Annual Network Plan

Covering Monitoring Operations in
25 California Air Districts
July 2022

CALIFORNIA
AIR RESOURCES BOARD

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Appendices

Abbreviations used in this document

AB	Assembly Bill
ANP	Annual Network Plan
APCD	Air Pollution Control District
AQMD	Air Quality Management District
AQMIS	Air Quality and Meteorological Information System
AQS	Air Quality System
ARD	Air Resources District
ARM	Approved Regional Method
AQDA	Air Quality Data Action
CAN	Corrective Action Notification
CARB	California Air Resources Board
CASTNET	Clean Air Status and Trends Network
CBSA	Core-Based Statistical Area
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CSN	Chemical Speciation Network
DV	Design Value
EMP	Enhanced Monitoring Plan
FEM	Federal Equivalent Method
FR	Federal Register
FRM	Federal Reference Method
GHG	Greenhouse Gases
IMPROVE	Interagency Monitoring of Protected Visual Environments
MATES	Multiple Air Toxics Exposure
MLD	Monitoring and Laboratory Division
MSA	Metropolitan Statistical Ares
NAAQS	National Ambient Air Quality Standard
NCore	National Core multipollutant network monitoring Station

NIST	National Institute of Standards and Technology
NO_2	Nitrogen Dioxide
NPS	National Park Service
OMB	Office of Management and Budget
OTR	Ozone Transport Region
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
QAW	Quality Management Section
QMB	Quality Management Branch
QMS	Quality Management Section
SLAMS	State and Local Air Monitoring Site
SLS	Standards Laboratory Section
SO_2	Sulfur Dioxide
SPM	Special Purpose Monitor
STN	Speciated Trends Network
TPY	Tons per Year
TSA	Technical System Audit
TTP	Through the Probe
U.S. EPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound

Executive Summary

Title 40 Code of Federal Regulations (CFR) Part 58.10 requires state and local agencies that conduct ambient air monitoring for regulatory purposes to submit an Annual Network Plan (ANP) to the United States (U.S.) Environmental Protection Agency (EPA) annually. The ANP provides detailed information about criteria pollutant monitoring sites and instruments operating in California. Accurately measuring air quality is the foundation of California's efforts to reduce air pollution and meet air quality standards. For more than 50 years, California has maintained one of the most extensive air monitoring networks in the world, collecting data on a wide range of pollutants. The information gathered from these networks makes it possible to track progress in cleaning the air and identify the most effective actions needed to meet air quality standards.

The California Air Resources Board (CARB) and California's thirty-five local air districts, 25 of which are covered in this plan, have been measuring ambient air quality using a variety of stationary monitoring networks supplemented by mobile platforms including cars, aircraft, and ships. From the very beginning, California's air monitoring program has been a partnership between government agencies at the federal, State, and local level, along with universities and more recently with engaged community members and industry representatives.

California's different air monitoring networks are designed to meet a range of regulatory requirements, such as compliance with the federal Clean Air Act, as well as to help address research and public health priorities. Over time, the types of air pollutants being monitored and the extent of the air monitoring networks have varied as a function of new legislative mandates, community concerns, as well as our success in improving air quality in many parts of California. Air monitoring data outreach such as the Air Quality and Meteorological Information System (AQMIS), Air Quality Index, and AirNow program allow people and companies to take precautions by avoiding the outdoors or minimizing activities that contribute to air pollution when levels are unhealthy.

This executive summary briefly describes the main types of monitoring that are conducted in California. The focus of this report is on criteria pollutant monitoring being conducted by governmental agencies using regulatory grade monitoring instruments. This report does not discuss the extensive networks of low-cost sensors installed by agencies, community groups, academics, and others.

Criteria Pollutant Monitoring

The majority of California's governmental air monitoring resources, reflected in the current statewide network of approximately 250 regulatory monitoring stations, have been dedicated to measuring ambient concentrations of criteria pollutants, which are ground-level ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb).

For each of these criteria pollutants, the CFR specifies a list of acceptable instruments and methods, the frequency at which samples are to be collected, and how many instruments must be duplicated at the same location for each region. The CFR also details standards to be used for locating air monitoring sites (such as population, local traffic counts, local emission sources, etc.), number of sites located in each region, and the appropriate scale (e.g., neighborhood, urban, and regional) for the spatial objective of the particular pollutant. The CFR has established minimum monitoring requirements for criteria pollutants, generally, based on the population from the most recent census data, the severity of the air quality problem, as specified by the design values or emissions.

Data from these monitoring networks are used for determining the attainment status for national and State ambient air quality standards, supporting public information services, forecasting expected high pollution events, and supporting the development of emissions reduction programs. Monitoring data must undergo review and validation process by the agency collecting the data before the data is deemed final for regulatory purposes. Because this type of monitoring often requires significant infrastructure and resources, these methods have limitations for widespread deployment as part of community air monitoring efforts.

Additional Types of Air Monitoring Not Covered in the Annual Network Plan

***Toxic Air Contaminants Monitoring*:** Beginning in the 1980s, with the recognition of the health risks posed by a wide range of chemicals, California and the local air districts deployed a network of approximately 35 air toxics monitoring stations. Each of these stations take samples of toxic compounds which are then analyzed using specialized equipment. A few examples are volatile organic compounds, carbonyl compounds, toxic metals, and hexavalent chromium.

Most air toxics monitoring methods involve collecting air samples in the field and returning them to the laboratory for subsequent analysis. One significant limitation is that data from these methods may take weeks, or in some cases months, after sampling to become available as these sophisticated methods often require labor intensive analytical procedures. Air toxic monitoring data are used to identify sources contributing to air toxic pollution and trends in the concentration of air toxics over time. Data can be used to support regulatory and enforcement actions when collected in a scientifically defensible manner.

***Greenhouse Gas Emission Monitoring*:** With the passage of the California Global Warming Solutions Act of 2006 (AB 32), CARB collaborated with federal agencies and universities to deploy a network of 15 tall towers and other stations across California to measure greenhouse gases (GHG), study regional GHG emissions trends throughout the State, and evaluate regional and statewide emissions inventories.

Evaluating regional and statewide GHG emissions requires highly accurate and precise measurements of ambient GHGs. The GHG network currently uses state-of-the-art, air

monitoring instrumentation (cavity ringdown spectrometry) to measure carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). In conjunction with the ground based network, airborne and spaceborne remote sensing measurements are conducted to screen large spatial regions for methane "hot spots".

***Remote Sensing*:** Remote sensing instrumentation measures reflected or emitted radiation to collect information about air pollutant concentrations and meteorological conditions. Remote sensing instruments can be deployed on ground-based (mobile and stationary), airborne (i.e., aircraft), and spaceborne (i.e., satellites) platforms. Fence-line remote sensing applications can monitor emissions from facilities such as refineries. When deployed on aircraft or satellites, remote sensing systems can survey large spatial areas and identify the general location of concentrated air pollution.

***Community-Scale Air Monitoring*:** Recognizing the need to understand air quality at the neighborhood level, CARB and the local air districts have periodically undertaken community -focused air monitoring studies. With the advent of low -cost air sensors in the last decade, many community groups and individuals are now also measuring air quality and deploying their own grassroots monitoring networks. As a result, community -level air monitoring network is continually expanding throughout California neighborhoods by community members, universities, private entities, and government agencies.

Continued usage of fence-line monitoring, advancements in air sensors, and additional mobile monitoring studies are important pieces to local air monitoring programs. Community -level air monitoring programs are expected to continue expanding in California with the adoption of Assembly Bill 617 (AB 617) in 2017. Monitoring methods commonly used for community air monitoring include:

- *Fence-line Monitoring*: Fence -line monitoring is a monitoring strategy in which air quality is measured at the perimeter of a known or potential emission source. Air districts may require fence -line monitoring at facilities that emit or potentially emit air pollutants and GHGs. Depending on the air pollutant that is expected to be emitted, fence -line monitoring can utilize a wide variety of measurement tools such as air sensors, passive samplers, remote sensing systems, and real-time instrumentation. This type of monitoring may be used to help determine where and when leaks are occurring, the rate emissions are leaving the source, and what chemicals are present. AB 1647 and AB 617 include new requirements for enhanced fence -line and community monitoring in the vicinity of major stationary sources such as refineries.
- *Air Sensors*: Air quality sensors measure air pollutants on a real-time or near real-time basis and are generally low in cost, highly portable, and can require less power, siting infrastructure, and expertise than other air monitoring methods. Currently, no low-cost (i.e., $2,000 or less) sensors meet federal reference or federal equivalent method requirements and many have not been robustly evaluated to determine the accuracy of their measurements. However,

sensor technology is rapidly developing, and performance is expected to improve over time. Sensors have the potential to provide hyper-local air quality data as part of coordinated, well -designed, community -led air monitoring efforts. The resulting data may be of sufficient quality to help understand spatial variability, identify areas with relatively higher pollutant concentrations for further investigation, complement existing air monitoring networks, and evaluate personal exposure to air pollution.

- *Mobile Monitoring*: Mobile monitoring platforms collect environmental data while in motion, for example in a car or van. Instrumentation is utilized that can quickly measure air pollutant concentrations and provide instantaneous snapshots of air pollutant concentrations at a specific location and time. Mobile platforms can deploy a variety of instrumentation ranging from sensors, research grade instrumentation, and remote sensing devices. Mobile platforms have the ability to measure real-time air pollutant concentrations at fine spatial gradients which can be used to identify persistent elevated pollutant concentrations and indicate potential contributing sources. These mobile monitoring platforms provide a valuable means of identifying areas that may need additional measurements and/or inspections or inquiries.

Conclusion

Monitoring networks and studies provide critical information for identifying and mitigating California's most significant air quality challenges. This Annual Network Plan documents California's network of regulatory ambient air quality monitors and describes how they meet Federal air monitoring and quality assurance requirements. In 2021, the Metropolitan Statistical Areas (MSAs) covered by this ANP met or exceeded the minimum monitoring requirements for all the criteria pollutants including O_3, PM_{10}, $PM_{2.5}$, CO, NO_2, SO_2, and Pb.

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) annually. ANPs are required to include 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 CARB Primary Quality Assurance Organization (PQAO) is comprised of 32 of the 35 local air districts in California. The districts in the CARB PQAO may elect to prepare their own ANP or have their information included in the CARB ANP. The CARB 2022 ANP covers the monitoring networks of 25 districts within the CARB PQAO. Seven districts in the CARB PQAO will prepare their own ANPs and submit them directly to the U.S. EPA. Three other districts in California, the Bay Area Air Quality Management District (AQMD), San Diego County 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 2022 ANP details the operations of the monitoring networks in 2021 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 districts, CARB, 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

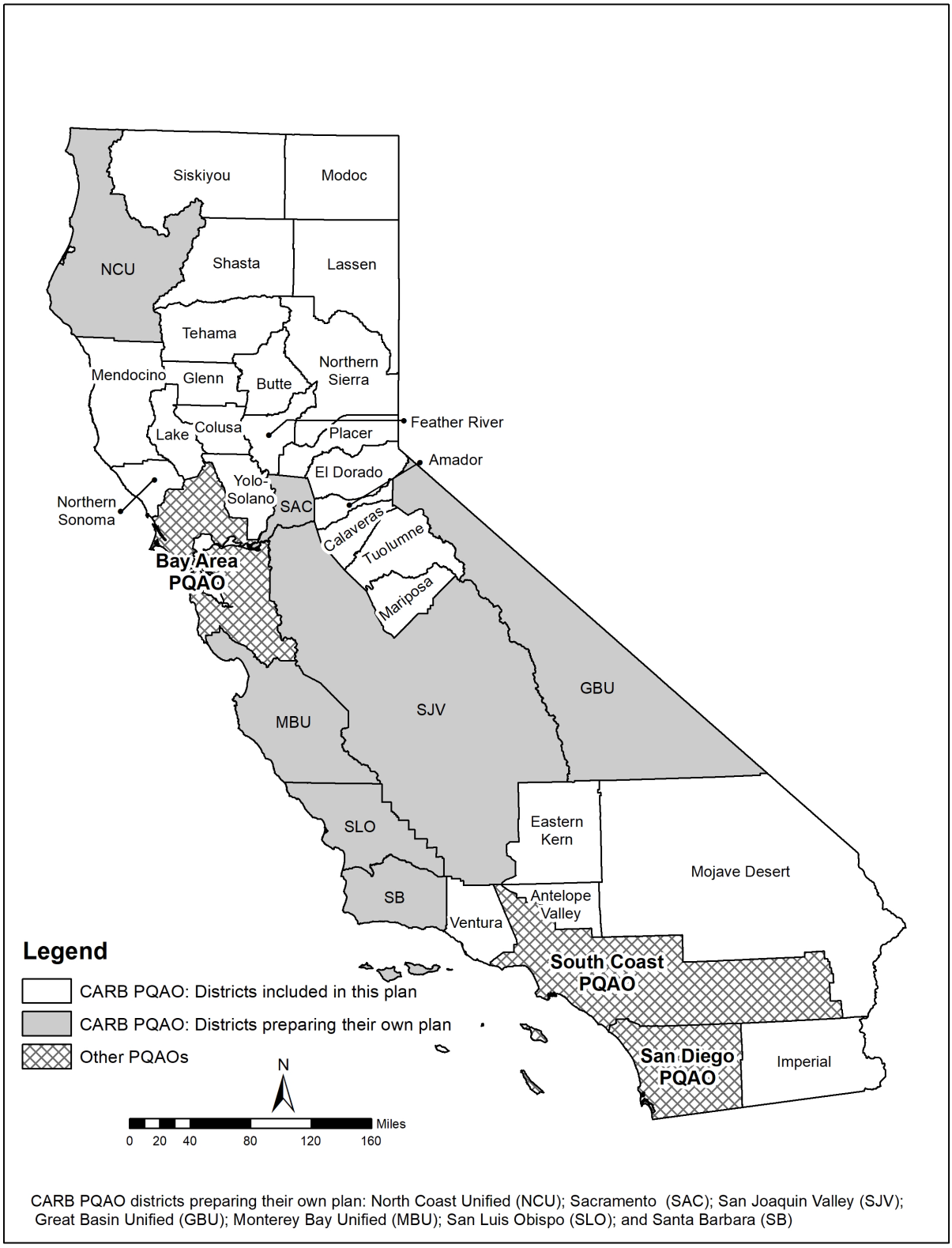
The CARB 2022 ANP will be available for a 30-day public inspection and comment period prior to its submittal to the U.S. EPA. If public comments are received, CARB will provide a response to the comments when the plan is submitted to the U.S. EPA. The final version of the CARB ANP is available for download from *https://www.arb.ca.gov/aqd/amnr/amnr.htm*.

Table 1: Districts in the CARB Primary Quality Assurance Organization

Districts Included in the CARB ANP	
Amador County APCD	Antelope Valley AQMD
Butte County AQMD	Calaveras County APCD
Colusa County APCD	Eastern Kern APCD
El Dorado County AQMD	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	
Districts Drafting Their Own ANP	
Great Basin Unified APCD	Monterey Bay ARD
North Coast Unified AQMD	Sacramento Metropolitan AQMD
San Joaquin Valley APCD	San Luis Obispo County APCD
Santa Barbara County APCD	

* Lassen County APCD, Modoc County APCD and Siskiyou County APCD are part of Northeast Plateau air basin and covered by this ANP, however, no ambient air quality monitors are currently sited in the Lassen County APCD, Modoc County APCD.

Figure 1: California Primary Quality Assurance Organizations



CARB PQAO districts preparing their own plan: North Coast Unified (NCU); Sacramento (SAC); San Joaquin Valley (SJV); 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 standards, understanding spatial and temporal variation in air pollutants, and evaluating pollutant exposure. Monitors are operated by CARB, local air districts, and other entities including the 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}), CO, NO_2, SO_2, and Pb, which are the federal criteria pollutants. Meteorological parameters, volatile organic compounds (VOCs), 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 jurisdiction 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 air 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, local air districts develop strategies, programs, and regulations to achieve needed emission reductions. Data from the ambient air monitoring network are then used to assess the efficacy of those 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 (AQS ID)	CO	NO_2	Ozone	SO_2	PM_{10}	$PM_{2.5}$	CARB Operated
Amador	Jackson-Clinton (06-005-0002)			1				Yes
Antelope Valley	Lancaster-Division (06-037-9033)	1	1	1		2	1	
Butte	Chico-East (06-007-0008)	1	1	1		1	2	Yes
	Gridley (06-007-4001)						1	Yes
	Paradise-Airport (06-007-0007)			1				Yes
	Paradise-Theater (06-007-2002)						1	Yes
Calaveras	San Andreas (06-009-0001)			1		1	1	Yes
Colusa	Colusa-Sunrise Blvd (06-011-1002)			1		1	1	Yes
Eastern Kern	Canebrake (06-029-0017)					1		
	Mojave-CA58 (06-029-0019)			1		1	1	Yes
	Ridgecrest-Ward (06-029-0018)					1	1	
El Dorado	Cool (06-017-0020)			1				Yes
	Echo Summit (06-017-0012)			1				Yes
	Placerville (06-017-0010)			1				Yes
	South Lake Tahoe (06-017-0011)					1		Yes
Feather River	Sutter Buttes (06-101-0004)			1				Yes
	Yuba City (06-101-0003)		1	1		1	2	Yes
Glenn	Willows-Colusa (06-021-0003)			1		1	1	Yes
Imperial	Brawley-Main (06-025-0007)					1	1	
	Calexico-Ethel (06-025-0005)	1	1	1	1	1	3	Yes
	El Centro-9th (06-025-1003)		1	1		1	1	
	Niland-English (06-025-4004)			1		1		
	Westmorland (06-025-4003)			1		1		
Lake	Anderson Spring (06-033-3010)					1		
	Glenbrook (06-033-3011)					1		
	Lakeport-S.Main (06-033-3002)			1		1	1	
Mariposa	Jerseydale (06-043-0006)			1				Yes
	Yosemite Village (06-043-1001)					1	1	Yes
	Yosemite NP-Turtleback (06-043-0003)*			1				
Mendocino[1]	Fort Bragg-300 Dana (06-045-0010)					1		
	Ukiah-Gobbi (06-045-0008)			1				
	Ukiah-Library (06-045-0006)						1	
	Willits-Blosser (06-045-2003)						1	
	Willits-Justice Center (06-045-2002)						1	
Mojave Desert	Barstow (06-071-0001)	1	1	1		1		
	Blythe-Murphy (06-065-9003)			1				Yes
	Hesperia-Olive (06-071-4001)			1		1		
	Joshua Tree-Black Rock (06-071-9002)*			1				
	Joshua Tree-Pinto Wells (06-065-1004)*			1				
	Lucerne Valley (06-071-0013)					1		
	Mojave NP (06-071-1001)*			1				
	Phelan (06-071-0012)			1				
	Trona-Athol/Telescope (06-071-1234)		1	1	1	1		
	Victorville-Park (06-071-0306)	1	1	1	1	1	2	
Northern Sierra	Chester (06-063-1007)						1	
	Grass Valley (06-057-0005)			1			3	
	Portola (06-063-1010)						3	
	Quincy-N Church (06-063-1006)						2	
	Truckee-Fire Station (06-057-1001)						2	
	White Cloud Mountain (06-057-0007)**			1				Yes
Northern Sonoma	Cloverdale (06-097-0001)					1		
	Guerneville-Church (06-097-3002)					1		
	Healdsburg-Matheson (06-097-0002)					1		

District	Site (AQS ID)	CO	NO_2	Ozone	SO_2	PM_{10}	$PM_{2.5}$	CARB Operated
Placer	Auburn-Atwood (06-061-0003)			1			1	
	Colfax-City Hall (06-061-0004)			1			1	
	Lincoln-Moore (06-061-2003)			1			1	
	Roseville-N Sunrise (06-061-0006)		1	1		1	1	Yes
	Tahoe City-Fairway (06-061-1004)			1			1	
Shasta	Anderson-North (06-089-0007)			1		1		
	Lassen Volcanic NP (06-089-3003)*			1				
	Redding-Health Dept (06-089-0004)			1		1	2	
	Shasta Lake-Lake (06-089-0009)			1				
	Shasta Lake-La Mesa (06-089-0008)					1		
Siskiyou	Yreka (06-093-2001)			1			1	
Tehama	Red Bluff-Walnut (06-103-0007)			1		1	1	
	Tuscan Butte (06-103-0004)			1				Yes
Tuolumne	Sonora-Barretta (06-109-0005)			1				Yes
Ventura	El Rio-Rio Mesa School (06-111-3001)		1	1		1	1	
	Ojai-East Ojai (06-111-1004)			1			1	
	Piru-Pacific (06-111-0009)			1			1	
	Simi Valley-Cochran (06-111-2002)		1	1		1	2	
	Thousand Oaks (06-111-0007)			1			1	
olo-Solano	Davis-UCD Campus (06-113-0004)		1	1			1	Yes
	Vacaville-Merchant (06-095-3001)					1		
	Vacaville-Ulatis (06-095-3003)			1				
	West Sacramento-15th (06-113-2001)					1		
	Woodland-Gibson (06-113-1003)			1		1	2	

[1] Mendocino County AQMD relocated its $PM_{2.5}$ site from Willits -Justice Center to Willits - Blosser Lane. The monitoring start date at the new site was February 5, 2021.

* These sites are operated by National Park Service (NPS).

** White Cloud Mountain did not operate in 2021

Note: CARB operating sites are delineated with grey shading.

Section 3: Site and Monitoring Information

Appendix D of 40 CFR Part 58requires the federal site type, federal monitoring objective, and federal monitor type to be included in the ANPs. These elements are described in the following sections and identified at the monitor-level in the detailed site reports in Appendix A. CARB periodically evaluates these elements and update them to correctly match with monitoring objectives of each site and to reflect any change in population, traffic counts, physical characteristics, emission source, frequency of occurrence of meteorological pattern, etc.

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 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 be adequate to 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 as follows:

- *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 Part 58.

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

The types of monitoring sites and the spatial scales designated in the area covered by this ANP are listed in Table 4 and included in the detailed site reports in Appendix A. The site type is listed first following the spatial scale. Note that a monitor may have more than one site type.

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	pop/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,pop/n	pop/ n
Eastern Kern	Canebrake					gen,pop/u	
	Mojave			high/r		pop/n	high/n
	Ridgecrest-Ward					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	pop/n	pop/n
	El Centro-9th		pop/n	high/n		pop/n	pop/n
	Niland-English			pop/n		pop/n	
	Westmorland			pop/r		pop/m	
Lake	Anderson Spring					pop/u	
	Glenbrook					pop/u	
	Lakeport-S.Main			pop/u		gen/n	pop/n
Mariposa	Jerseydale			high/r			
	Yosemite Village					pop/m	pop/ m
	Yosemite NP-Turtleback*			gen/r			
Mendocino	Fort Bragg-300 Dana					gen/n	
	Ukiah-Gobbi			pop/n			
	Ukiah-Library						pop/n
	Willits-Blosser						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		pop/n	pop/n
	Mojave-CA58						
	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	
Placer	Auburn-Atwood			pop/n			pop/n
	Colfax-City Hall			pop/n			pop/n
	Lincoln-Moore			pop/n			pop/n
	Roseville-N Sunrise		pop/n	high/n		high/n	pop/n
	Tahoe City-Fairway			gen/u			gen/u

District	Site	CO	NO_2	Ozone	SO_2	PM_{10}	$PM_{2.5}$
Shasta	Anderson-North			pop/n		high/n	
	Lassen Volcanic NP*			gen/r			
	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			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			high/n
	Simi Valley-Cochran		high/u	high/u		pop/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			high,pop/n			
	West Sacramento-15th					pop/n	
	Woodland-Gibson			pop/n		pop/n	pop/ n

* These sites are operated by National Park Service (NPS).
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 Part 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 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 *

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

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 air quality standards.

In this ANP, all the monitors identified as non-EPA federal monitors are operated by the NPS. Industrial monitors and EPA monitors are not operated in the area covered by this ANP. Tribal monitors are operated on tribal lands by tribal entities and are outside of the scope of this ANP. Table 5 shows the types of monitors, their monitoring objectives and the network affiliations. Some monitors are operated under specific types of monitoring network programs. Examples of the network affiliations are PAMS, NCore, Near-road and CSN. The full list can be found at *https://aqs.epa.gov/aqsweb/documents/codetables/networks.html*.

Table 5: Monitoring Objective, Monitor Type and Network Affiliation

District	Site	Monitoring Objective	Monitor Type*	Network Affiliation**
Amador	Jackson-Clinton	NAAQS Comparison	SLAMS	
Antelope Valley	Lancaster-Division	NAAQS Comparison, Public Info.	SLAMS	
Butte	Chico-East	NAAQS Comparison, Public Info.	SLAMS	CSN Supplemental
	Gridley	Public Info.	SLAMS	
	Paradise-Airport	NAAQS Comparison	SLAMS	
	Paradise-Theater	Public Info.	SLAMS	
Calaveras	San Andreas	NAAQS Comparison, Public Info.	SLAMS	
Colusa	Colusa-Sunrise Blvd	NAAQS Comparison	SLAMS	
Eastern Kern	Canebrake	NAAQS Comparison	SLAMS	
	Mojave	NAAQS Comparison	SLAMS	
	Ridgecrest-Ward	NAAQS Comparison	SLAMS	
El Dorado	Cool	NAAQS Comparison	SLAMS	
	Echo Summit	NAAQS Comparison	SLAMS	
	Placerville	NAAQS Comparison	SLAMS	
	South Lake Tahoe	NAAQS Comparison	SLAMS	
Feather River	Sutter Buttes	NAAQS Comparison	SLAMS	
	Yuba City	NAAQS Comparison, Public Info.	SLAMS	
Glenn	Willows-Colusa	NAAQS Comparison, Public Info.	SLAMS	
Imperial	Brawley-Main	NAAQS Comparison	SLAMS	
	Calexico-Ethel	NAAQS Comparison, Public Info.	SLAMS	CSN Supplemental
	El Centro-9th	NAAQS Comparison	SLAMS	
	Niland-English	NAAQS Comparison	SLAMS	
	Westmorland	NAAQS Comparison	SLAMS	
Lake	Anderson Spring	Public Info.	SLAMS	
	Glenbrook	Public Info.	SLAMS	
	Lakeport-S.Main	NAAQS Comparison	SLAMS	
Mariposa	Jerseydale	NAAQS Comparison	SLAMS	
	Yosemite Village	NAAQS Comparison, Public Info.	SLAMS	
	Yosemite NP-Turtleback	NAAQS Comparison	non-EPA Federal	CASTNET
Mendocino	Fort Bragg-300 Dana	NAAQS Comparison	SLAMS	
	Ukiah-Gobbi	NAAQS Comparison	SLAMS	
	Ukiah-Library	NAAQS Comparison	SLAMS	
	Willits-Blosser	NAAQS Comparison	SLAMS	
	Willits-Justice Center	NAAQS Comparison	SLAMS	
Mojave Desert	Barstow	NAAQS Comparison	SLAMS	
	Blythe-Murphy	NAAQS Comparison, Public Info.	SLAMS	
	Hesperia-Olive	NAAQS Comparison	SLAMS	
	Joshua Tree-Black Rock	NAAQS Comparison	non-EPA Federal	CASTNET
	Joshua Tree-Pinto Wells	Public Info.	non-EPA Federal	
	Lucerne Valley	NAAQS Comparison	SLAMS	
	Mojave NP	Public Info.	non-EPA Federal	
	Phelan	NAAQS Comparison	SLAMS	
	Trona-Athol/Telescope	NAAQS Comparison	SLAMS	
	Victorville-Park	NAAQS Comparison	SLAMS	
Northern Sierra	Chester	NAAQS Comparison	SLAMS	
	Grass Valley	NAAQS Comparison	SLAMS	
	Portola	NAAQS Comparison	SLAMS	CSN Supplemental
	Quincy-N Church	NAAQS Comparison	SLAMS	
	Truckee-Fire Station	NAAQS Comparison	SLAMS	
	White Cloud Mountain	NAAQS Comparison	SLAMS	
Northern Sonoma	Cloverdale	NAAQS Comparison	SLAMS	
	Guerneville-Church	NAAQS Comparison	SLAMS	
	Healdsburg-Matheson	NAAQS Comparison	SLAMS	
Placer	Auburn-Atwood	NAAQS Comparison	SLAMS	
	Colfax-City Hall	NAAQS Comparison, Public Info.	SLAMS	
	Lincoln-Moore	NAAQS Comparison, Public Info.	SLAMS	
	Roseville-N Sunrise	NAAQS Comparison, Public Info.	SLAMS	
	Tahoe City-Fairway	NAAQS Comparison, Public Info.	SLAMS	

District	Site	Monitoring Objective	Monitor Type*	Network Affiliation**
Shasta	Anderson-North	NAAQS Comparison	SLAMS	
	Lassen Volcanic NP	NAAQS Comparison, Research	non-EPA Federal	CASTNET
	Redding-Health Dept	NAAQS Comparison	SLAMS	
	Shasta Lake-Lake	NAAQS Comparison	SLAMS	
	Shasta Lake-La Mesa	NAAQS Comparison	SLAMS	
Siskiyou	Yreka	NAAQS Comparison	SLAMS	
Tehama	Red Bluff-Walnut	NAAQS Comparison	SLAMS	
	Tuscan Butte	NAAQS Comparison	SLAMS	
Tuolumne	Sonora-Barretta	NAAQS Comparison	SLAMS	
Ventura	El Rio-Rio Mesa School	NAAQS Comparison	SLAMS	PAMS
	Ojai-East Ojai	NAAQS Comparison	SLAMS	
	Piru-Pacific	NAAQS Comparison	SLAMS	
	Simi Valley-Cochran	NAAQS Comparison, Public Info.	SLAMS	PAMS
	Thousand Oaks	NAAQS Comparison	SLAMS	
Yolo-Solano	Davis-UCD Campus	NAAQS Comparison, Public Info.	SLAMS	
	Vacaville-Merchant	NAAQS Comparison	SLAMS	
	Vacaville-Ulatis	NAAQS Comparison	SLAMS	
	West Sacramento-15th	NAAQS Comparison	SLAMS	
	Woodland-Gibson	NAAQS Comparison	SLAMS	

* 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

Title 40 CFR Part 58.10 requires 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 the detailed site tables in Appendix A of this ANP.

Table 6: Required Detailed Monitoring Site Information

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).

Table 6 continued

Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls
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 (Appendix D of 40 CFR Part 58) require that monitors are FRMs, FEMs, or ARMs and meet certain siting criteria in order for the data to be used for national ambient air quality standards (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 monitoring sites covered in this ANP. The continuous $PM_{2.5}$ data reported from these non-FEM monitors are excluded from NAAQS comparison. However, many of these non-FEM monitors are California Approved Samplers (CAS) and the data are used for State designation purposes and/or in AirNow for Air Quality Index reporting.

Table 7: Monitoring Sites Operating Continuous $PM_{2.5}$ Non-FEM monitors

District	Site
Butte	Gridley (06-007-4001)
	Paradise-Theater (06-007-2002)
Glenn	Willows-Colusa (06-021-0003)
Mariposa	Yosemite Village (06-043-1001)
Northern Sierra	Chester (06-063-1007)
	Portola (06-063-1010)
	Quincy-N Church Street (06-063-1006)
	Truckee-Fire Station (06-057-1001)
Placer	Colfax-City Hall (06-061-0004)
	Lincoln-Moore Street (06-061-2003)
	Tahoe City-Fairway Drive (06-061-1004)
Yolo-Solano*	Davis-UCD Campus (06-113-0004)

*This district also operates non-FEM BAM monitors at sites in Rio Vista, Vacaville, and Woodland. Data from these monitors are used for local air quality purposes, are not reported to AQS, and are therefore not included here.

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 (MSAs) and Micropolitan Statistical Areas, which differ by population threshold. A MSA 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).

Appendix D of 40 CFR Part 58 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 CARB specify that districts and CARB must communicate with each other when changes to the network are being considered. When proposed changes are communicated between districts and CARB, 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 CARB website at *https://ww2.arb.ca.gov/our-work/programs/quality-assurance/qm-document-repository/roles-responsibility-agreements*.

Assessing the $PM_{2.5}$ monitoring network

The Roles and Responsibilities outlined in the documents described above direct CARB to coordinate all changes to the $PM_{2.5}$ monitoring network with local air districts, the general public and affected CARB divisions. Any $PM_{2.5}$ network changes are thoroughly reviewed by CARB and district working groups, both separately and in coordinated discussions, and impacts on all CFR requirements are assessed. CARB and the local air districts then work together, and with U.S. EPA Region 9, to mitigate impacts of any changes to the monitoring network, particularly with regard to any changes that impact any monitors that have violated the NAAQS. Public comment is solicited through the ANP process as required by 40 CFR 58.10(c) and any comments received are addressed in either this document or in the documents of the individual district Annual Network Plans.

Figure 2: Core-Based Statistical Areas in California

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

Table 8: List of Core-Based Statistical Areas included in CARB ANP and Other ANP in California

CBSA Name*	County	Included in the CARB 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-Folsom	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-Petaluma	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.

Section 5: Federal Minimum Monitoring Requirements

For criteria pollutants, U.S. EPA has established minimum monitoring requirements that are specified in Appendix D of 40 CFR Part 58. 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.

This ANP uses 2020 census populations to determine official minimum monitoring requirements. Upon direction from U.S. EPA, this ANP also includes the most recent available population census estimates (July 1, 2021) to estimate any changes to these requirements.

Section 5A: Ozone

Minimum Number of Ozone Monitoring Sites

The criteria for minimum monitoring requirements for ozone are shown in Table 9. The requirements are based on the population of the MSA and the magnitude of the design value (i.e., if the design value is greater or equal to 85 percent or less than 85 percent of the ozone standard). NCore and SLAMS monitors can be used to meet minimum monitoring requirements for ozone. In the absence of a valid design value, requirements for "less than 85 percent of any ozone NAAQS" apply.

Table 9: Minimum Ozone Monitoring Requirements for SLAMS

MSA population[1]	Monitors required for MSAs with most recent 3-year design value concentrations ≥85% of any Ozone NAAQS	Monitors required for MSAs with most recent 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

[1]There are no minimum monitoring requirements for areas that are not belong to any MSAs.

Within each MSA, 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 MSAs covered by this ANP met the minimum ozone monitoring requirements for ozone in 2021. Sites from districts not covered by this ANP are also listed to provide a complete picture of all the sites contributing towards the minimum monitoring requirements in each MSA. Note that percentages are relative to the 0.070 ppm 8-hour 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 but cannot be counted towards the minimum monitoring requirements. Information about these monitors is provided in Appendix A of this ANP.

Table 10: CBSAs with Minimum Ozone Monitoring Requirements

CBSA	2020 Census Population (2021 Population Estimate*)	2019-2021 Design Value (% of NAAQS)[1] *DV Site*	Required # of Sites	SLAMS Sites Operating in 2021 (District where site is located) ***Highest Concentration Sites Denoted by Bold Text***
Bakersfield	909,235 (917,673)	0.093 ppm (133%) *Edison*	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	211,632 (208,309)	0.070 ppm (100%) *Paradise*	1	Chico-East Avenue (Butte County) **Paradise-4405 Airport Road (Butte County)**
El Centro	179,702 (179,851)	0.08 ppm (114%) *Calexico*	1	**Calexico-Ethel Street (Imperial)** **El Centro-9th Street (Imperial)** Niland-English Road (Imperial) Westmorland (Imperial)
Los Angeles-Long Beach-Anaheim	13,200,998 (12,997,353)	0.103 ppm (147%) *Glendora*	4	Anaheim-Pampas Lane (South Coast) Azusa (South Coast) Compton-700 North Bullis Road (South Coast) **Glendora-Laurel (South Coast)** La Habra (South Coast) Lancaster-43301 Division Street (Antelope Valley) Long Beach-Signal Hill (South Coast) Los Angeles-LAX (South Coast) Los Angeles-North Main Street (South Coast) Mission Viejo-26081 Via Pera (South Coast) North Hollywood (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	843,843 (839,784)	0.076 ppm (109%) *Simi Valley*	2	El Rio-Rio Mesa School #2 (Ventura) Ojai-Ojai Avenue (Ventura) Piru-3301 Pacific Avenue (Ventura) **Simi Valley-Cochran Street (Ventura)** Thousand Oaks-Moorpark Road (Ventura)
Redding	182,155 (182,139)	0.064 ppm (91%) *Shasta*	1	Anderson-North Street (Shasta County) **Redding-Health Dept Roof (Shasta County)** Shasta Lake-13791 Lake Blvd (Shasta County)

Metropolitan Statistical Area	2020 Census Population (2021 Population Estimate*)	2019-2021 Design Value (% of NAAQS)[1] *DV Site*	Required # of Sites	SLAMS Sites Operating in 2021 (District where site is located) ***Highest Concentration Sites Denoted by Bold Text***
Riverside-San Bernardino-Ontario	4,599,839 (4,653,105)	0.114 ppm (163%) *Redlands*	3	Banning Airport (South Coast) Barstow (Mojave Desert) Blythe-445 West Murphy Street (Mojave Desert) **Crestline (South Coast)** Fontana-Arrow Highway (South Coast) Hesperia-Olive Street (Mojave Desert) 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) Phelan (Mojave Desert) Redlands-Dearborn (South Coast) Riverside-Rubidoux (South Coast) **San Bernardino-4th Street (South Coast)** Trona-Athol and Telegraph (Mojave Desert) Upland (South Coast) Victorville-14306 Park Avenue (Mojave Desert) Winchester-33700 Borel Road (South Coast)
Sacramento-Roseville-Folsom	2,397,382 (2,411,428)	0.082 ppm (117%) *Auburn*	2	Auburn-11645 Atwood Road (Placer County) Colfax-City Hall (Placer County) **Cool-Highway 193 (El Dorado County)** Davis-UCD Campus (Yolo-Solano) Echo Summit (El Dorado County) Elk Grove (Sacramento) **Folsom (Sacramento)** Lincoln-2885 Moore Rd (Placer County) North Highlands (Sacramento) **Placerville-Gold Nugget Way (El Dorado County)** **Roseville-N Sunrise Blvd (Placer County)** Sacramento-Del Paso Manor (Sacramento) Sacramento-T St (Sacramento) Sloughhouse (Sacramento) Tahoe City-221 Fairway Drive (Placer County) Woodland-Gibson Road (Yolo-Solano)
Santa Rosa-Petaluma	488,863 (485,887)	0.053 ppm (76%) *Sebastopol*	1	**Sebastopol (Bay Area)**
Vallejo-Fairfield	453,491 (451,716)	0.053ppm (93%) *Vacaville*	2	Fairfield-Chadbourne Road (Bay Area) Vallejo-304 Tuolumne Street (Bay Area) **Vacaville-Ulatis Drive (Yolo-Solano)**
Yuba City	181,208 (181,484)	0.075 ppm (107%) *Sutter Buttes*	1	**Sutter Buttes-S Butte (Feather River)** **Yuba City-Almond Street (Feather River)**

[1] Wildfires in 2019, 2020 and 2021 impacted many monitoring sites covered in this ANP. Some of these impacts will be addressed under the Exceptional Event Rule (81 FR 68216)

* Source: U.S. Census Bureau. Retrieved from *https://www.census.gov/programs-surveys/popest.html*

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. The ozone monitoring season for these sites is April through October, the period in which peak ozone is expected or when sites are physically accessible. A seasonal waiver for ozone monitoring in 2021 at these sites was granted by U.S. EPA. The waiver must be updated each year, and a copy of the waiver request for 2022 is provided in Appendix B.

Table 11: Seasonal Ozone Monitoring Sites

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

*The White Cloud Mountain site has not operated since 2016 due to shelter and power issues. A date for the relocation and startup of a new site is unknown at this time.

Section 5B: Nitrogen Dioxide (NO_2)

Minimum Number of NO_2 Monitoring Sites

Appendix D of 40 CFR Part 58 - specify three types of NO_2 minimum monitoring requirements:

- Area-wide;
- Near-road NO_2 monitoring, and;
- Monitoring in communities with susceptible populations

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--Folsom, 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 County 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 (AADT) counts on road segments within the CBSA. One monitor is required in CBSAs with a population of one million or more. A second monitor is required in CBSAs with a population greater than or equal to 2.5 million; or CBSA's with populations greater than or equal to 1 million and roadway AADT greater than or equal to 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. 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--Folsom CBSAs are not within the jurisdiction of the districts covered by this ANP. Near--road NO_2 monitoring for these CBSAs in the CARB PQAO is addressed in the ANPs prepared by the San Joaquin Valley APCD and the Sacramento Metropolitan AQMD. Information about near--road NO_2 monitoring for

the other PQAOs in California can also be found in the ANPs prepared by the San Diego County APCD, South Coast AQMD and the Bay Area AQMD.

Table 12: CBSAs with Near-Road NO_2 Monitoring Requirements

CBSA	Population 2020 Census (2021 Population Estimate)	Area-wide Monitoring	Maximum AADT (2020)*	Required Near-road Sites	Near-road Sites; AQS ID (District where sites are located)
Bakersfield	909,235 (917,673)	No	140,000	1**	Bakersfield–Westwind; 060292019 (San Joaquin Valley)
Fresno	1,008,654 (1,013,581)	Yes	143,000	1	Fresno-2482 Foundry Park; 060192016 (San Joaquin Valley)
Los Angeles-Long Beach-Anaheim	13,200,998 (12,997,353)	Yes	386,000	2	Anaheim-Route 5; 060590008 (South Coast) Long Beach-Route 710; 060374008 (South Coast)
Riverside-San Bernardino-Ontario	4,599,839 (4,653,105)	Yes	274,000	2	Ontario-Etiwanda; 060710026 (South Coast) Ontario-Route 60; 060710027 (South Coast)
Sacramento-Roseville-Folsom	2,397,382 (2,411,428)	Yes	249,000	2	Sacramento-Bercut Drive; 060670015 (Sacramento) - - ***
San Diego-Chula Vista-Carlsbad	3,298,634 (3,286,069)	Yes	272,000	2	Rancho Carmel Drive; 060731017 (San Diego) San Ysidro; 060731025 (San Diego) ***
San Francisco-Oakland-Berkeley	4,749,008 (4,623,264)	Yes	260,000	2	Laney College; 060010012 (Bay Area) Berkeley-Aquatic Park; 060010013 (Bay Area)
San Jose-Sunnyvale-Santa Clara	2,000,468 (1,952,185)	Yes	232,000	2	San Jose-Knox Ave; 060850006 (Bay Area) - - ***

* Source: Traffic Census Program, California Department of Transportation *http://www.dot.ca.gov/trafficops/census/*

** Regional Administrator Required Near-Road NO_2 Monitoring Site

*** Near-road sites were in the planning/construction stages and not yet operating in 2021.

As part of the final rule revising the NO_2 NAAQS in 2010 (75 FR 6474), U.S. EPA required the Regional Administrators to identify an additional 40 monitoring sites nationwide that would be located in areas representing susceptible and vulnerable populations. Seven of these sites are located in California, and the locations of them are shown in Table 13 along with the responsible monitoring agency. More information on this monitoring can be found in the ANPs prepared by Bay Area AQMD, San Diego County APCD, San Joaquin Valley APCD and South Coast AQMD.

Table 13: Regional Administrator Required NO_2 Monitoring Site

District	Site (AQS ID)
San Diego	Sherman Elementary School (060731026)
Bay Area	Oakland West (060010011)
San Joaquin Valley	Parlier (060194001)
	Bakersfield-Muni (060292012)*
South Coast	Long Beach North (060374002)
	Los Angeles-Main St. (060371103)
	San Bernardino (060719004)

* The San Joaquin Valley APCD's 2019 Air Monitoring Network Plan discussed Bakersfield Muni as the required NO_2 monitoring site for susceptible and vulnerable populations.

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 with a population more than 2.5 million, and by January 1, 2017 for all other CBSAs. Additionally, the Regional Administrators, jointly with states, may require additional CO monitoring in other areas where data or other indicators suggest that concentrations may approach or exceed the NAAQS. 40 CFR Part 58 Appendix D 4.2.2 (3) Carbon Monoxide (CO) Design Criteria states "*The Regional Administrator and the responsible State or local air monitoring agency shall work together to design and maintain the most appropriate CO network to address the data needs for an area and include all monitors under this provision in the annual monitoring network plan.*

Table 14: CBSAs with CO Minimum Monitoring Requirements

CBSA	Population 2020 Census (2021 Population Estimate)	Required # of Near-road Sites	Near-road Sites (AQS ID; District where sites are located)
Los Angeles-Long Beach-Anaheim	13,200,998 (12,997,353)	1	Anaheim-Route 5; 060590008 (South Coast)
Riverside-San Bernardino-Ontario	4,599,839 (4,653,105)	1	Ontario-Etiwanda; 060710026 (South Coast)
Sacramento-Roseville-Folsom	2,397,382 (2,411,428)	1	Sacramento-Bercut Drive; 060670015 (Sacramento)
San Diego-Chula Vista-Carlsbad	3,298,634 (3,286,069)	1	Rancho Carmel Dr. ; 060731017 (San Diego)
San Francisco-Oakland-Berkeley	4,749,008 (4,623,264)	1	Laney College; (060010012 (Bay Area) Berkeley-Aquatic Park; 060010013 (Bay Area)
San Jose-Sunnyvale-Santa Clara	2,000,468 (1,952,185)	1	San Jose-Knox Ave; 060850006 (Bay Area)

As shown in Table 14, 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 that have the highest AADT for the Los Angeles-Long Beach-Anaheim, Riverside-San Bernardino-Ontario, and Sacramento-Roseville-Folsom CBSAs are not within the areas covered by this ANP. Subsequently, near-road monitoring for these CBSAs is addressed in the ANPs

prepared by South Coast AQMD, Bay Area AQMD, and Sacramento Metropolitan AQMD.

Several districts covered by this ANP (Antelope Valley, Butte County, Imperial County and Mojave Desert) operate five area-wide CO monitors as listed in Table 2. The data from these monitors are used for various purposes such as estimating the general population exposure and also determining the impact of emissions from wildfires. CO concentrations at area-wide monitors are well below the standard, and California has long attained federal and State CO standards. CARB is working with EPA to close CO monitors at Calexico (060250005), Chico (060070008), Modesto (060990005), and Stockton (060771003). Information about these monitors is provided in Appendix A.

Section 5D: Sulfur Dioxide (SO2)

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 equal to or greater than 5,000 but less than 100,000; two monitors are required in CBSAs with PWEIs equal to or 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 15, 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 oriented, general background, or regional transport can satisfy minimum monitoring requirements. SO_2 monitors at NCore sites shall be counted toward minimum monitoring requirements.

The most recent emission data available to calculate PWEI was from the 2020 CARB Emission Inventory.

Table 15: CBSAs with Minimum Monitoring Requirements for SO_2

CBSA	District covered by this ANP	Other District ANPs covering this CBSA	County SO_2 (TPY) (2020 Data)*	Population 2020 Census (2021 Population Estimate)	PWEI	Required Sites	SLAMS Sites Operating in 2020
Los Angeles-Long Beach-Anaheim	Antelope Valley AQMD	South Coast AQMD	Los Angeles: 4,818 Orange: 475	13,200,998 (12,997,353)	69,873 (68,795)	1	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: 1,752	4,599,839 (4,653,105)	9,572 (9,683)	1	Fontana (South Coast) Rubidoux (South Coast) Trona (Mojave Desert) Victorville (Mojave Desert)

* Source: Criteria Pollutant Emission Inventory Data, California Air Resources Board
https://ww2.arb.ca.gov/criteria-pollutant-emission-inventory-data

All districts covered by this ANP met the minimum monitoring requirements for SO_2 in 2020. In December 2017, U.S. EPA designated all areas of California as unclassifiable/attainment for the federal SO_2 standard.

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 emit 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 is no longer required. However, agencies that operate NCore sites are required to obtain approval to terminate an existing Pb monitor.

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 MSA. The criteria for determining the minimum number of monitoring sites are listed in Table 16. 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 16: Minimum Monitoring Requirements for PM_{10} Monitoring Sites

Population	High Concentration (Exceeds NAAQS by ≥20%)	Medium Concentration (≥80% of NAAQS)	Low Concentration (<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 that are greater than or equal to 100,000 are shown in Table 17. 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 17 if needed to meet minimum monitoring requirements because of the complex nature of PM monitoring.

Eleven MSAs include at least a portion of the areas covered by this ANP. The Los Angeles-Long Beach-Anaheim MSA 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 AQMD.

The monitors operated in districts covered by this ANP are adequate to meet minimum monitoring requirements in the remaining ten MSAs; 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 APCD, and Sacramento Metropolitan AQMD.

Table 17: CBSAs with Minimum Monitoring Requirements for PM_{10}

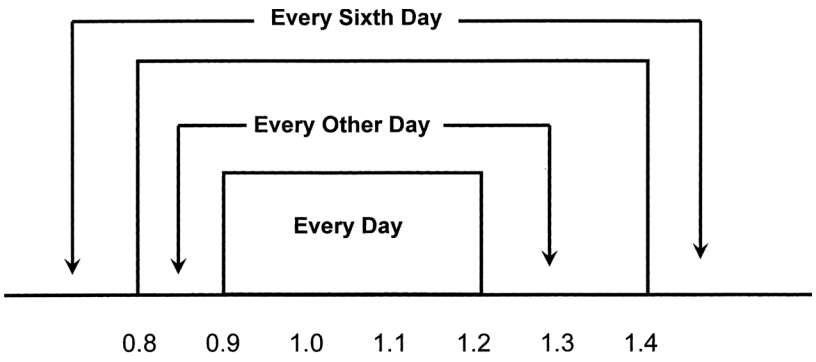
CBSA	2020 Census Population (2021 Population Estimate)	2021 Max Concentration (% of NAAQS) *Max Concentration Site*	Required[1] Sites	SLAMS Sites Operating in 2021 (District where site is located)
Bakersfield	909,235 (917,673)	437 µg/m^3 (291%) *Bakersfield-California*	4-8	Canebrake (Eastern Kern); Mojave (Eastern Kern); Ridgecrest (Eastern Kern); Bakersfield-California (San Joaquin); Bakersfield-Golden (San Joaquin); Oildale (San Joaquin)
Chico	211,632 (208,309)	130 µg/m^3 (87%) *Chico*	0-1	Chico (Butte County)
El Centro	179,702 (179,851)	547 µg/m^3 (365%) *Westmorland*	1-2	Brawley (Imperial County); Calexico (Imperial County); El Centro (Imperial County); Niland (Imperial County); Westmorland (Imperial County)
Los Angeles-Long Beach-Anaheim	13,200,998 (12,997,353)	121 µg/m^3 (81%) *Glendora*	4-8	Lancaster (Antelope Valley); Anaheim (South Coast); Azusa (South Coast); Glendora (South Coast); Los Angeles-N Main St (South Coast); Los Angeles-LAX (South Coast); Mission Viejo (South Coast); Santa Clarita (South Coast); South Long Beach (South Coast)
Oxnard-Thousand Oaks-Ventura	843,843 (839,784)	377 µg/m^3 (251%) *El Rio*	4-8	Simi Valley (Ventura County); El Rio (Ventura County)
Redding	182,155 (182,139)	126 µg/m^3 (84%) *Redding*	0-1	Redding (Shasta County); Anderson (Shasta County); Shasta Lake (Shasta County)
Riverside-San Bernardino-Ontario	4,599,839 (4,653,105)	334 µg/m^3 (223%) *Mecca*	6-10	Barstow (Mojave Desert); Lucerne Valley (Mojave Desert); Victorville (Mojave Desert); Trona (Mojave Desert); Hesperia (Mojave Desert); Banning (South Coast); Crestline (South Coast); Indio (South Coast); Mecca (South Coast); Palm Springs (South Coast)
Sacramento-Roseville-Folsom	2,397,382 (2,411,428)	492 µg/m^3 (328%) *So. Lake Tahoe*	6-10	So. Lake Tahoe (El Dorado County); Roseville (Placer County); North Highlands (Sacramento); Del Paso (Sacramento); Sacramento-T St (Sacramento); Sacramento-Branch (Sacramento); Woodland (Yolo-Solano); West Sacramento (Yolo-Solano)
Santa Rosa-Petaluma	488,863 (485,887)	58 µg/m^3 (39%) *Cloverdale*	0-1	Cloverdale (Northern Sonoma); Healdsburg (Northern Sonoma); Guerneville (Northern Sonoma)
Vallejo-Fairfield	453,491 (451,716)	50 µg/m^3 (33%) *Vacaville*	0-1	Vacaville (Yolo-Solano)
Yuba City	181,208 (182,484)	110 µg/m^3 (73%) *Yuba City*	0	Yuba City (Feather River)

[1] The minimum monitoring requirements were impacted by exceptional events in 2021 in some areas. Some of these impacts will be addressed under the Exceptional Event Rule (81 FR 68216) while others did not lead to exceedances of the standard or will not affect any upcoming regulatory determinations. Existing monitoring meets the needs of the local air districts and the communities; CARB is committed to working with U.S. EPA and the local air districts to ensure that monitoring levels continue to protect public health and safety.

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 18. Note that exceptional events are included in the concentrations shown.

Table 18: Required Sampling Frequency for PM_{10} FRM Monitors

Site Name	District	AQS ID	2021 Max Concentration	Ratio of Max Concentration to Standard	Required Sampling Frequency[1]	Current Sampling Frequency
Anderson Springs[2]	Lake	060333010-1	70	0.47	1:6	1:6
Glenbrook[2]	Lake	060333011-1	72	0.48	1:6	1:6
Lakeport [3]	Lake	060333002-1	88	0.59	1:6	1:6
Anderson[4]	Shasta	060890007-1	22	0.15	1:6	1:6
Redding	Shasta	060890004-2	126	0.84	1:2	1:6
Shasta Lake[5]	Shasta	060890008-1	116	0.77	1:6	1:6
Red Bluff	Tehama	061030007-1	96	0.64	1:6	1:6
Vacaville	Yolo-Solano	060953001-2	50	0.33	1:6	1:6
West Sacramento	Yolo-Solano	061132001-1	50	0.33	1:6	1:6
Woodland	Yolo-Solano	061131003-1	68	0.45	1:6	1:6

[1] Wildfires in 2021 impacted many monitoring sites covered in this ANP, including the monitor at Redding in Shasta County. Based solely on these exceptional events, this monitoring site moved into a higher sampling frequency category. This monitor is not located in an area impacted by upcoming regulatory determinations, so will not qualify for an exceptional event demonstration. CARB is working with local air districts to evaluate sampling frequencies at all monitoring sites impacted by the massive wildfires.
[2] The Lake County AQMD has discontinued PM10 monitoring at this location starting 1/1/2022".
[3] The Lake County AQMD is working with EPA to resolve district staffing and funding issues, as well as identifying equipment options for PM10 to resolve the sampling frequency issue for Lakeport".
[4] FRM monitor at Anderson was closed on 1/11/21.
[5] FRM monitor at Shasta Lake was closed on 10/31/21.

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 MSA, as shown in Table 19. Each MSA is required to have at least one monitoring site situated to measure maximum concentrations at a neighborhood or larger scale.

Table 19: 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 were only included in Table 20 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 Bay Area AQMD, Sacramento Metropolitan AQMD, San Joaquin Valley APCD, 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 MSA should be continuous monitors. In each MSA, 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 21 if needed to meet minimum monitoring requirements.

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

CBSA	2020 Census Population (2021 Population Estimate)	2021 Design Value (% of NAAQS)[1] Design Value Site		Required Sites	SLAMS Sites Operating in 2021 (District where site is located) Highest Concentration Site Types Denoted by Bold Text
		24-hour	Annual		
Bakersfield	909,235 (917,673)	61 µg/m³ (174%) *Bakersfield-Planz*	17.8 µ/m³ (148%) *Bakersfield-Planz*	2	**Mojave (Eastern Kern)** Ridgecrest (Eastern Kern) Bakersfield-California (San Joaquin) Bakersfield-Planz (San Joaquin)
Chico	211,632 (208,309)	55 µg/m³ (157%) *Chico*	11.4 µg/m³ (95%) *Chico*	1	Chico (Butte)
El Centro	179,702 (179,851)	30 µg/m³ (86%) *Calexico*	11 µg/m³ (92%) *Calexico*	1	Brawley (Imperial)* Calexico (Imperial) El Centro (Imperial)
Los Angeles-Long Beach-Anaheim	13,200,998 (12,997,353)	41 µg/m³ (117%) *Pico Rivera*	12.8 µg/m³ (107%) *Pico Rivera*	3	Lancaster (Antelope Valley) Compton (South Coast) Long Beach-Rte 710 (South Coast) Los Angeles-N Main (South Coast) Pico Rivera (South Coast)
Oxnard-Thousand Oaks-Ventura	843,843 (839,784)	21 µg/m³ (60%) *El Rio, Piru, Simi Valley, Thousand Oaks*	7.9 µg/m³ (66%) *Simi Valley*	1	El Rio (Ventura) Ojai (Ventura) **Piru (Ventura)** **Simi Valley (Ventura)** Thousand Oaks (Ventura)
Redding	182,155 (182,139)	69 µg/m³ (197%) *Redding*	9.7 µg/m³ (81%) *Redding*	1	Redding (Shasta)
Riverside-San Bernardino-Ontario*	4,599,839 (4,653,105)	41 µg/m³ (117%) *Ontario*	14.2 µg/m³ (118%) *Ontario*	3	Victorville (Mojave Desert) **Mira Loma (South Coast)** Ontario (South Coast)
Sacramento-Roseville-Folsom	2,397,382 (2,411,428)	60 µg/m³ (171%) *Woodland***	11.5 µg/m³ (96%) *Sacramento-Bercut*	3	Auburn (Placer) **Del Paso-Avalon Dr (Sacramento)** Roseville- (Placer) Sacramento-Bercut (Sacramento) Woodland (Yolo-Solano)
Santa Rosa-Petaluma	488,863 (485,887)	21 µg/m³ (60%) *Sebastopol***	7.0 µg/m³ (58%) *Sebastopol***	0	Sebastopol (Bay Area)
Vallejo-Fairfield	453,491 (451,716)	31 µg/m³ (89%) *Vallejo*	9.7 µg/m³ (81%) *Vallejo*	1	**Vallejo- (Bay Area)**
Yuba City	181,208 (182,484)	54 µg/m³ (154%) *Yuba City*	13.1 µg/m³ (109%) *Yuba City*	1	Yuba City (Feather River)

* Closed in 2021

** Incomplete data

[1] Many monitoring sites were impacted by exceptional events in 2019, 2020 and 2021. Some of these impacts will be addressed under the Exceptional Event Rule (81 FR 68216) while others did not lead to exceedances of the standard but impacted the minimum monitoring requirements. CARB is working with local air districts to evaluate minimum monitoring requirements for all impacted areas.

Table 21: CBSAs with Minimum Monitoring Requirements for Continuous $PM_{2.5}$

Metropolitan Statistical Area	Minimum # of Required Sites	Required Continuous Monitors	Sites with Continuous Monitors Operating in 2021[1] (District where site is located)
Bakersfield	2	1	Mojave (Eastern Kern); Ridgecrest (Eastern Kern)
Chico	1	1	Chico (Butte); Gridley (Butte)**; Paradise (Butte)**
El Centro	1	1	Brawley (Imperial)[1]; Calexico (Imperial)
Los Angeles-Long Beach-Anaheim	3	2	Lancaster (Antelope Valley); Anaheim (South Coast)
Oxnard-Thousand Oaks-Ventura	1	1	El Rio (Ventura); Ojai (Ventura);Piru (Ventura); Simi Valley (Ventura); Thousand Oaks (Ventura)
Redding	1	1	Redding (Shasta)
Riverside-San Bernardino-Ontario	3	2	Victorville (Mojave Desert); Rubidoux (South Coast
Sacramento-Roseville-Folsom	3	2	Auburn (Placer); Colfax (Placer)**; Lincoln (Placer)*; Roseville (Placer); Tahoe City (Placer)**; Del Paso (Sacramento); Elk Grove (Sacramento)**; Folsom (Sacramento); Sacramento-T St (Sacramento); Sacramento-Bercut (Sacramento); Sloughhouse (Sacramento); Woodland (Yolo-Solano); Davis (Yolo-Solano)**
Santa Rosa-Petaluma	0	0	Sebastopol (Bay Area)
Vallejo-Fairfield	1	1	Vallejo (Bay Area)
Yuba City	1	1	Yuba City (Feather River)

*These sites operate continuous SLAMS monitors reporting only under non-regulatory parameter codes 88501 or 88502.
**These sites operate continuous monitors reporting under non-regulatory parameter codes 88501 or 88502 but not as SLAMS monitors (e.g., SPM or Other).
[1]The monitors listed here are primarily those in the districts covered by this ANP. Sites outside of the scope of this ANP are only included if needed to meet minimum monitoring requirements.
[1]The Brawley site FRM monitor was replaced with an FEM on 6/23/21.

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

Sampling frequency for 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 22. Sites located in areas with more severe air quality conditions generally are required to 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 23 and also in Appendix A. Exceptional events are included in the determination of the design values shown here.

Table 22: 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 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	

Table 23: Required $PM_{2.5}$ Sampling Frequency for FRM monitors

Site Name	AQS ID	District	2021 24-hr DV	2021 Annual DV	Required Sampling Frequency	Current Sampling Frequency
Calexico	060250005	Imperial	30	11.0	1:3	1:3
Brawley[1]	060250007	Imperial	20*	8.5*	1:3	1:1
El Centro	060251003	Imperial	20	8.7	1:3	1:3
Lakeport[2]	060333002	Lake	42	6.3	1:3	1:6
Truckee	060571001	Northern Sierra	54*	8.4*	1:3	1:3
Quincy	060631006	Northern Sierra	72*	11.6*	1:3	1:1
Portola	060631010	Northern Sierra	63	16.5	1:3	1:3
Woodland[3]	061131003	Yolo-Solano	60*	10.5*	1:3	1:6

*DV based on incomplete data.
[1]The Brawley FRM monitor was replaced with an FEM on 6/23/21.
[2]The Lake County AQMD is working with EPA to resolve district staffing and funding issues, as well as identifying equipment options for $PM_{2.5}$ to resolve the sampling frequency issue for Lakeport.
[3]The Woodland primary monitor was replaced with an FEM on 12/10/20 which operated until July 2021. The FEM was since replaced with a non-FEM. CARB is working with the district to resolve the sampling frequency issue at the Woodland 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 $PM_{2.5}$ NAAQS. 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 annual $PM_{2.5}$ 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 Part 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

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

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 24: 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. CARB 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 25 lists the California sites in the National Speciation Trends Network (STN) and State speciation network.

Table 25: $PM_{2.5}$ 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-Lexington	060731022	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	x
Modesto-14th	060990005	San Joaquin Valley		x
Oakland-West*	060010011	Bay Area		x
Portola-Gulling	060631010	Northern Sierra		x
Riverside-Rubidoux*	060658001	South Coast	x	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

* District supplemental speciation monitor

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.

National Core Multipollutant Network (NCore) Monitoring

Sites in the NCore Monitoring 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 includes rural and metropolitan sites. As shown in Table 26, seven NCore sites are located in California; none of the sites are located in the districts covered by this ANP, although the Fresno-Garland site is operated by CARB. More information about specific sites can be found in the ANPs submitted by districts in which the sites are located.

Table 26: NCore Sites in California

Site	AQS ID	District	Site Type
El Cajon-Lexington Elementary	060731022	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.

On October 1, 2015, U.S. EPA substantially revised the PAMS requirements in 40 CFR part 58 Appendix D. As part of the revision, U.S. EPA required state and local monitoring agencies to make PAMS measurements (including hourly averaged mixing height) at NCore sites in CBSAs with a population of 1,000,000 or more. The Fresno

CBSA has triggered the PAMS 1 million population requirement according to the 2020 census results. CARB is working with San Joaquin Valley APCD and U.S. EPA to implement the PAMS monitoring at the Freson-Garland NCore site. The revisions also required state monitoring agencies with moderate and above 8-hour ozone nonattainment areas and states in the Ozone Transport Region (OTR) to develop and implement an Enhanced Monitoring Plan (EMP) detailing enhanced ozone and ozone precursor monitoring activities to be performed to better understand area specific ozone issues.

In California, the Bay Area AQMD, Sacramento Metropolitan AQMD, San Diego County APCD, San Joaquin Valley 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. Due to the significant resources required to operate and maintain VOC measurements at the PAMS, the age of equipment, and changes to the monitoring regulations, the Ventura County APCD terminated VOC sampling at the Simi Valley and El Rio sites with U.S. EPA's approval in 2019. The Ventura County APCD continues to monitor NO_2/NOx at Simi Valley and El Rio sites; upper air meteorological parameters at the Simi Valley upper air site; and surface meteorological parameters at its six monitoring sites.

Ventura County does not have any NCore sites and its CBSA (Oxnard-Thousand Oaks-Ventura) is under 1,000,000. However, Ventura County is nonattainment - serious for ozone and is required to develop and implement an EMP. CARB worked with Ventura County APCD and U.S. EPA Region 9 to develop an EMP in 2019, and also the EMP was updated as part of the CARB 5-year Network Assessment in 2020.

Ozone air quality continues to improve in the Ventura County due to the implementation of Ventura County APCD and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation; therefore, no additional ozone or ozone precursor monitoring is planned or needed for the Ventura County nonattainment area at this time.

Special Purpose Monitors (SPM)

In the areas covered by this ANP, non-primary SPM monitors operated in 2021 in conjunction with SLAMS monitors at Brawley in Imperial County and at all sites in Ventura County.

Section 7: Federal Quality Assurance Requirements

CARB PQAO Collocation Requirements

Appendix A of 40 CFR Part 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 additional monitor must be an FRM monitor.

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 $PM_{2.5}$ NAAQS. 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, CARB 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 CARB 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 requirement.

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)
143 (FRM)[1]	R&P Model 2000 with VSCC	2	1	
145 (FRM)[2]	R&P Model 2025 with VSCC	9	1	Bakersfield-California – 145/145 (San Joaquin Valley) Portola – 145/145 (Northern Sierra) Sacramento-Del Paso – 145/145 (Sacramento)
170 (FEM)[3]	Met One BAM 1020 with VSCC	53	8	Calexico – 170/143 (Imperial) Folsom – 170/170 (Sacramento) Fresno-Garland – 170/145 (San Joaquin Valley) Grass Valley – 170/143 (Northern Sierra)[4] Sacramento-T St – 170/143 (Sacramento) Salinas – 170/143 (Monterey Bay) Simi Valley – 170/170 (Ventura) Victorville – 170/170 (Mojave Desert) Yuba City – 170/170 (Feather River)
181 (FEM)	Thermo TEOM 1400	1	1	Keeler – 181/145 (Great Basin)
209 (FEM)	Met One BAM-1022 with VSCC or TE-PM2.5C	6	1	Redding – 209/143 (Shasta))
238 (FEM)[5]	Teledyne TEOM T640X	2	1	Bishop/White Mountain – 238/145 (Great Basin)

[1] Previous collocation with FRM (143/143) replaced with FEM (170). CARB is working with the local air district to replace the two FRM (143) monitors with FEM (170). Once completed, this replacement will remove the collocation requirement for Method 143 (FRM)
[2]Two FRM (145) monitors (Brawley and Corcoran) were closed in 2021 and are not included in this total.
[3]Four FEM (170) monitors (Stockton-Hazelton secondary monitor, San Luis Obispo, Santa Maria, and Visalia) were closed in 2021 and are not included in this total.
[4]The collocated monitor at Grass Valley was closed in August 2021. CARB is working with local air districts to identify a replacement location in anticipation of more BAM1020 units being added to the network; current 8 collocations satisfy the requirement.
[5]Mammoth monitor, listed as SPM, is included in this total since it has been in operation over two years.

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 primary 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)
22	3	Fresno-Drummond – 162/162 (San Joaquin Valley) Keeler-Cerro – 127/127 (Great Basin) Sacramento-Del Paso – 063/063 (Sacramento)

Pb Collocation Status

There is one Pb monitor in the CARB PQAO located at the Sacramento-Del Paso Manor sites. However, Pb collocation for NCore sites is addressed by U.S. EPA at the national level. Thus, CARB is not required to collocate for lead at the NCore sites.

CARB Quality Management Branch (QMB)

The information in this section, along with the information available on CARB's Quality Assurance website, *https://ww2.arb.ca.gov/our-work/programs/quality-assurance*, provides an overview of CARB'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), Standards Laboratory Section (SLS) 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, SLS 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. CARB's audit program meets the federal requirements for conducting annual performance evaluations. Audits are conducted by using independent National Institute of Standards and Technology (NIST) traceable standards.

SLS is responsible for ensuring air monitoring equipment and QAS standards are in compliance with federally establish acceptance criteria and traceable to national and international standards. QAS is responsible for conducting performance audits of criteria and non-criteria gaseous analyzers, particulate matter samplers, meteorological equipment, and laboratory analyses utilized for generating ambient pollutant level measurements. QAS also performs site reviews as well as reports quality assessment and quality control results. In addition, QAS performs technical system audits (TSA). QMS is responsible for ensuring that CARB meets its federally mandated PQAO responsibilities and provides quality assurance oversight of the PQAO districts.

CARB Quality Assurance Activities

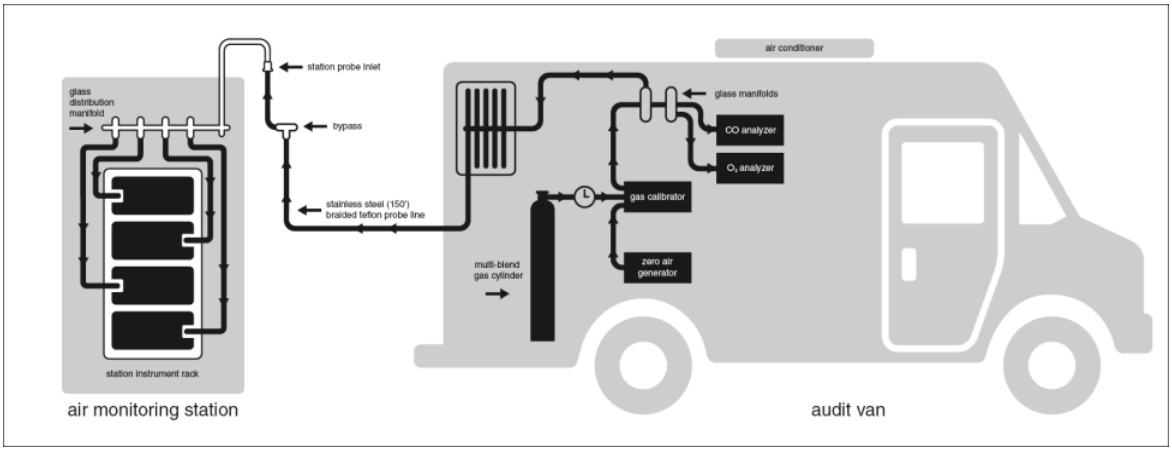
Monitoring Station Audits

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 CO, NO_2, H_2S, SO_2, 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 sensors 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 such as trees infringing on the minimum distance required from probe 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.

Technical System Audit

A Technical System Audit (TSA) is an on-site inspection and review of a monitoring organization's entire ambient air monitoring program. CARB conducts TSAs of monitoring organizations within its PQAO in accordance with U.S. EPA Quality Assurance Guidance Document: Conducting Technical Systems Audits of Ambient Air Monitoring Programs, EPA-454/B-17-004, November 2017. Each local air district 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 CARB 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 staff 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 take 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) or CARB control limits, 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 CARB'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 *https://ww2.arb.ca.gov/applications/quality-assurance-air-monitoring-site-list-generator-1*. 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 2021 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. Notably for 2021, the audit program was fully functional while operating under travel restrictions and safety protocol imposed during the pandemic. Following the guidance on priorities from the March 26, 2020 U.S. EPA memo, the program was able to audit all required monitors, including semi-annual assessments of PM monitors. Nearly all PM assessments met the criteria of being five to seven months apart.

In addition, as required by 40 CFR Part 58.15, CARB 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 21, 2021.

Section 8: Proposed and Recently Implemented Monitoring Site Changes

CARB 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.

Table 29 lists the proposed and recently implemented monitoring site changes that CARB is currently aware of in the areas covered by this ANP.

Ambient Air Monitoring Priorities During Covid-19 Response

Due to the statewide stay-at-home order in March 2020, CARB was forced to reduce or discontinue its filter-based monitoring operations during the COVID-19 response. All operations were implemented with personnel health and safety requirements following recommendations from the California Department of Public Health and Center for Disease Control guidelines.

In early December 2020, a new statewide stay-at-home order required CARB to further reduce its operations. CARB's air monitoring laboratory support was limited to only 3 sites (Bakersfield–California, Bakersfield–Southeast Planz, and Portola), which were deemed critical for area designations. CARB worked closely with the U.S. EPA and local agencies to inform them of the situation and the potential impacts. In February 2021, CARB received approval to resume its air monitoring operations for all programs at all sites.

Table 29: Proposed and Recently Implemented Changes to the Sites in the CARB ANP

District	Site (AQS ID)	Comment
Antelope Valley AQMD	Divisions St (060339033)	Antelope Valley AQMD stopped collecting CO data effective 1/1/2022 relying on South Coast AQMD shared CBSA site. Additionally, the Antelope Valley AQMD is planning to move the location of the site to the recently relocated District office location sometime in 2022-23 timeframe.
Butte County APCD	Paradise-Theater (060072002); Paradise-Airport (060070007)	CARB is planning to consolidate the two Paradise monitoring stations to a single new location due to the potential demolition of the Theater building. The new site will be located at 5913 Clark Road. Lease negotiations are underway and site improvements have begun.
Colusa County APCD	Colusa-Sunrise (060111002)	The $PM_{2.5}$ FRM was converted to FEM BAM-1022 in December 2020 shortly after the lab shutdown*. The BAM-1022 was then replaced by a BAM-1020 on 6/28/2021.
Eastern Kern APCD	Mojave (060290011)	The Mojave site is still at its temporary location behind the Kern County Sheriff's Department in Mojave. Currently, the plan is to move the site to a permanent spot located at 3200 Pat Avenue in Mojave.
El Dorado APCD	Placerville (060170010)	CARB is currently working to move the CARB operated Placerville-Gold Nugget station to El Dorado High School property. Lease negotiations were finalized in April 2022. CARB staff will begin building the station.
Feather River AQMD	Yuba City (061010003)	CARB installed a collocated $PM_{2.5}$ FEM BAM-1020 in March 2021 to meet PQAO continuous collocation requirements.
Imperial County APCD	El Centro-9th Street (060251003)	BAM-1022 $PM_{2.5}$ installed at location in November 2021. R&P 2025 $PM_{2.5}$ shut down on January 18, 2022.
	Brawley-Main Street (060250007)	R&P 2025 $PM_{2.5}$ shut down on May 27, 2021. BAM-1022 $PM_{2.5}$ installed at location in June 2021.
Lake County AQMD	Anderson Springs (060333010); Glenbrook (060333011)	The Lake County AQMD has discontinued PM10 monitoring at these locations starting 1/1/2022.
	Lakeport (060333002)	District is working with U.S. EPA to resolve District staffing and funding issues, as well as identifying equipment options for PM10 and PM2.5 to resolve the sampling frequency concerns.
Mendocino County AQMD	Willits-Justice Center (060452002)	District relocated its $PM_{2.5}$ site from Willits -Justice Center to Willits - Blosser Lane. The monitoring start date at the new site was February 5, 2021.

District	Site (AQS ID)	Comment
Northern Sierra AQMD	Grass Valley (060570005)	District shut down the collocated $PM_{2.5}$ FRM monitor in August 2021; this change does not require U.S. EPA approval.
	White Cloud Mountain (060570007)	Monitoring site is no longer available due to shelter and power issues. CARB is currently in the process of requesting U.S. EPA 's approval to close the site and establish a new site in the area.
Shasta County APCD	Anderson-North Street (060890007); Shasta Lake-La Mesa (060890008)	District got approval from U.S. EPA to discontinue the PM_{10} monitors at the Anderson and Shasta Lake sites.
	Redding-Health Department (060890004)	The BAM-1022 is now the primary monitor, the $PM_{2.5}$ FRM has been changed to a 1:12 day sampling schedule.
CARB	Calexico (060250005); Chico (060070008); Modesto (060990005); Stockton (060771003).	CARB is working with EPA to close CO monitors at Calexico, Chico, Modesto, and Stockton.

* The lab shutdown filter processing 12/7/2020. With the exception of Bakersfield CA St., Bakersfield Planz and Portola, the lab resumed operations on 4/1/2021.

CARB operates multiple sites in districts that are not covered by this ANP. Table 30 lists proposed and recently implemented changes to the CARB operated sites in Sacramento Metro AQMD and San Joaquin Valley APCD. For more detailed information of changes in these districts, please see the individual district plans.

Table 30: Proposed and Recently Implemented Changes to the CARB Operated Sites in the Other District ANPs

District	Site (AQS ID)	Comment
San Joaquin Valley APCD	Stockton-Hazelton (060771002)	Due to site demolition, the Stockton-Hazelton site was permanently closed down Nov 2021
	Stockton-University Park (060771003)	Due to the Stockton-Hazelton site closure, the Stockton-University Park site was installed and online Nov 2021.

Section 9: Network Information Resources

While this ANP includes a great deal of information about the ambient air quality monitoring network, much more information, including summaries of the pollutant data from the monitors around the State is readily 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.

CARB'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 *https://ww2.arb.ca.gov/applications/quality-assurance-air-monitoring-site-search-1*. A more general MLD web page that provides links to other aspects of ambient monitoring is located at *https://ww2.arb.ca.gov/our-work/programs/ambient-air-monitoring-regulatory*

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 CARB 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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El Dorado County Air Quality Management District, Placerville, CA
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Feather River Air Quality Management District, Yuba City, CA
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Glenn County Air Pollution Control District, Willows, CA
Marcie Skelton, Air Pollution Control Officer
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Imperial County Air Pollution Control District, El Centro, CA
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Lake County Air Quality Management District, Lakeport, CA
Douglas Gearhart, Air Pollution Control Officer
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Lassen County Air Pollution Control District, Susanville, CA
Erik Edholm, Air Pollution Control Officer
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Mariposa County Air Pollution Control District, Mariposa, CA
Eric Sergienko, Air Pollution Control Officer
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Mendocino County Air Quality Management District, Ukiah, CA
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Modoc County Air Pollution Control District, Alturas, CA
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Mojave Desert Air Quality Management District, Victorville, CA
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Northern Sierra Air Quality Management District, Grass Valley, CA
Gretchen Bennitt, Air Pollution Control Officer
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Northern Sonoma County Air Pollution Control District, Healdsburg, CA
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Placer County Air Pollution Control District, Auburn, CA
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Shasta County Air Quality Management District, Redding, CA
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Siskiyou County Air Pollution Control District, Yreka, CA
Jim Smith, Air Pollution Control Officer
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Tehama County Air Pollution Control District, Red Bluff, CA
Joe Tona, Air Pollution Control Officer
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Tuolumne County Air Pollution Control District, Sonora, CA
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Ventura County Air Pollution Control District, Ventura, CA
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Yolo-Solano Air Quality Management District, Davis, CA
Matt Ehrhardt, Air Pollution Control Officer
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Appendices to the 2022 Annual Network Plan

List of Appendices

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Appendix A

Detailed Site Reports

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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)	270 to CA-49				
Traffic Count (AADT,year)	7,300 (2,500)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
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	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)	14.1				
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	8/16/2021				
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)	118 to Sierra Hwy; 47 to Division Street				
Traffic Count (AADT,year)	Not available				
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 Info.	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)	16.0	16.3	15.8	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	9/14/2021	9/14/2021	9/14/2021	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	03/25/2021 09/14/2021	03/25/2021 09/14/2021

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)	920 to CA-99				
Traffic Count (AADT,year)	45,200 (2015)				
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, 3
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
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	Thermo 42iQ	Teledyne API 400	Met One BAM 1020	Met One BAM 1020
Method code	593	74	87	122	170
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	FEM
Collecting Agency	ARB	ARB	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	ARB	ARB	ARB	ARB	ARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	06/01/2012	06/08/2012	06/01/2012	5/27/2012	6/1/2012
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)	6.3	6.3	6.3	6.5	6.5
Distance from supporting structure (meters)	2.0	2.0	2.0	2.5	2.5
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	2
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)	N/A	17.7	12.6	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	N/A	No
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	Daily	Daily	Daily	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	non-operational; not audited	8/12/2021	8/12/2021	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	02/23/2021 08/12/2021	02/23/2021 08/12/2021

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)	1,053 to CA-99				
Traffic Count (AADT,year)	19,200 (2015)				
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)	Other				
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	02/24/2021 08/12/2021				

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)	852 to CA-191				
Traffic Count (AADT,year)	6,100 (2015)				
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	Primary				
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)	10.1				
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	7/21/2021				
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)	126 to CA-191				
Traffic Count (AADT,year)	9,300 (2015)				
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)	OTHER				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1022				
Method code	171				
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?	Yes				
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	02/23/2021 07/21/2021				

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)	620 to CA-49				
Traffic Count (AADT,year)	10,900 (2015)				
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	Primary	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)	13.4	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	8/17/2021	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/24/2021 08/17/2021	02/24/2021 08/17/2021		

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)	642 to CA-20				
Traffic Count (AADT,year)	9,500 (2015)				
Ground Cover	Grass				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM10, 6	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Supplementary		
Parameter Code	44201	81102	88502		
Basic monitoring objective(s)	NAAQS	NAAQS	Public Information		
Site type(s)	General Background	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	Other		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1022		
Method code	87	122	171		
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	Regional	Neighborhood	Neighborhood		
Monitoring start date	07/01/1996	2/1/2016	10/12/2004		
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)	5.3	5.9	9.8		
Distance from supporting structure (meters)	2	2.2	2.8		
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)	14.4	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	8/10/2021	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/24/2021 08/10/2021	02/24/2021 08/10/2021		

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)	88 to CA-178				
Traffic Count (AADT,year)	2,250 (2015)				
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)	Population Exposure; General Background				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	MetOne Ebam Plus				
Method code	226				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Eastern Kern APCD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Eastern Kern APCD				
Spatial scale	Regional				
Monitoring start date	1/1/2009				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	2.8				
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				
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	2 weeks				
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	03/22/2021 08/25/2021				

Local Site Name	Mojave				
AQS ID	06-029-0011				
GPS Coordinates	35.04649, -118.16295				
Street Address	1773 CA-58 Business, Mojave CA 93501				
County	Kern				
Distance to roadways (meters)	60m to CA-58				
Traffic Count (AADT,year)	17,000 (2015)				
Ground Cover	Dirt/Soil				
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	Population Exposure	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	9/22/2020	10/1/2020	10/1/2020		
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	4.5		
Distance from supporting structure (meters)	1.5	1.8	1.9		
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)	9.4	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	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Semi-Monthly	Semi-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	8/25/2021	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/23/2021 08/25/2021	03/23/2021 08/25/2021		

Local Site Name	Ridgecrest - Ward Ave				
AQS ID	06-029-0018				
GPS Coordinates	35.64296, -117.71414				
Street Address	2051 Ward Av , Ridgecrest, 93555				
County	Kern				
Distance to roadways (meters)	N. Primavera Street (32m), Sydnor Ave (235m), West Ward Ave. (162m), Jacks Ranch Road (800m)				
Traffic Count	Primavera 5 (staff estimate), Sydnor 15 (staff estimate), Ward 15 (staff estimate), Jacks Ranch Rd 2,087 (July 25, 2018)				
Ground Cover	Sand				
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, 85101	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	MET ONE BAM 1020	MET ONE BAM 1020			
Method code	122	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Eastern Kern APCD	Eastern Kern APCD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Eastern Kern APCD	Eastern Kern APCD			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	11/1/2017	11/1/2017			
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)	5.5	5.5			
Distance from supporting structure (meters)	2.0	2.0			
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)	100	100			
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	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	2 weeks	2 weeks			
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	03/22/2021 08/25/2021	03/22/2021 08/25/2021			

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)	183 to CA-193				
Traffic Count (AADT,year)	6,300 (2015)				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento-Roseville-Arden-Arcade 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)	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)	13.7				
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	7/20/2021				
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)	207 to US-50				
Traffic Count (AADT,year)	10,000 (2015)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento-Roseville-Arden-Arcade 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)	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)	17.6				
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	8/9/2021				
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)	721 to US-50				
Traffic Count (AADT,year)	49,500				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento-Roseville-Arden-Arcade 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)	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)	18.2				
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	7/15/2021				
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)	196 to US-50				
Traffic Count (AADT,year)	29,200				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
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	02/25/2021 08/09/2021				

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)	6,100 to CA-20				
Traffic Count (AADT,year)	7,400 (2015)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	Yuba City 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)	Highest Concentration; 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	05/01/1993				
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)	14.0				
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	8/13/2021				
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)	275 to CA-20				
Traffic Count (AADT,year)	38,500 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Yuba City Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 3	PM2.5, 4
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	Collocate
Parameter Code	42602	44201	81102	88502	88502
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS
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	Thermo 42iQ	Teledyne API 400	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020
Method code	74	87	122	170	170
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	FEM
Collecting Agency	ARB	ARB	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	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	12/7/2020	3/24/2021
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)	8.4	8.4	9.6	9.7	9.7
Distance from supporting structure (meters)	1.1	1.1	2.3	2.4	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	1.1	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)	15.2	12.2	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	No	No
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	Monthly	Monthly	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	8/24/2021	8/24/2021	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	02/22/2021 08/24/2021	02/22/2021 08/24/2021	8/24/2021

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)	1,092 to CA-162				
Traffic Count (AADT,year)	5,000 (2015)				
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	Other		
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	731		
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)	3.8	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	8/11/2021	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/23/2021 08/11/2021	02/23/2021 08/11/2021		

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)	270 to CA-86				
Traffic Count (AADT,year)	16,400 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	El Centro Metropolitan Statistical Area				
Pollutant, POC	PM10, 3	PM2.5, 1	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary		
Parameter Code	81102	88101	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	Met One BAM 1020	R & P 2025	Met One BAM 1022		
Method code	122	118	209		
FRM/FEM/ARM/Other	FEM	FRM	FEM		
Collecting Agency	Imperial County	Imperial County	Imperial County		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	San Diego County	N/A		
Reporting Agency	ARB	San Diego County	ARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	8/11/2009	12/15/2003	6/23/2021		
Current sampling frequency	Continuous	1:3	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)	12.4	12	10		
Distance from supporting structure (meters)	2.4	2	1.5		
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?	No	Closed 5/27/2021	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	Yes		
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	Every 2 weeks	N/A	Every 2 weeks		
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	3/18/2021	3/18/2021	3/18/2021 9/2/2021		

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)	528 to CA-86				
Traffic Count (AADT,year)	17,000 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	El Centro Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 4	PM2.5, 1	PM2.5, 3
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	Primary
Parameter Code	42602	44201	81102	88101	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS
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 1022
Method code	99	87	122	118	209
FRM/FEM/ARM/Other	FRM	FEM	FEM	FRM	FEM
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	San Diego County	N/A
Reporting Agency	ARB	ARB	ARB	San Diego County	ARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	1/1/1980	02/01/1988	7/1/2015	1/1/1999	11/13/2021
Current sampling frequency	Continuous	Continuous	Continuous	1:3	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)	11	11	11	11.6	10
Distance from supporting structure (meters)	2	2	2	2.1	1.5
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	N/A (No trees)
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	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	11.76	10.94	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	Yes	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Closed 1/15/2022	Yes
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	Every 2 weeks	N/A	Every 2 weeks
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	8/31/2021	8/31/2021	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	03/18/2021 08/31/2021	03/18/2021 08/31/2021	

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):	2,460 to CA-111				
Traffic Count (AADT,year)	2,950 (2015)				
Ground Cover:	Dirt				
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			
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	Neighborhood	Neighborhood			
Monitoring start date	10/1/1997	8/10/2009			
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)	4.6	5.2			
Distance from supporting structure (meters)	1.6	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)	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)	6.59	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	Every 2 weeks			
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	9/2/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/17/2021 09/02/2021			

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):	646 to CA-86				
Traffic Count (AADT,year)	13,300 (2015)				
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)	6.27	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	Every 2 weeks			
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	9/2/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/17/2021 09/02/2021			

Local Site Name:	Calexico-Ethel Street				
AQS ID:	06-025-0005				
GPS Coordinates:	32.67887, -115.48292				
Street Address:	1085 Andrade Ave, Calexico, 92231				
County:	Imperial				
Distance to roadways (meters):	26 to CA-98				
Traffic Count (AADT,year)	18,100 (2016)				
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	
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	Highest Concentration	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 300	Thermo 43i-TLE	Thermo 42iQ	Teledyne API 400	
Method code	593	560	74	87	
FRM/FEM/ARM/Other	FRM	FEM	FRM	FEM	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	3/1/2013	3/1/2013	3/1/1994	4/1/1994	
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	4.4	4.4	
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)	N/A	N/A	N/A	N/A	
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	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
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)	4.3	5.9	5.2	4.5	
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	Precision S-Th*	Precision S-Th*	Precision S-Th*	Precision S-Th*	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/7/2021	9/7/2021	9/1/2021	9/1/2021	
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	

*one-point. QC checks at the precision level (20% of scale) Sunday through Thursday; Span levels (80% of scale) are conducted Fridays and Saturdays.

(continued)

Local Site Name:	Calexico-Ethel Street				
AQS ID:	06-025-0005				
GPS Coordinates:	32.67887, -115.48292				
Street Address:	1085 Andrade Ave, Calexico, 92231				
County:	Imperial				
Distance to roadways (meters):	26 to CA-98				
Traffic Count (AADT,year)	18,100 (2016)				
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, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary		
Parameter Code	81102	88101	88502		
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	CSN supplemental	N/A		
Instrument manufacturer and model	Met One BAM 1020	Thermo 2000I	Met One BAM 1020 W VSCC		
Method code	122	143	731		
FRM/FEM/ARM/Other	FEM	FRM	FEM		
Collecting Agency	ARB	ARB	ARB		
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	01/15/2016	(1/1/1999,2025) 4/2021	1/1/2016		
Current sampling frequency	Continuous	1:12	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	4.9	5.9		
Distance from supporting structure (meters)	2.1	2.1	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)	N/A	6 (tree)	N/A		
Height above probe for obstructions not on roof (meters)	3	3	3		
Distance to nearest tree drip line (meters)	7	7	7		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	1.4	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	Yes	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	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	Semi-Monthly	Every 2 weeks	Semi-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	03/16/2021 09/07/2021	03/16/2021 09/01/2021	03/16/2021 09/01/2021		

Lake County AQMD

Local Site Name	Middletown-Anderson Springs Road				
AQS ID	06-033-3010				
GPS Coordinates	38.77453, -122.69950				
Street Address	11210 Anderson Springs Road, Middletown, CA 95461				
County	Lake				
Distance to roadways (meters)	1,400 to CA-175				
Traffic Count (AADT,year)	3,200 (2015)				
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)	Other-GAMP				
Network affiliation(s)	N/A				
Instrument manufacturer and model	R & P 2000				
Method code	126				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Lake County AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	Lake County AQMD				
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	1:6				
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)	>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?	closed 1/1/2022				
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	05/20/2021 12/01/2021				

Local Site Name	Glenbrook				
AQS ID	06-033-3011				
GPS Coordinates	38.84846, -122.75797				
Street Address	8276 High Valley Road, Cobb, CA 95426				
County	Lake				
Distance to roadways (meters)	6,437 to Bottle Rock Rd. and CA-175				
Traffic Count Notes	1700 (2005)				
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)	Other-GAMP				
Network affiliation(s)	N/A				
Instrument manufacturer and model	R & P 2000				
Method code	126				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Lake County AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	Lake County AQMD				
Reporting Agency	ARB				
Spatial scale	Urban				
Monitoring start date	04/01/2001				
Current sampling frequency	1:6				
Required sampling frequency including exceptional events	1:6				
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)	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?	closed 1/1/2022				
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	05/20/2021 12/01/2021				

Local Site Name	Lakeport-S. Main Street				
AQS ID	06-033-3002				
GPS Coordinates	39.018900, -122.913350				
Street Address	2617 South Main Street, Lakeport, CA 95453				
County	Lake				
Distance to roadways (meters)	30				
Traffic Count Notes	15,300 (2015)				
Ground Cover	Clearlake Micropolitan Statistical Area				
Representative statistical area name (i.e. MSA, CBSA, other)					
Pollutant, POC	Ozone, 1	PM10, 1	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	General 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 AQMD	Lake County AQMD	Lake County AQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	Lake County AQMD	Lake County AQMD		
Reporting Agency	ARB	ARB	ARB		
Spatial scale	Urban	Neighborhood	Neighborhood		
Monitoring start date	7/1/2017	7/1/2017	7/1/2017		
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)	4.8	4.5	4.5		
Distance from supporting structure (meters)	2.2	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)	>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)	9.2	N/A	N/A		
Will there be changes within the next 18 months?	Yes	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	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	12/1/2021	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	05/20/2021 12/01/2021	05/20/2021 12/01/2021		

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):	184 to Jerseydale Road				
Traffic Count (AADT,year)	Not available				
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)	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	07/01/1995				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Apr - 31-Oct				
Probe height (meters)	4				
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)	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)	11.9				
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	10/5/2021				
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):	220 to Northside Drive				
Traffic Count (AADT,year)	Not available				
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	Other			
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)	>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?	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	Notes:		
Frequency of one-point QC check for gaseous instruments	N/A	N/A	* ARB and EPA concluded that the PM2.5 sampler is not FEM and is not subject to federal siting criteria of CFR Title 40, Part 58, Appendix E; see AQDA issued on 5-15-12.		
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	04/22/2021 10/06/2021	04/22/2021 10/06/2021			

Local Site Name:	Yosemite NP - Turtleback Dome				
AQS ID:	06-043-0003				
GPS Coordinates:	37.713251, -119.706196				
Street Address:	Turtleback Dome, Yosemite National Park				
County:	Mariposa				
Distance to roadways (meters):	> 100				
Traffic Count (AADT,year)	Not available				
Ground Cover:					
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)	General Background				
Monitor type(s)	Non-EPA Federal				
Network affiliation(s)	CASTNET				
Instrument manufacturer and model	Thermo 49C				
Method code	47				
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	Regional				
Monitoring start date	9/1/1990				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	10				
Distance from supporting structure (meters)					
Distance from obstructions on roof (meters)					
Height above probe for obstructions on roof (meters)					
Distance from obstructions not on roof (meters)	>50				
Height above probe for obstructions not on roof (meters)	10				
Distance to nearest tree drip line (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)					
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)	9.1				
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	10/6/2021				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

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)	1,564 to CA-1				
Traffic Count (AADT,year)	19,300 (2015)				
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	06/15/2021 12/02/2021				

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)	570 to US-101				
Traffic Count (AADT,year)	22,800 (2015)				
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)	9.7				
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	Weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	12/1/2021				
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)	847 to US-101				
Traffic Count (AADT,year)	29,200 (2015)				
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?	Yes				
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	06/15/2021 12/01/2021				

Local Site Name	Willits - Blosser Lane				
AQS ID	06-045-2003				
GPS Coordinates	39.39861, -123.35872				
Street Address	1277 Blosser Lane, Willits, 95490				
County	Mendocino				
Distance to roadways (meters)	595 to State Hwy 20				
Traffic Count (AADT,year)	23,600 (2015)				
Ground Cover	Gravel				
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	2/4/2021				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.3				
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?	Yes				
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	6/15/2021,12/2/2021				

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)	890 to I-15; 890 to CA-247				
Traffic Count (AADT,year)	66,000 (I-15); 18,400 (CA-247) (2015)				
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)	14.1	15.1	14.3	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	9/9/2021	9/9/2021	9/9/2021	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	03/23/2021 09/09/2021	

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)	674 to I-10				
Traffic Count (AADT,year)	27,200 (2015)				
Ground Cover	Unpaved				
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	Supplementary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS, Public Information				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne T400				
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)	6.5				
Distance from supporting structure (meters)	2				
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 (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)	14.8				
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	9/21/2021				
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)	105 to Olive Street; 36 to H Avenue				
Traffic Count (AADT,year)	Not available				
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)	1.8	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	9/16/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/24/2021 09/16/2021			

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):	13 (Campground Rd)				
Traffic Count (AADT,year)	Not available				
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	National Park Service				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	National Park Service				
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)	7.5				
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	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/8/2021				
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):	16,600 to CA-62				
Traffic Count (AADT,year)	860 (2015)				
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	National Park Service				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	National Park Service				
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)	2.5				
Will there be changes within the next 18 months?	Discontinued, Aug 1				
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	4/7/2021				
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):	345 to CA-18				
Traffic Count (AADT,year)	8,100 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario 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	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	03/24/2021 09/16/2021				

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):	30,800 to I-15				
Traffic Count (AADT,year)	42,000 (2015)				
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	National Park Service				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	National Park Service				
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):	1291 to CA-138				
Traffic Count (AADT,year)	19,400 (2015)				
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)	1.8				
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	Every 2 weeks				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/15/2021				
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):	375 to CA-178				
Traffic Count (AADT,year)	2,300 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	SO2, 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)	Population Exposure	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)	9.9	10.8	9.6	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	10/12/2021	10/12/2021	10/12/2021	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	04/20/2021 10/12/2021	

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):	416 to CA-18; 416 to I-15				
Traffic Count (AADT,year)	40,000 (CA-18); 87,000 (I-15) (2015)				
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)	11.2	11.9	10.6	11.3	
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	9/8/2021	9/8/2021	9/8/2021	9/8/2021	
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):	416 to CA-18; 416 to I-15				
Traffic Count (AADT,year)	40,000 (CA-18); 87,000 (I-15)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	PM10, 1	PM2.5, 1	PM2.5, 2		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	QA-Audit		
Parameter Code	81102	88101	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Regional Transport; Population Exposure	Regional Transport; Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	R & P CO 2000		
Method code	122	170	117		
FRM/FEM/ARM/Other	FEM	FEM	FRM		
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	Mojave Desert AQMD		
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	1/1/2014	1/1/2016	1/1/2000		
Current sampling frequency	Continuous	Continuous	1:6		
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)	7.4	7.5	7.5		
Distance from supporting structure (meters)	2	2.1	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)	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	2	2		
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	Yes	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	Yes		
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	Monthly	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	03/24/2021 09/08/2021	03/24/2021 09/08/2021	03/24/2021 09/08/2021		

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):	133 to CA-36				
Traffic Count (AADT,year)	4,800 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM2.5, 4				
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)	Other				
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	03/04/2021 09/30/2021				

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):	1,256 to CA-20				
Traffic Count (AADT,year)	37,000 (2015)				
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	Supplementary	Primary		
Parameter Code	44201	88101	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	Thermo Scientific Partisol 2000i	Met One BAM 1020		
Method code	87	117	170		
FRM/FEM/ARM/Other	FEM	FRM	FEM		
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	12/6/2017		
Current sampling frequency	Continuous	Continuous	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)	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)	15.4	N/A	N/A		
Will there be changes within the next 18 months?	No	Closed August 2021	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	Yes		
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	8/30/2021	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/3/2021	03/03/2021 08/30/2021		

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):	317 to CA-70				
Traffic Count (AADT,year)	6,600 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM2.5, 1	PM2.5, 2	PM2.5, 4		
Primary, QA-Audit, Supplementary, or N/A	Primary	QA-Audit	Supplementary		
Parameter Code	88101	88101	88502		
Basic monitoring objective(s)	NAAQS	NAAQS	Public Information		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	Other		
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	03/04/2021 08/31/2021	03/04/2021 08/31/2021	03/04/2021 08/31/2021		

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):	270 to CA-70; 492 to CA-70				
Traffic Count (AADT,year)	4,800 (CA-70); 9,800 (CA-70) (2015)				
Ground Cover:	Grass				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM2.5, 1	PM2.5, 4			
Primary, QA-Audit, Supplementary, or N/A	Primary	Supplementary			
Parameter Code	88101	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	Other			
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	08/31/2021	03/04/2021 08/31/2021			

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):	825 to I-80				
Traffic Count (AADT,year)	33,000 (2015)				
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, 4			
Primary, QA-Audit, Supplementary, or N/A	Primary	Supplementary			
Parameter Code	88101	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	Other			
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	03/03/2021 08/30/2021	03/03/2021 08/30/2021			

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 (AADT,year)	3,500 (2015)				
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 2021				
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	not operated in 2021				
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)	623 to US-101				
Traffic Count (AADT,year)	15,400 (2015)				
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	06/15/2021 11/30/2021				

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)	160 to CA-116				
Traffic Count (AADT,year)	9,000 (2015)				
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	CARB				
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	06/16/2021 11/30/2021				

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):	540 to US-101				
Traffic Count (AADT,year)	40,500 (2015)				
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)	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	Northern Sonoma				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Urban				
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	06/16/2021 11/30/2021				

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):	446 to CA-49				
Traffic Count (AADT,year)	39,000 (2015)				
Ground Cover:	Asphalt				
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	CARB	CARB			
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)	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	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	8/25/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/01/2021 08/25/2021			

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):	404 to CA-174; 567 to I-80				
Traffic Count (AADT,year)	6,100 (CA-174); 27,600 (I-80) (2015)				
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	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	Other			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	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	CARB	CARB			
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	8/26/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/01/2021 08/26/2021			

Local Site Name:	Lincoln-Moore Road				
AQS ID:	06-061-2003				
GPS Coordinates:	38.86794, -121.33835				
Street Address:	2885 Moore Road, Lincoln, 95648				
County:	Placer				
Distance to roadways (meters):	20 to Moore Road				
Traffic Count (AADT,year)	500 (2019)				
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	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	Other			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	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	CARB	CARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	11/1/2018	11/1/2018			
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)	1.1	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)	12.1	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	8/25/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/02/2021 08/25/2021			

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):	280 to CA- 89; 377 to CA-28				
Traffic Count (AADT,year)	10,800 (CA- 89); 11,800 (CA-28) (2015)				
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	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	General Background	General Background			
Monitor type(s)	SLAMS	Other			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	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	CARB	CARB			
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)	13.3	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	8/27/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/01/2021 08/27/2021			

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):	330 to I-80				
Traffic Count (AADT,year)	175,500 (2015)				
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, 3	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Supplementary	
Parameter Code	42602	44201	81102	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	Public Information	
Site type(s)	Population Exposure	Highest Concentration	Highest Concentration	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	Other	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Thermo 42i	Teledyne API 400	Met One BAM 1020	Met One BAM 1020	
Method code	74	87	122	731	
FRM/FEM/ARM/Other	FRM	FEM	FEM	Other	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	01/13/1993	01/13/1993	4/1/2015	6/23/2004	
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)	8.5	8.5	7.9	7.9	
Distance from supporting structure (meters)	3.5	3.5	2.9	2.9	
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)	>10 meters	>10 meters	>10 meters	>10 meters	
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	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	19.3	17.3	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	No	
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	Monthly	Monthly	
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/18/2021	8/18/2021	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	02/22/2021 08/18/2021	02/22/2021 08/18/2021	

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)	717 to CA-273; 818 to I-5				
Traffic Count (AADT,year)	8,600 (CA-273); 51,000 (I-5) (2015)				
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)	6.9	N/A			
Will there be changes within the next 18 months?	No	Closed			
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	10/11/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	10/11/2021			

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)	778 to CA-44				
Traffic Count (AADT,year)	1,150 (2015)				
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	Regional				
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)	8 (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)	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	11.2				
Frequency of flow rate verification for automated PM analyzers	N/A		Notes:		
Frequency of one-point QC check for gaseous instruments	Daily		* Distance to tree is 8m; height unknown. Waiver (EPA) was granted in 2014.		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/12/2021				
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):	530 to CA-273				
Traffic Count (AADT,year)	19,200 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Redding Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 1	PM2.5, 3	PM10, 2	
Primary, QA-Audit, Supplementary, or N/A	N/A	Supplementary	Primary	Primary	
Parameter Code	44201	88101	88101	81102	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure; Highest Concentration	Population Exposure	Population Exposure	Highest Concentration	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 400	R & P 2000	Met One BAM 1022	Sierra Andersen 1200	
Method code	87	143	209	63	
FRM/FEM/ARM/Other	FEM	FRM	FEM	FRM	
Collecting Agency	Shasta County	Shasta County	Shasta County	Shasta County	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	N/A	ARB	
Reporting Agency	Shasta County	ARB	Shasta County	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	05/01/1990	02/19/1998	2/23/2019	01/01/1988	
Current sampling frequency	Continuous	1:12	Continuous	1:6	
Required sampling frequency including exceptional events	N/A	1:12	N/A	1:6	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	9.6	8.7	9	8.3	
Distance from supporting structure (meters)	3	>2	>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	>2	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 Borosilicate	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.1	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	No	Yes	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	No	N/A	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Monthly	Monthly	Quarterly	
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	Weekly	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/12/2021	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	04/13/2021 10/12/2021	04/13/2021 10/12/2021	04/13/2021 10/12/2021	

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):	259 to CA-151				
Traffic Count (AADT,year)	1,650 (2015)				
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 265				
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)	no obstructions *				
Height above probe for obstructions on roof (meters)	1.5				
Distance from obstructions not on roof (meters)	no obstructions *				
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)	15.6				
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		Notes:		
Frequency of one-point QC check for gaseous instruments	weekly		* Cell tower is not considered an obstruction. Distance to probe is 6m.		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/13/2021				
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):	488 to CA-151				
Traffic Count (AADT,year)	4,500 (2015)				
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?	Closed				
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	04/13/2021 10/13/2021				

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)	437 to I-5; 496 to CA-3				
Traffic Count (AADT,year)	16,500 (I-5); 8,700 (CA-3) (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary following POC 1 shutdown			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Highest Conc; Regional Transport; Pop. Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400E	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Siskiyou County	Siskiyou County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	Siskiyou County			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	01/01/1981	7/1/2018			
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)	3.4	3.7			
Distance from supporting structure (meters)	N/A	N/A			
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)	3.5	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	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Biweekly			
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	10/14/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/14/2021 10/14/2021			

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)	1,860 to CA-36				
Traffic Count (AADT,year)	11,400 (2015)				
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	1/24/2015	3/1/2016		
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	>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)	Pyrex, borosilicate 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	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	10/15/2021	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/12/2021 10/15/2021	04/12/2021 10/15/2021		

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)	3,076 to CA-36				
Traffic Count (AADT,year)	1,200 (2015)				
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	Primary				
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	06/01/1995				
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)	5.8				
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	8/12/2021				
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):	355 to CA-49				
Traffic Count (AADT,year)	18,300 (2015)				
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	Primary				
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)	9.9				
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	8/16/2021				
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:	34.25239, -119.14318				
Street Address:	545 Central Av, El Rio, 93030				
County:	Ventura				
Distance to roadways (meters):	1,116 to CA-232				
Traffic Count (AADT,year)	14,600 (2015)				
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	N/A	N/A	
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	
Method code	99	87	122	170	
FRM/FEM/ARM/Other	FRM	FEM	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, borosilicate glass	Teflon, borosilicate glass	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	11.0	11.5	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	11/18/2021	11/18/2021	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	05/12/2021 11/18/2021	05/12/2021 11/18/2021	

Local Site Name:	Ojai - East Ojai Ave				
AQS ID:	06-111-1004				
GPS Coordinates:	34.44806, -119.23130				
Street Address:	1201 E. Ojai Ave, Ojai, 93023				
County:	Ventura				
Distance to roadways (meters):	366 to CA-150				
Traffic Count (AADT,year)	6,500 (2015)				
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	N/A			
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	FEM	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, borosilicate glass	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	11.1	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	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	11/18/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	05/12/2021 11/18/2021			

Local Site Name:	Piru - Pacific				
AQS ID:	06-111-0009				
GPS Coordinates:	34.40428, -118.80998				
Street Address:	3301 Pacific Ave, Piru, 93040				
County:	Ventura				
Distance to roadways (meters):	403 to CA-126				
Traffic Count (AADT,year)	23,500 (2015)				
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	N/A			
Parameter Code	44201	88101			
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	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FEM	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	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, borosilicate glass	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.5	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	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	11/16/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	05/11/2021 11/16/2021			

Local Site Name:	Simi Valley - Cochran Street				
AQS ID:	06-111-2002				
GPS Coordinates:	34.27632, -118.68369				
Street Address:	5400 Cochran St, Simi Valley, 93063				
County:	Ventura				
Distance to roadways (meters):	758 to CA-118				
Traffic Count (AADT,year)	125,000 (2015)				
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, 3	PM2.5, 4
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	Primary	QA-Audit
Parameter Code	42602	44201	81102	88101	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	Public Information
Site type(s)	Highest Concentration	Highest Concentration	Population Exposure	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	FEM	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	06/29/2013	03/17/2014
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, borosilicate glass	Teflon, borosilicate glass	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.7	10.9	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	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	11/17/2021	11/17/2021	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	05/11/2021 11/17/2021	05/11/2021 11/17/2021	05/11/2021 11/17/2021

Local Site Name:	Thousand Oaks-Moorpark Road				
AQS ID:	06-111-0007				
GPS Coordinates:	34.21017, -118.87051				
Street Address:	2323 Moorpark Rd, Thousand Oaks, 91360				
County:	Ventura				
Distance to roadways (meters):	1,622 to CA-23				
Traffic Count (AADT,year)	112,000 (2015)				
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	N/A			
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	FEM	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, borosilicate glass	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.5	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	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	11/16/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	05/12/2021 11/16/2021			

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):	502 to CA-113				
Traffic Count (AADT,year)	39,300 (2015)				
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	Primary	Primary	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	Other		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Thermo 42iQ	Teledyne API 400	Met One BAM 1020		
Method code	74	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)	10.2	10.3	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	8/23/2021	8/23/2021	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	02/25/2021 08/23/2021		

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):	607 to I-80				
Traffic Count (AADT,year)	174,000 (2015)				
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	02/23/2021 08/05/2021				

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):	1,500 to I-80				
Traffic Count (AADT,year)	169,000 (2015)				
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; 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	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)	10.6				
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	Weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/5/2021				
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):	1,338 to I-5; 1,338 to US-50				
Traffic Count (AADT,year)	179,000 (2015)				
Ground Cover:	Pavement				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade 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	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	02/23/2021 07/28/2021				

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):	1,442 to I-5; 1,642 to CA-113				
Traffic Count (AADT,year)	47,300 (2015)				
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)	9.3	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	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	7/28/2021	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/23/2021 11/30/2021	02/23/2021 11/30/2021		

San Joaquin Valley APCD

*CARB operated sites outside of the CARB ANP

Local Site Name	Modesto –14th St				
AQS ID	06-099-0005				
GPS Coordinates	37.6421 N, -120.9942 W				
Street Address	814 14th Street, Modesto CA 95354				
County	Stanislaus				
Distance to roadways (meters)	50 m (southwest)				
Traffic Count (AADT,year)	122,000 / 2014 (Traffic count for nearest roads: H Street / Rte 99, Source: Caltrans 2017 AADDT)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Modesto				
Pollutant, POC	Ozone, 1	Trace CO, 3	PM10, 7	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	primary	
Parameter Code	44201	42101	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)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 400	Teledyne API 300	Met One BAM-1020	Met One BAM-1020	
Method code	593	67	122	170	
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	1/1/2013	1/1/1981	12/1/2013	12/7/2020	
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)	8	8	4.4	4.4	
Distance from supporting structure (meters)	2	2	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	Teflon	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.7	6.9	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	Semi-Monthly	Semi-Monthly	
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	12/8/2021	12/8/2021			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors			4/14/21, 12/8/21	4/14/21, 12/8/21	

Local Site Name:	Stockton-Hazelton				
AQS ID	06-077-1002				
GPS Coordinates	37.9507 N, -121.2689 W				
Street Address	1601 E Hazelton St, Stockton CA 95205				
County	San Joaquin				
Distance to roadways (meters)	62 m (north)				
Traffic Count (AADT,year)	4000/2014 (Traffic count estimated by City of Stockton Public Works Traffic Engineering Division)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Stockton-Lodi				
Pollutant, POC	Ozone, 1	Trace CO, 3	NO2, 2	PM10, 5	PM2.5, 3
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	Primary	primary
Parameter Code	44201	42101	42602	81102	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	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 400	Teledyne API 300	Teledyne API 200	Met One BAM-1020	Met One BAM-1020
Method code	593	67	99	122	170
FRM/FEM/ARM/Other	FRM	FEM	FRM	FEM	FEM
Collecting Agency	ARB	ARB	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	ARB	ARB	ARB	ARB	ARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	1/1/1976	?	?	1/1/2021	12/7/2020
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)	5.7	5.7	5.7	5.7	5.7
Distance from supporting structure (meters)	2	2	2.0	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)	6.2	5.8	8.0	N/A	N/A
Will there be changes within the next 18 months?	Site closed 11/2021	Site closed 11/2021	Site closed 11/2021	Site closed 11/2021	Site closed 11/2021
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	Semi-Monthly	Semi-Monthly
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	8/3/2021	8/3/2021	8/3/2021		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors				2/26/21, 10/18/21	2/26/21, 10/18/21

Local Site Name:	Stockton - University Park				
AQS ID	06-077-1003				
GPS Coordinates	37.96158 N, -121.28141 W				
Street Address	702 N Aurora Street, Stockton, CA				
County	San Joaquin				
Distance to roadways (meters)	60 m (north)				
Traffic Count (AADT,year)	3600/2020 (Traffic count estimated by City of Stockton Public Works Traffic Engineering Division)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Stockton-Lodi				
Pollutant, POC	Ozone, 1	Trace CO, 3	NO2, 2	PM10, 5	PM2.5, 3
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	Primary	primary
Parameter Code	44201	42101	42602	81102	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	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 400	Teledyne API 300	Teledyne API 200	Met One BAM-1020	Met One BAM-1020
Method code	593	67	99	122	170
FRM/FEM/ARM/Other	FRM	FEM	FRM	FEM	FEM
Collecting Agency	ARB	ARB	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	ARB	ARB	ARB	ARB	ARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	11/5/2021	11/5/2021	11/5/2021	11/5/2021	11/5/2021
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)	5.7	5.7	5.7	5.7	5.7
Distance from supporting structure (meters)	2	2	2.0	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)	7.6	7.6	7.6	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	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	Semi-Monthly	Semi-Monthly
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					
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors					

Sacramento Metropolitan AQMD

*CARB operated sites outside of the CARB ANP

Local Site Name	Sacramento-1309 T Street				
AQS ID	06-067-0010				
GPS Coordinates	38.568440°N, 121.4931190°W				
Street Address	1309 T Street, Sacramento, CA 95814				
County	Sacramento				
Distance to roadways (meters)	30 m				
Traffic Count (AADT,year)	T St. east of 11th St.: 3,102 (City of Sacramento, 2009)				
Ground Cover	Rooftop site (residential area is paved)				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento--Arden-Arcade--Roseville, CA				
Pollutant, POC	O3, 1	NO2, 1	PM10, 4	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)	Highest 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 400	Thermo 42iQ	Met One BAM-1020	Met One BAM-1020	
Method code	87	74	122	170	
FRM/FEM/ARM/Other	FEM	FRM	FEM	FEM	
Collecting Agency	CARB	CARB	CARB	CARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	CARB	CARB	CARB	CARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	12/1/1998	5/15/2013	4/1/2007	12/11/2020	
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)	10	10	10	10	
Distance from supporting structure (meters)	2	2	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 meters	>10 meters	>10 meters	>10 meters	
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	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8	9.1	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	semi-monthly	semi-monthly	
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/10/2021	8/10/2021			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors			2/25/2021, 8/10/2021	2/25/2021, 8/10/2021	

San Luis Obispo APCD

*CARB operated sites outside of the CARB ANP

Local Site Name	Paso Robles				
AQS ID	06-079-0005				
GPS Coordinates	35.61467, -120.65691				
Street Address	235 Santa Fe Ave, Paso Robles				
County	San Luis Obispo				
Distance to roadways (meters)	27 to Santa Fe Ave.; 110 to Sherwood Rd.; 180 to Creston Rd.; 2700 to US 101				
Traffic Count (AADT,year)	Santa Fe Ave.: 75 (estimated); Sherwood Rd.: 10,027 (2017); Creston Rd: 17,347 (2017); US101: 70,500 (2017)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	San Luis Obispo – Paso Robles				
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)	General/Background	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	Met One BAM 1020			
Method code	87	122			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	ARB	ARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	9/1/1991	6/1/2013			
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)	6.2	5.2			
Distance from supporting structure (meters)	2.9	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)	N/A	N/A			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	30	N/A			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
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)	12.9	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	Daily	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	11/8/2021	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	5/10/2021, 11/8/2021			

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Appendix B

Ozone Seasonal Monitoring Waiver
Renewal Request

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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 California Air Resources Board (CARB) 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 CARB'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 standard.

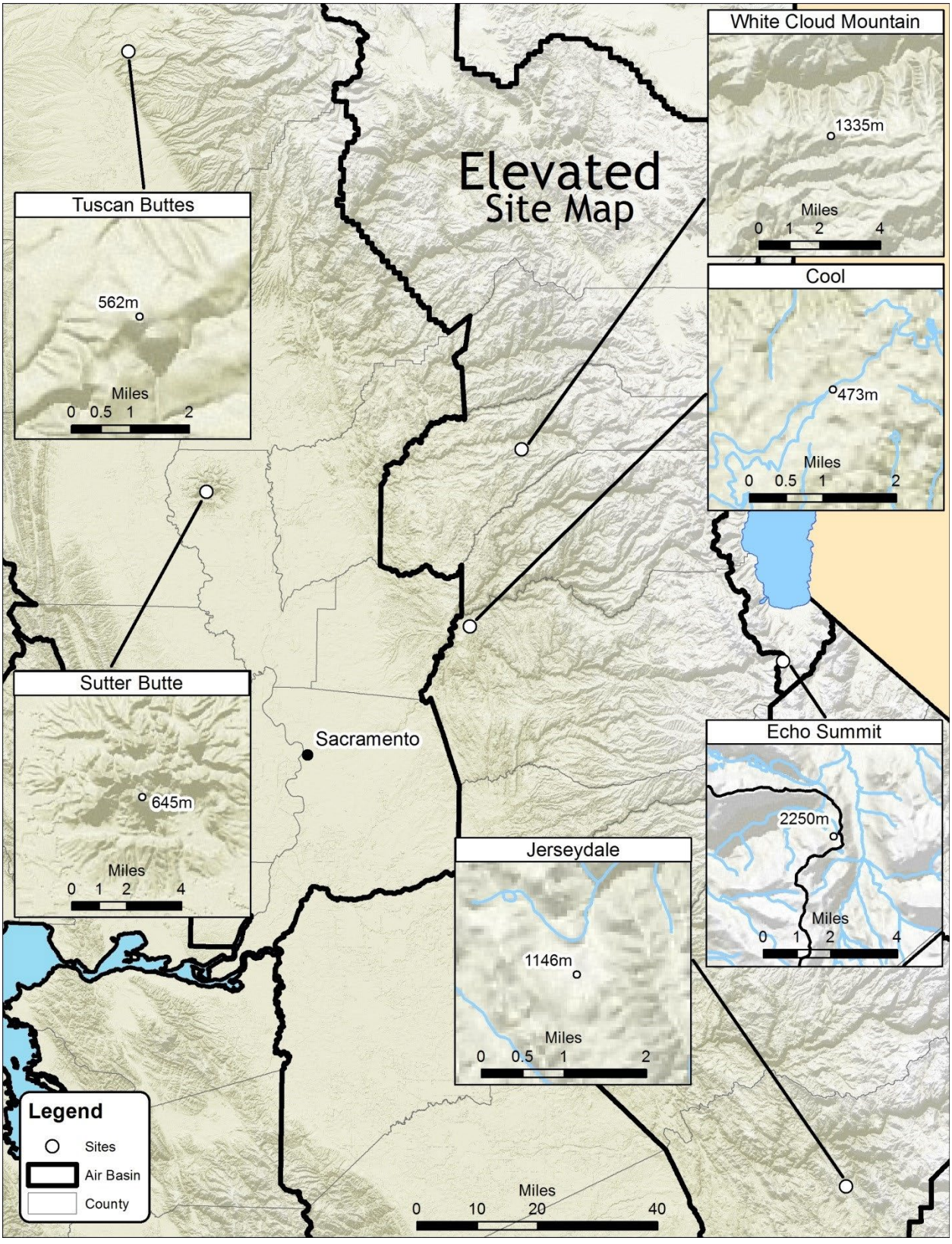
CARB staff has updated several tables and graphs which demonstrated in the past that an April through October monitoring season is adequate for the six seasonal ozone monitors. The following analyses provide the justification needed for the U.S. EPA to continue to grant a waiver for the seasonal sites, 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. However, the White Cloud Mountain site has not operated since 2016 due to various operational issues at the current location. Therefore, no additional analysis is included for this site.

TABLE 1
SEASONAL OZONE MONITORS

Site Name	AQS ID	County	Start Year	Current Operating Season	Preliminary 2021 Design Value (ppm)[1]
Echo Summit[2]	060170012	El Dorado	2000	April-October	0.071
Cool	060170020	El Dorado	1996	April-October	0.076
Jerseydale	060430006	Mariposa	1995	April-October	0.081
White Cloud Mountain	060570007	Nevada	1995	April-October	N/A[3]
Sutter Buttes	061010004	Sutter	1993	April-October	0.075
Tuscan Butte	061030004	Tehama	1995	April-October	0.072

[1] Data obtained on March 29, 2022, from CARB's ADAM database: *https://www.arb.ca.gov/adam* and CARB's AQMIS database: *https://www.arb.ca.gov/aqmis2/aqmis2.php*
[2] Echo Summit site did not operate in April of 2017, 2019 and 2020.
[3] White Cloud Mountain site has not operated since 2016 due to shelter and power issues. A date for the relocation and startup of a new site is unknown at this time.

FIGURE 1
CARB SEASONAL OZONE MONITORING SITES



Ozone concentration data used in the analyses were retrieved from CARB's ADAM and AQMIS databases in March 2021. Average of the monthly maximum 8-hour ozone concentrations for each seasonal site covering a 5-year period from 2017 to 2021 are shown in Figures 2 through 6. In addition to averages for the seasonal sites, averages for the closest surrounding site(s) that operate year-round are also depicted. Beginning with 2016, ozone monitoring season was extended to include April. However, some of the seasonal sites were not operated in April during certain years (Echo Summit in 2017, 2019 through 2021; Jerseydale in 2019; Tuscan Butte in 2017) or their April data was invalidated or incomplete (Echo Summit in 2018; Jerseydale in 2017; Tuscan Butte in 2018). Additionally, to enhance understanding of the seasonal variations in ozone concentrations, the highest monthly maximum 8-hour ozone concentrations for each of the five years are also shown in Table 2.

Figures 2 to 6 and Table 2 indicate that seasonal sites and their surrounding site(s) show similar seasonal variations and have higher concentrations during summer months (June through September), when weather conditions are conducive to ozone formation and buildup. It shows that the average concentrations at the seasonal sites during June through September were 17 percent higher than the averages of the preceding months (April/May) and 14 percent higher than the averages of the following month (October). Concentrations at the year-round sites show that the average percent difference between the months of March to April was 10 percent, which is almost similar to those between the months of April to May (11percent). In addition, on average, the concentrations dropped 15 percent from September to October, and 25 percent from October to November. These indicate 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 seasonal ozone monitoring sites, the April through October monitoring season captures the highest annual concentrations.

In addition, fourth-highest daily maximum 8-hour average ozone concentrations, used in calculating design values, were also estimated. These are compared with the federal standard to determine an area's designation status. The annual fourth-highest daily maximum 8-hour average ozone 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-highest concentrations occurred between June and September, indicate that those are the key monitoring months. Only two of the fourth-highest concentrations, across all of the seasonal sites, occurred in April (Sutter Buttes, 2017) or May (Tuscan Butte, 2021) . It is important to note that, the fourth-highest 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 are the Sutter Buttes and the Tuscan Butte sites, which present unique situations. Sutter Buttes and Tuscan Butte 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 Buttes and Tuscan Butte are not representative of population exposure. U.S. EPA recognized the uniqueness of the Sutter Buttes site when promulgating area

designations for the 0.080 ppm federal 8-hour ozone standard. U.S. EPA limited the nonattainment area to the area immediately surrounding the Sutter Buttes monitor. Although concentrations at Sutter Buttes are higher than those at Yuba City (the closest populated area), concentrations continue to decrease. Tuscan Butte received similar recognition during designations for the 0.075 ppm federal 8-hour 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. Tables 4 and 5 indicate that there are no exceedances of the 0.070 ppm standards and only a few above the 0.054 ppm threshold at the year-round sites between the months of November and March. Both Tables 4 and 5 clearly indicate that monitoring, based on concentration information alone, is not needed from November through March. Therefore, the current April through October operating season will continue to be adequate.

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 Buttes, and Tuscan Butte locations. For instance, all six seasonal monitoring sites are located in remote, mountainous areas, and at significant distances from CARB 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 federal 8-hour standard and other considerations, CARB 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 Buttes, and Tuscan Butte monitoring sites. Therefore, CARB 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

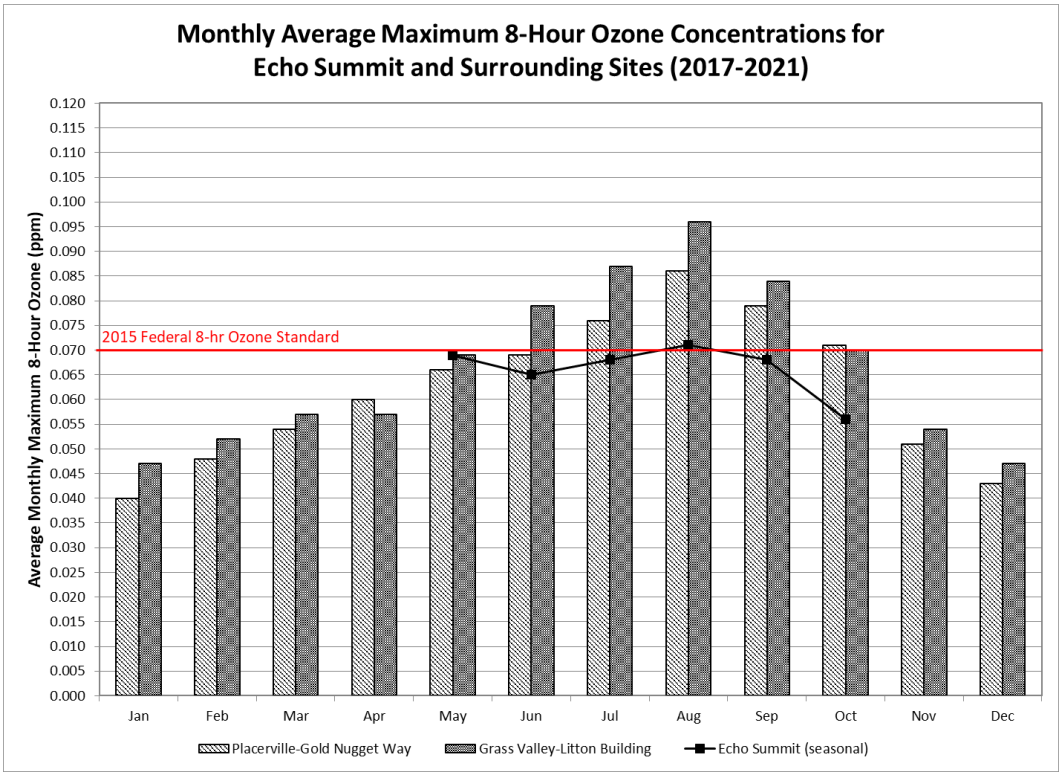


FIGURE 3

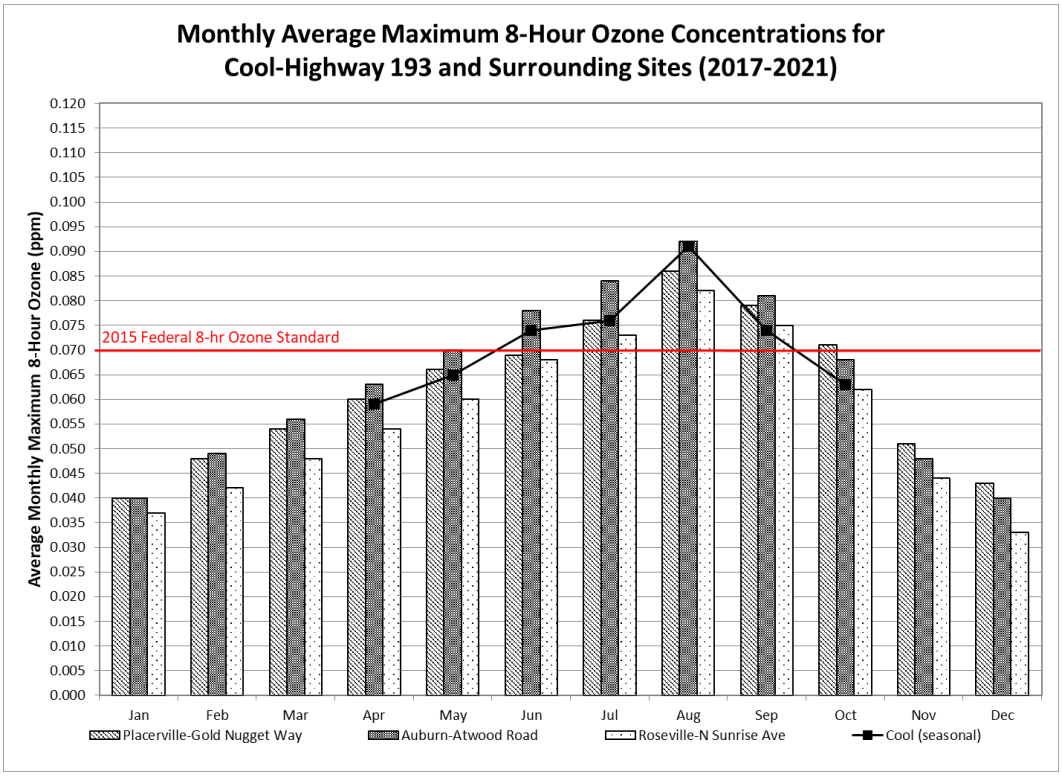


FIGURE 4

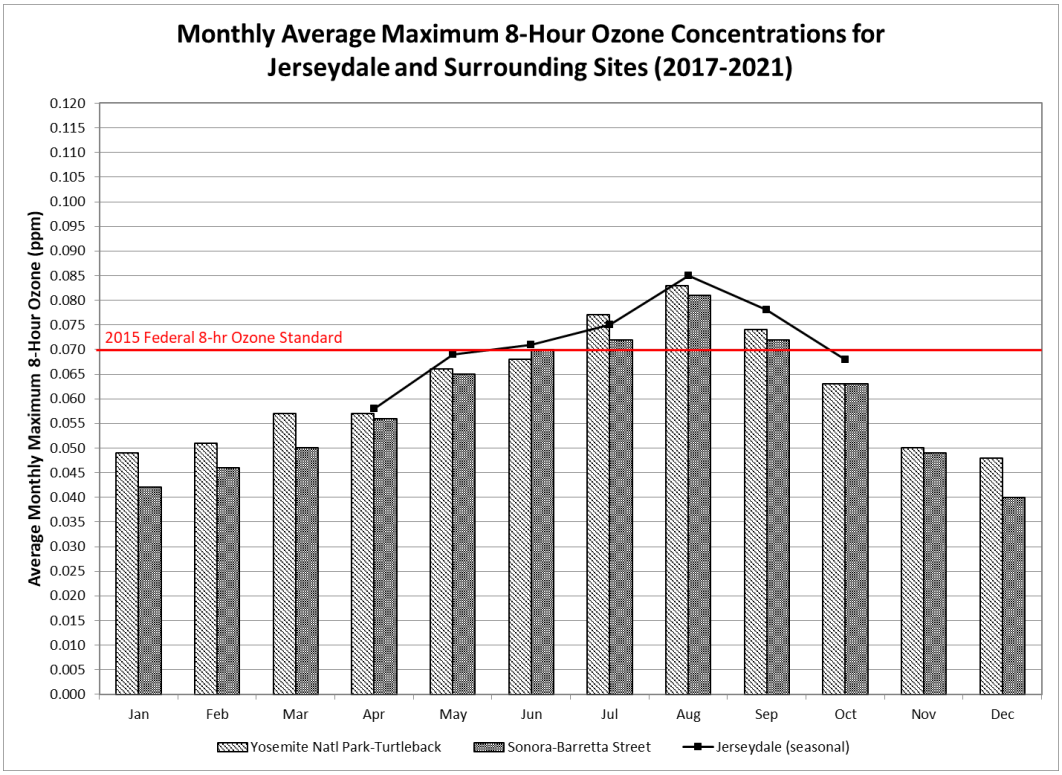
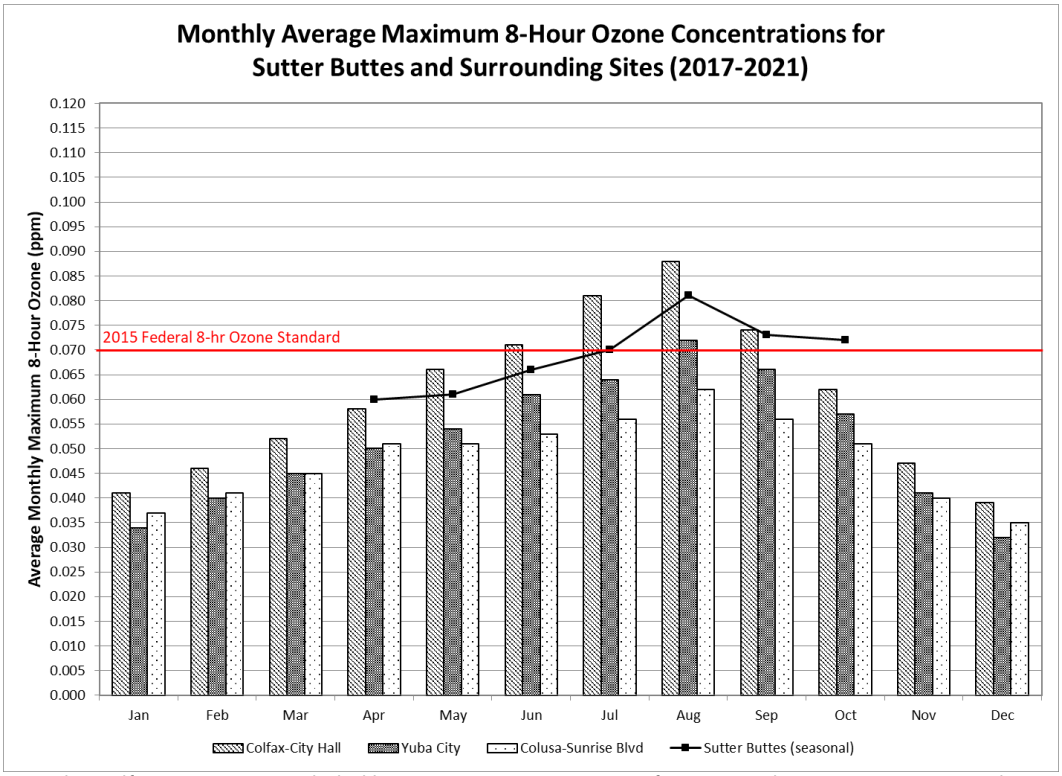


FIGURE 5



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

FIGURE 6

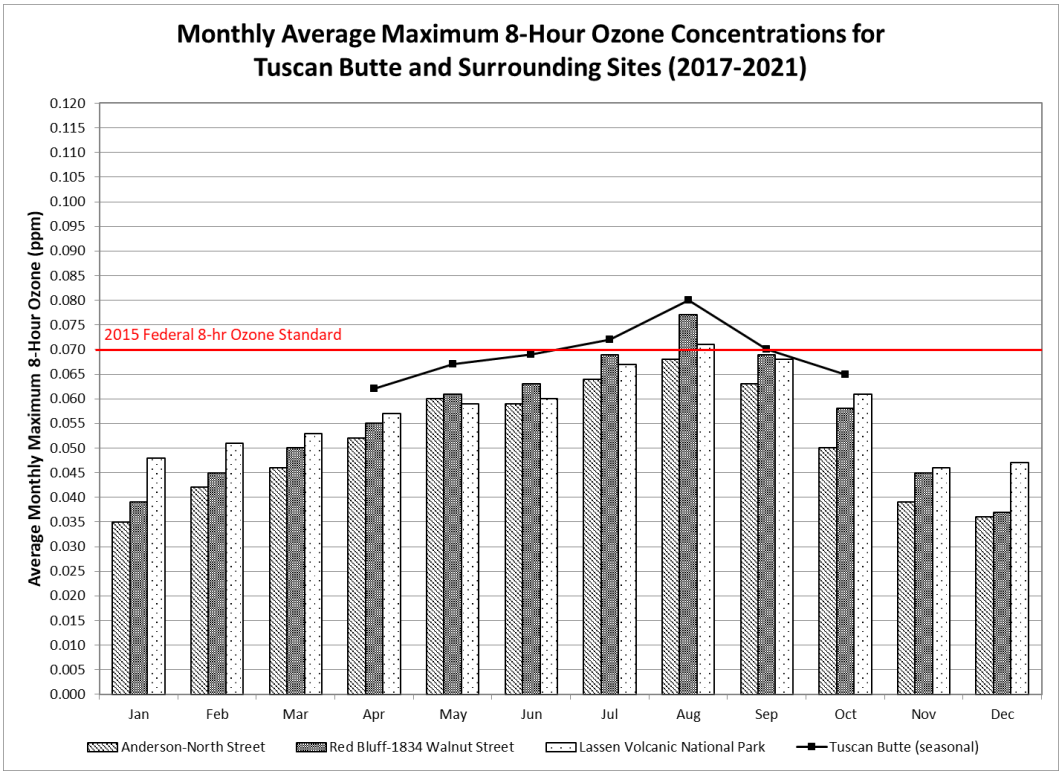

Monthly Average Maximum 8-Hour Ozone Concentrations for Tuscan Butte and Surrounding Sites (2017-2021)
Average Monthly Maximum 8-Hour Ozone (ppm)
0.120
0.115
0.110
0.105
0.100
0.095
0.090
0.085
0.080
0.075
0.070
0.065
0.060
0.055
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
2015 Federal 8-hr Ozone Standard
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Anderson-North Street
Red Bluff-1834 Walnut Street
Lassen Volcanic National Park
Tuscan Butte (seasonal)

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

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville-Gold Nugget Way	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback	Yuba City
JAN '17	0.039	0.043	0.042	0.043			0.044	0.050		0.052		0.041	0.050	0.048				0.061	0.037
FEB '17	0.042	0.048	0.042	0.049			0.045	0.050		0.051	0.052	0.043	0.047	0.051				0.049	0.039
MAR '17	0.043	0.056	0.049	0.051			0.060	0.061		0.056	0.058	0.048	0.046	0.055				0.066	0.044
APR '17	0.046	0.057	0.059	0.053	0.059		0.055	0.064	---	0.059	0.054	0.051	0.052	0.060	0.064			0.065	0.051
MAY '17	---	0.068	0.067	---	0.074	---	0.077	0.087	0.072	0.061	0.074	0.063	0.075	0.071				0.070	0.062
JUN '17	0.059	0.079	0.077	---	0.084	0.066	0.075	0.098	0.067	0.058	---	0.067	0.088	0.082				0.067	0.067
JUL '17	0.065	0.082	---	0.062	0.076	0.072	0.079	0.099	0.075	0.064	0.074	0.066	0.080	0.080		0.072		0.088	0.066
AUG '17	---	0.084	0.078	0.068	0.084	0.057	0.086	0.092	0.083	0.064	0.084	0.078	0.086	0.083		0.077		0.070	0.071
SEP '17	---	0.082	0.077	0.062	0.075	0.066	0.084	0.088	0.078	0.071	0.082	0.082	0.083	0.077		0.075		0.073	0.073
OCT '17	---	0.070	0.065	0.055	0.070	0.057	0.069	0.090	0.066	0.066	0.076	0.056	0.058	0.064		0.065		0.056	0.053
NOV '17	0.040	0.043	0.044	0.041			0.041	0.048		0.045	0.046	0.046	0.036	0.046				0.051	0.036
DEC '17	0.038	0.040	0.044	0.038			0.037	0.053		0.047	0.043	---	0.030	0.042				0.048	0.033
JAN '18	0.028	0.038	0.043	0.038			0.039	0.057		0.048	0.040		0.035	0.039				0.047	0.030
FEB '18	0.044	0.047	0.045	0.041			0.047	0.060		0.048	0.047		0.043	0.045				0.049	0.040
MAR '18	0.045	0.051	0.053	0.048			0.057	0.055		0.053	0.055	0.048	0.052	0.044				0.052	0.042
APR '18	0.059	0.064	0.061	0.061	0.067	---	0.063	0.058	0.057	0.055	0.064	0.061	0.056	0.054	0.065	---		0.058	0.049
MAY '18	0.051	0.067	0.066	0.050	0.063	0.069	0.057	0.061	0.062	0.052	0.058	0.053	0.053	0.060	0.059	0.060		0.062	0.044
JUN '18	0.067	0.079	0.075	0.058	0.075	0.069	0.073	0.072	0.073	0.066	0.070	0.065	0.064	0.067	0.073	0.076		0.069	0.060
JUL '18	0.073	0.107	0.108	0.062	0.092	0.080	0.079	0.101	0.079	0.081	0.088	0.073	0.083	0.084	0.083	0.081		0.092	0.066
AUG '18	0.081	0.115	0.114	0.062	0.108	0.078	0.093	0.101	0.081	0.083	0.099	0.087	0.082	0.087	0.082	0.087		0.087	0.071
SEP '18	---	0.083	0.072	0.058	0.076	0.067	0.081	0.077	0.084	0.064	0.089	0.070	0.078	0.077	0.074	0.071		0.075	0.061
OCT '18	0.046	0.068	0.057	0.055	0.059	0.051	0.071	0.060	0.064	0.053	0.066	0.057	0.064	0.060	0.065	0.064		0.057	0.054
NOV '18	---	0.058	0.053	0.046			0.057	0.062		0.051	0.058	0.049	0.051	0.061				0.057	0.043
DEC '18		0.038	0.038	0.037			0.039	0.046		0.044	0.042	0.036	0.032	0.037				0.046	0.031

TABLE 2 Continued

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville-Gold Nugget Way	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback	Yuba City
JAN '19				0.040			0.039	0.047		0.048	0.041	0.037	0.034	0.042				0.045	0.036
FEB '19				0.040			0.043	0.046		0.052	0.046	0.043	0.038	0.048				0.050	0.037
MAR '19	---	0.056	---	0.046			0.052	0.055		0.052	0.053	0.050	0.045	0.053				0.060	0.039
APR '19	0.055	0.071	0.054	0.052	0.060		0.067	0.056		0.052	0.065	0.058	0.059	0.057	0.061	0.062		0.053	0.044
MAY '19	0.060	0.069	0.059	0.052	0.061	---	0.067	0.059	---	0.055	0.065	0.058	0.057	0.061	0.061	0.064		0.060	0.046
JUN '19	0.063	0.079	0.070	0.054	0.072	0.063	0.072	0.074	0.064	0.061	0.065	0.059	0.067	0.073	0.067	0.067		0.065	0.059
JUL '19	0.063	0.079	0.075	0.055	0.069	0.057	---	0.072	0.068	0.057	0.069	0.065	0.070	0.067	0.065	0.068		0.065	0.069
AUG '19	0.065	0.081	0.077	0.051	0.077	0.057		0.076	0.074	0.059	0.073	0.067	0.076	0.072	0.064	0.068		0.070	0.063
SEP '19	0.055	0.074	0.073	0.048	0.064	0.063		0.077	0.074	0.059	0.075	0.058	0.062	0.069	0.061	0.058		0.073	0.060
OCT '19	0.052	0.067	0.059	0.051	0.062	0.059		0.064	0.068	0.060	0.068	0.060	0.062	0.062	0.066	0.065		0.068	0.056
NOV '19	0.043	0.052	0.052	0.045				0.059		0.045	0.061	0.048	0.049	0.059				0.051	0.045
DEC '19	0.035	0.039	0.039	0.034				0.044		0.046	0.042	0.037	0.035	0.043				0.048	0.031
JAN '20	0.034	0.037	0.037	0.034				0.042		0.048	0.036	0.036	0.033	0.039				0.048	0.031
FEB '20	---	0.054	0.051	0.040				0.055		0.049	0.050	0.050	0.044	0.047				0.050	0.046
MAR '20	0.051	0.058	0.053	0.042				0.059		0.049	0.050	0.051	0.048	0.049				0.056	0.050
APR '20	0.050	0.055	0.054	0.044	0.051			0.052	0.054	0.057	0.055	0.048	0.049	0.054	0.052	0.055		0.053	0.051
MAY '20	0.062	0.070	0.071	0.051	0.063	---		0.068	0.071	0.066	0.067	0.058	0.058	0.067	0.059	0.068		0.070	0.059
JUN '20	0.052	0.072	0.065	0.051	0.066	0.062		---	0.070	0.052	0.069	0.058	0.062	0.066	0.058	0.063		0.067	0.058
JUL '20	0.062	0.072	0.068	0.047	0.066	0.061		---	0.067	0.059	0.071	0.061	0.063	0.063	0.059	0.065		0.064	0.058
AUG '20	0.063	0.089	0.092	0.068	0.096	0.079		0.122	0.100	0.075	0.101	---	0.080	0.083	0.090	0.087		0.100	0.082
SEP '20	0.073	0.083	0.075	0.052	0.075	0.076		0.086	0.078	0.079	0.078	0.063	0.073	0.068	0.083	0.073		0.075	0.066
OCT '20	0.049	0.070	0.064	0.044	0.062	0.057		0.065	0.077	0.058	0.081	0.059	0.063	0.068	0.084	0.068		0.063	0.057
NOV '20	0.039	0.052	0.049	0.042				0.054		0.046	0.052	0.050	0.048	0.046				0.044	0.046
DEC '20	0.034	0.043	0.040	0.029			---	0.042		0.048	0.044	0.039	0.032	0.040				0.045	0.032

MONTHLY MAXIMUM 8-HOUR OZONE CONCENTRATIONS AT SEASONAL AND SURROUNDING MONITORING SITES

(Ozone in parts per million)

Month & Year	Anderson -North Street	Auburn- Atwood Road	Colfax -City Hall	Colusa- Sunrise Blvd	Cool	Echo Summit	Folsom- Natoma Street	Grass Valley- Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville- Gold Nugget Way	Red Bluff- Walnut Street	Roseville-N Sunrise Ave	Sonora- Barrett a Street	Sutter Buttes	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park- Turtleback	Yuba City
JAN '21	0.040	0.042	0.044	0.031			0.039	0.042		0.045	0.043	0.043	0.035	0.043				0.047	0.036
FEB '21	0.042	0.050	0.048	0.037			0.046	0.050		0.056	0.049	0.047	0.039	0.043				0.060	0.041
MAR '21	0.048	0.059	0.056	0.042	---		0.057	0.056		0.059	0.058	0.053	0.050	0.050	---	---		0.052	0.050
APR '21	0.054	0.068	0.065	0.047	0.058		0.066	---	0.064	0.066	0.064	0.059	0.054	0.059	0.062	0.069		0.060	0.057
MAY '21	0.067	0.077	0.070	0.051	0.068	---	0.069	0.074	0.072	0.062	0.068	0.074	0.057	0.066	0.068	0.077		0.071	0.060
JUN '21	0.058	0.081	0.071	0.051	0.074	0.068	0.079	0.072	0.081	0.064	0.072	0.070	0.060	0.065	0.067	0.073		0.073	0.061
JUL '21	0.061	0.082	0.075	0.055	0.080	0.070	0.091	0.079	0.089	0.076	0.080	0.081	0.070	0.067	0.073	0.078		0.076	0.063
AUG '21	0.065	0.094	0.083	0.064	0.091	0.085	0.096	0.092	0.090	0.077	0.076	0.076	0.090	0.081	0.090	0.084		0.089	0.077
SEP '21	0.062	0.085	0.075	0.063	0.081		0.085	0.096	0.078	0.068	0.075	0.072	0.079	0.070	0.077	0.076		0.077	0.072
OCT '21	0.053	0.067	0.068	0.052	0.062		0.071	0.072	---	0.069	0.068	0.061	0.064	0.062	0.073	0.063		0.073	0.065
NOV '21	0.035	0.039	0.038	0.030	0.039		---	0.049	---	0.047	0.038	0.036	0.036	0.037	---	---		0.047	0.035
DEC '21	0.038	0.041	0.038	0.037	0.041		---	0.051		0.053	0.044	0.039	0.037	0.040				0.053	0.035

Notes:

1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. The Echo Summit monitoring site did not operate in April of 2017, 2019 and 2020.
3. The White Cloud Mountain monitoring site has not operated since 2016.
4. 2017 data from May 18 to October 31 for Sutter Buttes has been invalidated due to poor quality assurance results.
5. 2017 data from April 6 to June 20 for Tuscan Butte has been invalidated due to poor quality assurance results.
6. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.

* AQS Site ID of the surrounding sites: Anderson-North Street (060890007); Auburn- Atwood Road(060610003); Colfax-City Hall (060610004); Colusa-Sunrise Blvd (060111002); Folsom-Natoma Street (060670012); Grass Valley-Litton Building (060570005); Lassen Volcanic Natl Park (060893003); Placerville-Gold Nugget Way (060170010); Red Bluff- Walnut Street (061030007); Roseville-N Sunrise Ave (060610006); Sonora-Barretta Street (06109000); Yosemite Natl Park-Turtleback (060430003); Yuba City (061010003)

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

	2017 4th Highest	Date	2018 4th Highest	Date	2019 4th Highest	Date	2020 4th Highest	Date	2021 4th Highest	Date
Anderson-North Street	0.061	8/19/2017	0.076	8/8/2018	0.063	6/3/2019	0.066	9/15/2020	0.063	8/25/2021
Auburn-Atwood Road	0.082	9/2/2017	0.098	8/9/2018	0.079	7/31/2019	0.083	9/1/2020	0.085	9/24/2021
Colfax-City Hall	0.077	8/1/2017	0.097	8/9/2018	0.072	7/31/2019	0.08	8/23/2020	0.076	8/24/2021
Colusa-Sunrise Blvd	0.062	8/19/2017	0.061	8/25/2018	0.053	6/12/2019	0.052	9/5/2020	0.061	8/30/2021
Cool	0.078	8/17/2017	0.092	8/1/2018	0.070	8/16/2019	0.078	8/23/2020	0.08	7/23/2021
Echo Summit	0.066	9/2/2017	0.075	8/25/2018	0.059	10/7/2019	0.073	9/15/2020	0.081	8/22/2021
Folsom-Natoma Street	0.079	7/19/2017	0.079	7/18/2018					0.085	9/24/2021
Grass Valley-Litton Building	0.090	6/24/2017	0.095	8/8/2018	0.072	7/25/2019	0.08	8/29/2020	0.09	9/10/2021
Jerseydale	0.075	7/24/2017	0.077	9/27/2018	0.071	8/3/2019	0.091	8/20/2020	0.081	6/17/2021
Lassen Volcanic Natl Park	0.064	7/24/2017	0.077	8/10/2018	0.059	9/15/2019	0.069	9/14/2020	0.075	8/23/2021
Placerville-Gold Nugget Way	0.078	9/3/2017	0.095	8/8/2018	0.071	8/16/2019	0.086	8/22/2020	0.075	9/24/2021
Red Bluff-Walnut Street	0.073	8/1/2017	0.075	8/3/2018	0.065	8/14/2019	0.061	9/6/2020	0.075	7/22/2021
Roseville-N Sunrise Ave	0.080	7/19/2017	0.080	8/9/2018	0.067	6/5/2019	0.07	8/23/2020	0.075	9/3/2021
Sonora-Barretta Street	0.077	7/24/2017	0.084	8/5/2018	0.069	9/14/2019	0.08	8/24/2020	0.068	8/25/2021
Sutter Buttes	0.061	4/4/2017	0.080	7/28/2018	0.065	7/31/2019	0.083	9/13/2020	0.077	9/3/2021
Tuscan Butte	0.074	9/1/2017	0.082	8/25/2018	0.066	6/12/2019	0.074	8/20/2020	0.077	5/13/2021
White Cloud Mountain										
Yosemite Natl Park-Turtleback	0.078	7/24/2017	0.085	7/25/2018	0.068	8/3/2019	0.084	8/20/2020	0.08	8/24/2021
Yuba City-Almond Street	0.067	6/23/2017	0.065	7/31/2018	0.061	8/15/2019	0.066	9/5/2020	0.072	9/13/2021

Notes:
1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. The Echo Summit monitoring site did not operate in April of 2017, 2019 and 2020.
3. The White Cloud Mountain monitoring site has not operated since 2016.
4. 2017 data from May 18 to October 31 for Sutter Buttes has been invalidated due to poor quality assurance results.
5. 2017 data from April 6 to June 20 for Tuscan Butte has been invalidated due to poor quality assurance results.
6. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.

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

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville-Gold Nugget Way	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback	Yuba City
JAN '17																			
FEB '17																			
MAR '17																			
APR '17																			
MAY '17					2		2	4	1		3		1	2					
JUN '17		4	1		8		3	14			2		2	6					
JUL '17		5	3		8	1	3	24	5		4		1	7		1		8	
AUG '17	1	16	6		7		6	20	2		5	2	3	7		3			1
SEP '17		3	4		3		3	7	2	1	3	2	2	3		4		3	1
OCT '17								9			1								
NOV '17																			
DEC '17																			
JAN '18																			
FEB '18																			
MAR '18																			
APR '18																			
MAY '18																			
JUN '18		3	3		2		1	1	1						2	2			
JUL '18	2	11	9		9	4	7	7	2	4	7	1	4	7	4	2		15	
AUG '18	7	16	15		12	6	5	10	4	9	13	7	5	11	9	8		8	1
SEP '18		5	3		3		4	4	4		8		2	3	3	1		2	
OCT '18							1												
NOV '18																			
DEC '18																			

TABLE 4 Continued

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville-Gold Nugget Way	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback	Yuba City
JAN '19																			
FEB '19																			
MAR '19																			
APR '19		1																	
MAY '19		1			1		2	1						1					
JUN '19		4	2					2											
JUL '19		2	1		2			1	4		2		1	1					
AUG '19		1	1					1	1		2							1	
SEP '19																			
OCT '19																			
NOV '19																			
DEC '19																			
JAN '20																			
FEB '20																			
MAR '20																			
APR '20																			
MAY '20			1						1										
JUN '20		1																	
JUL '20		1									1								
AUG '20		11	10		5	4		10	12	1	9		2	5	5	7		9	2
SEP '20	1	9	7		2	3		10	5	1	8		1		4	2		3	
OCT '20									6		2				2				
NOV '20																			
DEC '20																			

TABLE 4 Continued

Month & Year	Anderson -North Street	Auburn- Atwood Road	Colfax -City Hall	Colusa- Sunrise Blvd	Cool	Echo Summit	Folsom- Natoma Street	Grass Valley- Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville- Gold Nugget Way	Red Bluff- Walnut Street	Roseville-N Sunrise Ave	Sonora- Barretta Street	Sutter Buttes	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park- Turtleback	Yuba City
JAN '21																			
FEB '21																			
MAR '21																			
APR '21																			
MAY '21		1						2				1				1		1	
JUN '21		3	1		1		2	1			2					1		1	
JUL '21		13	6		4		8	8		2	3	3			1	4		3	
AUG '21		11	7		5	6	8	11		7	4	7	2	2	7	9		10	3
SEP '21		6	3		4			14			1	4	2		3	5		1	1
OCT '21								2						1		1			
NOV '21																			
DEC '21																			

Notes:
1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. The Echo Summit monitoring site did not operate in April of 2017, 2019 and 2020.
3. The White Cloud Mountain monitoring site has not operated since 2016.
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TABLE 5
NUMBER OF DAYS WITH MAXIMUM 8-HOUR OZONE CONCENTRATION >0.054 PPM
(April-October ozone season columns highlighted in yellow; seasonal site rows denoted by gray)

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville-Gold Nugget Way	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback	Yuba City
JAN '17																		1	
FEB '17		1					1	5		2	3			1				2	
MAR '17		2	4		3		1	12		3				10	14			7	
APR '17	1	10	9	2	13		9	19	9	6	10	5	6	15	5			8	1
MAY '17	2	13	13		15	5	12	21	16	2	14	8	12	20	3	7		14	5
JUN '17	12	29	14	10	30	13	28	31	29	13	29	22	26	29		27		25	14
JUL '17	12	25	25	12	22	4	22	28	22	7	24	25	22	30		24		20	13
AUG '17		15	14	6	15	5	14	20	17	7	15	9	12	17		16		15	7
SEP '17		13	9	1	7	3	11	19	19	2	14	1	4	10		7		5	
OCT '17																			
NOV '17																			
DEC '17																			
JAN '18								2											
FEB '18								3											
MAR '18							1	1			1								
APR '18	2	4	6	2	3	5	2	2	4	1	4	2	1		7	4		3	
MAY '18		5	4		5	7	3	3	7		3			2	6	11		6	
JUN '18	7	23	21	1	20	14	14	18	23	8	18	11	5	20	20	22		21	3
JUL '18	13	27	28	3	27	20	23	19	22	11	26	16	16	21	18	20		26	10
AUG '18	21	30	30	4	28	24	22	26	27	23	27	22	21	26	24	22		28	11
SEP '18	7	22	13	2	17	15	20	20	19	9	25	16	12	17	12	15		18	2
OCT '18		6	4	2	5		6	5	13		11	1	1	5	7	7		5	
NOV '18		1					2	2			1			3				4	
DEC '18																			

TABLE 5 Continued

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville-Gold Nugget Way	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback	Yuba City
JAN '19																			
FEB '19																			
MAR '19		3	1					1										2	
APR '19	2	6			4		6	1			4	3	4	3	4	7			
MAY '19	6	9	6		6		7	5		1	3	5	1	5	9	8		5	
JUN '19	7	18	12		14	6	16	14	11	4	11	11	9	16	18	13		18	5
JUL '19	6	20	17	1	15	2	8	15	15	3	14	4	6	15	7	10		16	4
AUG '19	9	16	19		13	2		19	26	5	19	13	8	21	11	15		23	8
SEP '19	1	12	11		5	1		11	14	1	9	3	5	13	4	6		11	4
OCT '19		8	6		4	2		7	15	2	9	4	2	10	6	5		10	1
NOV '19								3			6			3					
DEC '19																			
JAN '20																			
FEB '20								1											
MAR '20		2						2										1	
APR '20		2								1	1					1			
MAY '20	4	10	8		4			5	11	2	8	1	1	8	2	8		6	2
JUN '20		11	12		8	3			11		9	2	5	7	2	4		9	4
JUL '20	13	25	27		21	4		15	28	5	23	5	10	16	12	16		26	4
AUG '20	9	28	24	2	24	13		23	24	12	25	4	18	17	20	18		23	15
SEP '20	9	18	19		12	8		23	20	16	21	9	12	17	17	17		15	8
OCT '20		12	6		6	2		9	20	2	11	3	4	11	11	7		13	2
NOV '20																			
DEC '20																			

TABLE 5 Continued

Month & Year	Anderson -North Street	Auburn- Atwood Road	Colfax -City Hall	Colusa- Sunrise Blvd	Cool	Echo Summit	Folsom- Natoma Street	Grass Valley- Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville- Gold Nugget Way	Red Bluff- Walnut Street	Roseville-N Sunrise Ave	Sonora- Barretta Street	Sutter Buttes	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park- Turtleback	Yuba City
JAN '20																			
FEB '20										1									
MAR '20		3	3				1	2		4	1								
APR '20		9	5		2		7			4	7	4		2	5	4		5	3
MAY '20	3	13	7		3	2	9	13		4	8	6	1	7	3	8		13	3
JUN '20	2	18	14		10	6	14	19		9	10	14	2	5	10	15		12	4
JUL '20	9	30	28	1	23	16	21	30		26	22	24	17	19	14	28		31	12
AUG '20	12	27	21	6	24	21	16	25		25	19	23	16	18	23	26		29	14
SEP '20	5	22	19	8	20			21		17	19	20	16	12	21	21		25	16
OCT '20		7	7		7			7		4	6	3	3	3	6	6		7	3
NOV '20																			
DEC '20																			

Notes:
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5. 2017 data from April 6 to June 20 for Tuscan Butte has been invalidated due to poor quality assurance results.
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FIGURE 8
PHOTOS OF AREA SURROUNDING THE SUTTER BUTTES OZONE MONITORING SITE

Sutter Buttes: Looking north from probe.

Sutter Buttes: Looking east from probe.

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

Sutter Buttes: Looking west from probe.

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

Tuscan Butte: Looking north from probe.

Tuscan Butte: Looking east from probe.

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

Tuscan Butte: Looking west from probe.

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Appendix C

Supporting Documentation for Site Changes

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LAKE COUNTY AIR QUALITY MANAGEMENT DISTRICT
2617 South Main Street
Lakeport, CA 95453
Phone (707) 263-7000
Fax (707) 263-0421

Douglas G. Gearhart
Air Pollution Control Officer
dougg@lcaqmd.net

Certified Mail: 7021 0350 0001 8068 3585

December 21, 2021

Gwen Yoshimura
Air Quality Analysis Office, Manager
EPA Region 9
75 Hawthorne Street, AIR-7
San Francisco, CA 94105

Subject: Request to Discontinue PM10 Monitoring at the Anderson Springs Recreation Center and at Glenbrook.

Dear Ms. Yoshimura:

The Lake County Air Quality Management District (District) is hereby requesting approval from U.S. EPA to discontinue PM10 monitoring at the Anderson Springs Recreation Center (Anderson Springs) (AQS Site ID: 06-033-3010) and Glenbrook (AQS Site ID: 06-033-3011) sites.

Since 2000, PM10 and Trace Metals have been monitored at the Anderson Springs and Glenbrook sites, as part of the Geysers Air Monitoring Program (GAMP), a consortium of industry, regulatory agencies, and public representatives. In 2013, this data began being submitted into AQS.

The District will continue to operate the 1:6-day Lo-Vol FRM PM10 and PM2.5 monitors at the Lakeport SLAMS site (AQS site ID: 06-033-3002).

The request for closure of the PM10 monitors at the Anderson Springs site and the Glenbrook site, even though they are not SLAMS stations, will generally follow the criteria in Section 58.14, of Title 40 of the Code of Federal Regulations.

- The District is requesting public notice of the proposed site change be published in the next Annual Network Plan.

- These PM10 monitors are GAMP (not SLAMS) monitors, that were originally installed as near fence line / downwind monitoring for geothermal operations.

- These PM10 monitors are not specifically required for an Attainment Designation, Attainment Plan, or Maintenance Plan.

- The District will continue to monitor PM10 at the Lakeport site.

- Low cost monitors will be placed at the Anderson Springs and Glenbrook sites for

continuous non-regulatory monitoring. PM10 monitors can be reinstalled during geothermal activities if necessary.

• CARB staff has reviewed the Anderson Springs and Glenbrook site monitoring data and supports discontinuing PM10 monitoring at these sites.

• District staff has informed representatives from Community Advocacy groups (Friends of Cobb Mountain and Anderson Springs Community Alliance) of the proposed change to PM10 monitoring at our last GAMP Consortium meeting CARB Staff was present and expressed their support as well. Friends of Cobb Mountain are supportive and Anderson Springs Community Alliance has not expressed any concerns.

• Lake County has been designated Attainment for all Ambient Air Quality Standards since 1990.

The District has been operating with a staffing deficit, and has therefore been unable to fully staff the monitoring program. This has been an ongoing issue for a number of years, but with the increasing requirements placed on PM10 by the PQAO, as well as other non-monitoring program requirements, the District staff can no longer maintain these two PM10 monitors. The PM10 levels are very low and do not warrant expending staff time when levels are well below any health based threshold. Discontinuing these monitors will free up resources and allow the District to focus on more critical monitoring activities.

Pending approval to permanently discontinue PM10 monitoring at these sites, the District is temporarily suspending PM10 monitoring operations at the Anderson Springs and Glenbrook sites beginning January 1, 2022.

Please feel free to contact Deputy Air Pollution Control Officer Elizabeth Knight or myself with any questions or concerns at 707-263-7000.

Sincerely,

Douglas Gearhart, APCO

DG/EK

CC: Leah Matthews, California Air Resources Board
via email: Leah.Mathews@arb.ca.gov

Dena Vallano, US Environmental Protection Agency
via email: Vallano.Dena@epa.gov

Shasta County

DEPARTMENT OF RESOURCE MANAGEMENT
1855 Placer Street, Redding, CA 96001

Paul A. Hellman
Director

Dale J. Fletcher, CBO
Assistant Director

August 26, 2021

Gwen Yoshimura
Air Quality Analysis Office, Manager
EPA Region 9
75 Hawthorne Street, AIR-7
San Francisco, CA 94105

Sent via email: Yoshimura.Gwen@epa.gov

Dear Ms. Yoshimura,

The Shasta County Air Quality Management District (District) is requesting approval from U.S. EPA to discontinue the PM_{10} monitoring at the Anderson – North Street site (AQS site ID: 06-089-0007) and at the Shasta Lake – La Mesa site (AQS site ID: 06-089-0008). PM_{10} has been monitored at the Anderson – North Street site since 1993, and at the Shasta Lake – La Mesa site since 2004, as part of the California State and Local Air Monitoring (SLAMS) network. The District will continue to operate the Hi-Vol PM_{10} monitor at the Redding – Health Department site (AQS site ID: 06-089-0004). In addition, the District will also monitor the more health protective $PM_{2.5}$ standard at the Redding – Health Department by both 1:6-day FRM and continuous 1-hour FEM monitors.

The request for closure of the PM_{10} monitors at the Anderson – North Street site and Shasta Lake – La Mesa site follows the criteria in Section 58.14, of Title 40 of the Code of Federal Regulations.

- Public notice of the proposed site change was published in the *Annual Network Plan, Covering Monitoring Operations in 25 California Air Districts* dated July 2020, page 48.
- The PM_{10} monitors are not specifically required by an attainment or maintenance plan.
- PM_{10} will continue to be monitored at the Redding – Health Department site.
- Table 1 indicates that there is a greater than 10% chance that the Anderson – North Street site and the Shasta Lake – La Mesa site will exceed 80% of the NAAQS. The District believes that this is due to the smoke impacts from recent wildfires, and the District is requesting that EPA conduct a case-by-case evaluation for these monitoring sites.

In 2018 and 2020, Shasta County was significantly impacted by wildfires in the northern part of California, specifically, the Carr, Delta, Hirz, and Camp Fires for 2018, and the August Complex and Zogg Fires for 2020. If the data from the wildfires are not included in the calculation to determine the 90% upper confidence limit, the Anderson – North Street and Shasta Lake – La Mesa sites do meet the requirements in 40 CFR 58.14(c)(1).

Table1

24-HOUR PM10 NAAQS

Site	Year 1 Max (ug/m3) 2016	Year 2 Max (ug/m3) 2017	Year 3 Max (ug/m3) 2018	Year 4 Max (ug/m3) 2019	Year 5 Max (ug/m3) 2020	Average Max (ug/m3) 2016-2020	Std. Dev. *s*	Student's *t* value (90% confidence)	Number of Data Values (*n*)	90% Upper CI (ug/m3)	80% NAAQS (ug/m3)	Test
Anderson (06-089-0007)	37	115	113	32	108	*81.00*	*42.56*	*2.13*	5	121.5	120	*FAIL*
Shasta Lake (06-089-0008)	33	87	145	41	105	*82.20*	*46.38*	*2.13*	5	*126.4*	120	FAIL

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For informational purposes, Table 2 is included to demonstrate the effects of recent wildfires on the NAAQS evaluation calculations. On the two highest concentration days in 2018, July 31st and August 6th, the District issued Air Quality Smoke Advisories, see attached, due to the impacts from the 229,651-acre Carr Fire located less than four miles from the monitoring station. On the three highest concentration days in 2020, August 25th, September 12th and September 30th, the District issued Air Quality Smoke Advisories, (see attached) due to the impacts from the August Complex and Zogg fires. If that data is excluded from the NAAQS evaluation calculations, the Anderson – North Street and Shasta Lake – La Mesa sites meet the requirements in 40 CFR 58.14(c)(1).

Table 2

24-HOUR PM10 NAAQS

Site	Year 1 Max (ug/m3)	Year 2 Max (ug/m3)	Year 3 Max (ug/m3)	Year 4 Max (ug/m3)	Year 5 Max (ug/m3)	Average Max (ug/m3)	Std. Dev. *s*	Student's *t* value (90% confidence)	Number of Data Values (*n*)	90% Upper CI (ug/m3)	80% NAAQS (ug/m3)	Test
	2016	2017	2018	2019	2020	2016-2020						
Anderson (06-089-0007)	37	115	95	32	64	*68.60*	*36.09*	*2.13*	5	*103.0*	120	*PASS*
Shasta Lake (06-089-0008)	33	87	104	41	58	*64.60*	*30.22*	*2.13*	5	*93.4*	120	*PASS*

Additional site meta data is available in the attachments, excerpted from the *Annual Network Plan, Covering Monitoring Operations in 25 California Air Districts* dated July 2020, Appendix A, page 61 and 65.

The design values for the PM_{10} monitoring stations are based on look-up approach from Table 6.1 *PM10 SIP Development Guideline*. For sites that have less than 347 samples over a three-year period, the design value is the highest value. Table 3 indicates the design values for all three PM_{10} monitors. Attached is AQS report AMP480, *Design Value Report* for all three PM_{10} monitoring sites. The report indicates that the only site that has estimated exceedances for 2016 – 2020 is the Redding – Health Center monitoring site.

Table 3

24-HOUR PM10 NAAQS

Site	Year 1 Design Concentration (ug/m3)	Year 2 Design Concentration (ug/m3)	Year 3 Design Concentration (ug/m3)	Year 4 Design Concentration (ug/m3)	Year 5 Design Concentration (ug/m3)	Average Design Conc. (ug/m3)	Std. Dev. *s*	Student's *t* value (90% confiden	Number of Data Values (*n*)	90% Upper CI (ug/m3)	80% NAAQS (ug/m3)	Test
	2016	2017	2018	2019	2020	2015-2019						
Anderson (06-089-0007)	37	115	113	32	108	*81.00*	*42.56*	*2.13*	5	*121.5*	120	*FAIL*
Shasta Lake (06-089-0008)	33	87	145	41	105	*82.20*	*46.38*	*2.13*	5	*126.4*	120	*FAIL*
Redding (06-089-0004)	28	88	166	26	95	*80.60*	*57.67*	*2.13*	5	*135.5*	120	*FAIL*

Both the Anderson – North Street and the Shasta Lake – La Mesa sites have had historically low concentrations of PM_{10}. Attached is a copy of the AQS AMP 350 report detailing the PM_{10} concentration at the two sites. The data available for the Anderson – North Street site begins in August 1993, and for the Shasta Lake – La Mesa site, data begins in April of 2004, and the most recent data is September 2020. Graph 1 indicates that the Anderson – North Street site has had a decrease in the PM_{10} concentration from the early 1990's to current. Graph 2 indicates that the ambient concentration of PM_{10} at the Shasta Lake – La Mesa site has been consistently low throughout the monitoring period. The PM_{10} concentrations at both monitoring sites are significantly under the NAAQS, with the exceptions of when the area is impacted by wildfires. Neither site has had an exceedance of the NAAQS at any time of the federal PM_{10} standard of 150 µg/m3.

The discontinuation of the Anderson – North Street and Shasta Lake – La Mesa sites will not compromise the minimum monitoring requirements for PM_{10} in the Redding metropolitan statistical area. For metropolitan statistical areas with a population of less 250,000, the minimum monitoring requirement is:

- High concentration (Exceeds NAAQS by ≥20%), 1 – 2 monitoring sites,
- Medium concentration (≥80% of NAAQS), 0 – 1 monitoring sites, and

- Low concentration (<80% of NAAQS), 0 monitoring sites.

For the Redding metropolitan statistical area, the highest reading for 2020 was at the Anderson – North Street site at 108 $\mu g/m^3$, which is 72% of the NAAQS. The Redding metropolitan statistical area falls in the low concentration category, which required zero PM_{10} monitoring sites. Although the minimum monitoring requirements indicate that zero PM_{10} monitoring sites are required, the Shasta County Air Quality Management District will continue to operate and maintain the Redding – Health Center PM_{10} SLAM site. Attached is Table 17, from the *Annual Network Plan, Covering Monitoring Operations in 25 California Air Districts* dated July 2020, Section 5F, page 30, which details the minimum monitoring requirements for the air districts in the California Air Resources Board Primary Quality Assurance Organization.

Discontinuing these monitors will free up resources and allow the District to focus on more critical monitoring activities. The Anderson – North Street site has been down due to equipment failure since the beginning of January 2021. The last sample at the Anderson – North Street site was on January 11, 2021. Along with the limited availability of PM_{10} filters during the COVID-19 shutdowns, the District prioritized the PM_{10} filters primarily at the Redding – Health Center site, and then at the Shasta Lake – La Mesa site to ensure those sites would have enough filters for the first quarter. Pending your approval, the District is requesting that the Anderson – North Street site be shut down at the beginning of first quarter 2021, to coincide with the equipment breakdown. The District intends to continue monitoring PM_{10} at the Shasta Lake – La Mesa site until October 31, 2021, in order to have complete data for the first, second, and third quarters of 2021. Please feel free to contact Senior Air Pollution Inspector Rob Stahl with any questions or concerns at 530-225-5674.

Sincerely,

Paul Hellman
Air Pollution Control Officer

PH/RS/my

Enclosures

C: Leah Matthews, California Air Resources Board, sent via email: Leah.Mathews@arb.ca.gov
Dena Vallano, US Environmental Protection Agency, sent via email: Vallano.Dena@epa.gov

March 3, 2022

Rene Bermudez, Manager
Atmospheric Measurements
South Coast Air Quality Management District
218865 Copley Drive, Diamond Bar CA 91765

Subject: Agreement of Shared Carbon Monoxide (CO) Monitoring Responsibilities

Dear Mr. Bermudez:

40 CFR, Part 58 Appendix D, section (2)(e), requires air monitoring of carbon monoxide (CO) to be performed in order for our agencies to meet the minimum monitoring requirements for our shared Riverside-San Bernardino-Ontario Metropolitan Statistical Area (MSA). The Riverside-San Bernardino-Ontario MSA is required to have a minimum of one near road CO monitor to meet Environmental Protection Agency (EPA) minimum monitoring requirements.

The South Coast Air Quality Management District (SCAQMD) currently operates the required near road State or Local Monitoring Station (SLAMS) CO monitors in our shared MSA located at the Ontario Etiwanda Near Road site (AQS No. 60710026). The Mojave Desert Air Quality Management District (MDAQMD) recently decommissioned, with EPA and CARB approval, two State or Local Monitoring Station (SLAMS) CO monitors in our shared MSA located at the Victorville site and the Barstow site.

The MDAQMD is hereby notifying SCAQMD of the decommission of its CO monitoring at the Victorville and Barstow sites. The EPA approval of decommission is enclosed for reference.

The EPA has requested that the MDAQMD and SCAQMD recognize the shared MSA monitoring responsibility and agree to ongoing collaboration to ensure the continued operation of at least one CO monitor. In the spirit of inter-agency collaboration, the MDAQMD and SCAQMD agree that:

- The SCAQMD will continue to operate the SLAMS CO Near Road monitor at Ontario Etiwanda site, and
- The MDAQMD and SCAQMD share the Riverside-San Bernardino-Ontario MSA and the EPA minimum monitoring requiring is at least one CO Near Road monitor for the MSA; and
- SCAQMD shall notify the MDAQMD of any changes to the Riverside-San Bernardino-Ontario monitor and the MDAQMD shall notify SCAQMD if it re-establishes a CO monitor; and

- The MDAQMD and the SCAQMD shall collaborate and include the CARB and the EPA as necessary to maintain at least one CO monitor for the MSA, or meet future CO monitoring requirements, should they change.

3/3/22

Chris Anderson Date:
Air Monitoring Supervisor
Mojave Desert Air Quality Management District
14306 Park Ave, Victorville, CA 92392
(760) 245-1661

Rene Bermudez, Manager Date:
Atmospheric Measurements
South Coast Air Quality Management District
218865 Copley Drive, Diamond Bar CA 91765
(909) 396-2136

Attachment: EPA approval letter for discontinuation of the CO SLAMS monitors at the Victorville and Barstow sites.

Please sign, and retain a copy for your file and return this document to MDAQMD

Email cc: Williams.jennifer@eap.gov
Rbermudez@aqmd.gov
Yoshimura.gwen@epa.gov
Tsai.sheila@epa.gov
Greg.gilani@arb.ca.gov
adesalvio@mdaqmd.ca.gov

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

December 20, 2021

Christopher Collins
Air Monitoring Supervisor
Mojave Desert Air Quality Management District
14306 Park Ave
Victorville, CA 92392

Dear Christopher Collins:

This letter provides the U.S Environmental Protection Agency's (EPA) review and approval for the Mojave Desert Air Quality Management District (MDAQMD) discontinuation of the sulfur dioxide (SO_2) State/Local Air Monitoring Station (SLAMS) monitors at the Victorville (Air Quality System (AQS) ID: 06-071-0306) and Trona (AQS ID: 06-071-1234) sites, and discontinuation of the carbon monoxide (CO) SLAMS monitors at the Victorville and Barstow (AQS ID: 06-071-0001) sites. A request for EPA approval of these network changes was submitted to EPA on November 17, 2021. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors.

Discontinuation of the CO and SO_2 SLAMS monitors was reviewed by EPA against criteria contained in 40 CFR 58.14(c)(1). According to certified data submitted to EPA's AQS, the Victorville and Trona SO_2 monitors were in attainment of the 2010 1-hour SO_2 National Ambient Air Quality Standards (NAAQS) from 2016 through 2020. The EPA has determined that, based on design values from 2016-2020, there is a less than 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at these sites. Preliminary 2021 data are consistent with the historical trend and continue to show low concentrations. These SO_2 monitors are not specifically required by an attainment or maintenance plan and are not located in a nonattainment or maintenance area.

According to certified data submitted to EPA's AQS, the Victorville and Barstow CO monitors were in attainment of the 1971 1-hour CO and 8-hour CO NAAQS from 2016 through 2020. The EPA determined that, based on design values from 2016-2020, there is a less than 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at these sites. Preliminary 2021 data are consistent with the historical trend and continue to show low concentrations. These CO monitors are not specifically required by an attainment or maintenance plan and are not located in a nonattainment or maintenance area.

With these closures, fulfillment of SO_2 and CO minimum monitoring requirements (as specified in 40 CFR 58 Appendix D) for the Riverside-San Bernardino-Ontario, CA Metropolitan Statistical Area (MSA) will be dependent on monitoring conducted by the South Coast Air

Quality Management District (South Coast AQMD). 40 CFR 58 Appendix D §2(e) requires MDAQMD to establish a shared monitoring agreement with South Coast AQMD upon EPA approval of these monitor discontinuations. Please include a letter of agreement between the two agencies in your next Annual Network Plan (ANP).

Based on these analyses, EPA approves MDAQMD's discontinuation of the SO_2 SLAMS monitors at the Victorville and Trona sites, and CO SLAMS monitors at the Victorville and Barstow sites. Please include this letter, the relevant monitor and site information, and the letter of agreement between MDAQMD and South Coast AQMD in the next ANP.

If there are any questions regarding this letter, please feel free to contact me at (415) 947-4134 or Sheila Tsai of my staff at 415-972-3328.

Sincerely,

for

Gwen Yoshimura, Manager
Air Quality Analysis Office

cc (via e-mail): Greg Gilani, CARB
Manisha Singh, CARB
Kathleen Gill, CARB
Sylvia Vanderspek, CARB
Ravi Ramalingam, CARB
Jin Xu, CARB
Adolfo Garcia, CARB
Reggie Smith, CARB
Ranjit Bhullar, CARB

Antelope Valley Air Quality Management District
43301 Division St., Suite 206
Lancaster, CA 93535-4649 661-723-8070

March 3, 2022

Rene Bermudez, Manager
Atmospheric Measurements
South Coast Air Quality Management District
218865 Copley Drive, Diamond Bar CA 91765

Subject: Agreement of Shared Carbon Monoxide (CO) Monitoring Responsibilities

Dear Mr. Bermudez:

40 CFR, Part 58 Appendix D, section (2)(e), requires air monitoring of carbon monoxide (CO) to be performed in order for our agencies to meet the minimum monitoring requirements for our shared The Los Angeles-Long Beach-Anaheim Metropolitan Statistical Area (MSA). The Los Angeles-Long Beach-Anaheim MSA is required to have a minimum of one near road CO monitor to meet Environmental Protection Agency (EPA) minimum monitoring requirements.

The South Coast Air Quality Management District (SCAQMD) currently operates the required near road State or Local Monitoring Station (SLAMS) CO monitor in our shared MSA located at the Anaheim Route 5 Near Road site (AQS No. 60590008). The Antelope Valley Air Quality Management District (AVAQMD) recently decommissioned, with EPA and CARB approval, one State or Local Monitoring Station (SLAMS) CO monitor in our shared MSA located at the Lancaster site.

The AVAQMD is hereby notifying SCAQMD of the decommission of its CO monitoring at the Lancaster site. The EPA approval of decommission is enclosed for reference.

The EPA has requested that the AVAQMD and SCAQMD recognize the shared MSA monitoring responsibility and agree to ongoing collaboration to ensure the continued operation of at least one CO monitor. In the spirit of inter-agency collaboration, the AVAQMD and SCAQMD agree that:

- The SCAQMD will continue to operate the SLAMS CO near road monitor at Anaheim Route 5 Near Road site, and
- The AVAQMD and SCAQMD share the Los Angeles-Long Beach-Anaheim MSA and the EPA minimum monitoring requirement is at least one CO Near Road monitor for the MSA; and

- SCAQMD shall notify the AVAQMD of any changes to the Los Angeles-Long Beach-Anaheim monitor and the AVAQMD shall notify SCAQMD if it re-establishes a CO monitor; and
- The AVAQMD and the SCAQMD shall collaborate and include the CARB and the EPA as necessary or required to maintain at least one CO near road monitor for the MSA, or meet future CO monitoring requirements, should they change.

3/3/22

Chris Anderson Date:
Air Monitoring Supervisor
Antelope Valley Air Quality Management District
43301 Division St, Lancaster, CA 93535
(760) 245-1661

Rene Bermudez, Manager Date:
Atmospheric Measurements
South Coast Air Quality Management District
218865 Copley Drive, Diamond Bar CA 91765
(909) 396-2136

Attachment: EPA approval letter for discontinuation of the CO SLAMS monitors at the Lancaster site.

Please sign, and retain a copy for your file and return this document to AVAQMD

Email cc: Williams.jennifer@eap.gov
Rbermudez@aqmd.gov
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adesalvio@mdaqmd.ca.gov

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

December 21, 2021

Christopher Collins
Air Monitoring Supervisor
Mojave Desert Air Quality Management District
14306 Park Ave
Victorville, CA 92392

Dear Christopher Collins:

This letter provides the U.S Environmental Protection Agency's (EPA) review and approval for the Antelope Valley Air Quality Management District (AVAQMD) discontinuation of the carbon monoxide (CO) State/Local Air Monitoring Station (SLAMS) monitor at the Lancaster-Division Street (Air Quality System (AQS) ID: 06-037-9033) site. A request for EPA approval of this network change was submitted to EPA on November 17, 2021. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors.

Discontinuation of this CO monitor was specifically reviewed by EPA against criteria contained in 40 CFR 58.14(c)(1). According to certified data submitted to EPA's AQS, the Lancaster-Division Street CO monitor was in attainment of the 1971 1-hour and 8-hour CO National Ambient Air Quality Standards (NAAQS) from 2016 through 2020. The EPA determined that, based on design values from 2016-2020, there is a less than 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at this site. Preliminary 2021 data are consistent with the historical trend and continue to show low concentrations. This CO monitor is not specifically required by an attainment or maintenance plan and is not located in a nonattainment or maintenance area.

With this closure, fulfillment of CO minimum monitoring requirements (as specified in 40 CFR 58 Appendix D) for the Los Angeles-Long Beach-Anaheim, CA Metropolitan Statistical Area (MSA) will be dependent on monitoring conducted by the South Coast Air Quality Management District (South Coast AQMD). 40 CFR 58 Appendix D §2(e) requires AVAQMD to establish a shared monitoring agreement with South Coast AQMD upon EPA approval of these monitor discontinuations. Please include a letter of agreement between the two agencies in your next Annual Network Plan (ANP).

Based on this analysis, EPA approves the AVAQMD's discontinuation of the CO SLAMS monitor at the Lancaster-Division Street site. Please include this letter, the relevant monitor and site information, and the letter of agreement between AVAQMD and South Coast AQMD in the next ANP.

If there are any questions regarding this letter, please feel free to contact me at (415) 947-4134 or Sheila Tsai of my staff at 415-972-3328.

Sincerely,

for

Gwen Yoshimura, Manager
Air Quality Analysis Office

cc (via e-mail): Greg Gilani, CARB
Manisha Singh, CARB
Kathleen Gill, CARB
Sylvia Vanderspek, CARB
Ravi Ramalingam, CARB
Jin Xu, CARB
Adolfo Garcia, CARB
Reggie Smith, CARB
Ranjit Bhullar, CARB

BARBARA A. MOED, PG
Air Pollution Control Officer

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Mendocino County
Air Quality Management District

Gwen M. Yoshimura
Air Quality Analysis Office, Manager
U.S. EPA Region 9
75 Hawthorne Street
Mail Code: AIR-7
San Francisco, California 94105
June 3, 2021

Dear Ms. Yoshimura:

The Mendocino County Air Quality Management District is requesting approval from U.S. EPA to relocate the PM 2.5 monitor formerly at our Willits Justice Center site (Site ID: 060452002), based on 40 CFR 58 (c)(6) due to the demands of Mendocino County Executive Office Facility & Fleet Division to remove the equipment from the roof top of the Willits Justice building.

Mendocino County Executive Office Facility & Fleet Division instructed the District to remove all air monitoring equipment from the roof of the Willits Justice building for roof repairs. Facilities did not recommend that this equipment continue to operate on any County Facility roof top and requested that this equipment be removed and relocated to an alternative location.

The Willits Justice BAM 1020 PM 2.5 monitor was mounted on the roof top of a 70-foot building. The surrounding area included residential homes, a children's park and daycare center, a police station and was 1.5 blocks from Main Street. Facilities gave the district until January 22, 2021 to remove the equipment. Due to delays caused by winter storms, the PM 2.5 monitor was removed on February 4, 2021.

Proposed site information

a) Distance between proposed and current site: 5,063 feet.
   Distance to Main street Willits: 2,522 feet.
   New site Lat/Lon: 39.39861,-123.35872
   Address: 1277 Blosser Lane, Willits, CA 95490
b) Description of the proposed site: Site is located on the Unified School District office surrounded by a residential neighborhood, a small industrial park, Indian reservation and casino, and K-7 schools. The PM2.5 monitor is mounted on the top of an air monitoring trailer. The annotated map of the site is below in Figure #1. An actual photo of the site is below in Figure #2.
c) Statement confirming that the new site will meet siting criteria of Appendix E and will confirm in ANP if supporting information is unavailable. The monitoring start date at the Willits-Blosser Lane was February 4, 2021. The detailed site information for the site will be included in the 2022 ANP (2021 ANP documents the monitoring network for the year 2020).

BARBARA A. MOED, PG
Air Pollution Control Officer

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Mendocino County
Air Quality Management District

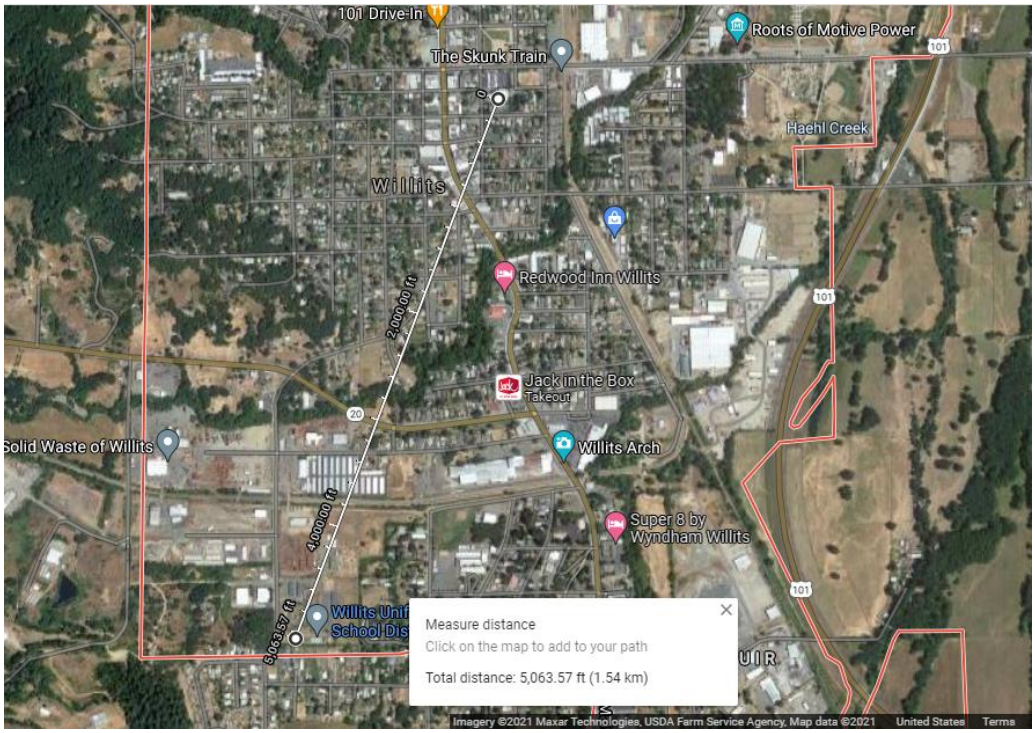

Figure 1. Distance from Willits-Justice Center to Willits-Blosser Lane

Figure 2. Picture of site at Willits-Blosser Lane

Local Site Name	Willits - Blosser Lane

BARBARA A. MOED, PG
Air Pollution Control Officer

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Mendocino County
Air Quality Management District

AQS ID	06-045-2003
GPS Coordinates	39.39861, -123.35872
Street Address	1277 Blosser Lane, Willits, 95490
County	Mendocino
Distance to roadways (meters)	595 to State Hwy 20
Traffic Count (AADT,year)	23,600 (2015)
Ground Cover	Gravel
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	2/4/2021
Current sampling frequency	Continuous
Required sampling frequency including exceptional events	N/A
Sampling season	1-Jan - 31-Dec
Probe height (meters)	5.3
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
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360
Will there be changes within the next 18 months?	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	Yes
Frequency of flow rate verification for automated PM analyzers	Monthly

Table 1. Willits-Blosser Lane Site Details

cc: Dena Vallano, Ph.D.

BARBARA A. MOED, PG
Air Pollution Control Officer

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Mendocino County
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
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Barbara Moed
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306 East Gobbi Street
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Air Pollution Control Officer Moed:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the Mendocino County Air Quality Management District's (MCAQMD) relocation of the $PM_{2.5}$ State/Local Air Monitoring Station (SLAMS) monitor at the Willits Justice Center site (Air Quality System (AQS) Site ID: 06-045-2002).

On June 18, 2021, MCAQMD sent a letter to EPA with a request for EPA approval of this network change. In this letter, MCAQMD explained the need to relocate the Willits Justice Center site due to logistics beyond MCAQMD's control (i.e., the Mendocino County Executive Office Facility & Fleet Division requested that the monitoring equipment be removed and permanently relocated to an alternative location due to Willits Justice Center building repairs). The Willits Justice Center $PM_{2.5}$ SLAMS monitor was removed from the original location at the request of Mendocino County Executive Office Facility & Fleet Division on February 4, 2021. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors.

The Willits Justice Center $PM_{2.5}$ monitor is not eligible for discontinuation under 40 CFR 58.14(c)(1) - (c)(5). This monitor relocation was reviewed under 40 CFR 58.14(c)(6), which describes the relocation requirements if a SLAMS monitor is not eligible for removal under the criteria in 40 CFR 58.14(c)(1) through (c)(5), and states that "[a] SLAMS monitor … 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."

According to certified data submitted to EPA's AQS, the Willits Justice Center $PM_{2.5}$ monitor had attaining design values for the 2006 24-hour $PM_{2.5}$ NAAQS from 2016-2019 and the 2012 annual $PM_{2.5}$ NAAQS from 2016-2020. The monitor had a violating design value for the 2006 24-hour $PM_{2.5}$ NAAQS in 2020. MCAQMD flagged several monitoring dates in 2018 and 2020 as being impacted by wildfire in AQS. MCAQMD currently operates one other $PM_{2.5}$ monitor at the Ukiah-Library site (AQS Site ID: 06-045-0006), which is the $PM_{2.5}$ design value site for both the annual and 24-hour $PM_{2.5}$ NAAQS for Mendocino County. The Ukiah-Library site has had higher design values from 2016-2020, with the exception of having a lower annual design value in 2016 (reflecting data years 2014-2016) and the same 24-hour design value in 2017 (reflecting data years 2015-2017). During the 2016-2020 data period, the

Willits Justice $PM_{2.5}$ monitor generally measured lower concentrations of $PM_{2.5}$ than the Ukiah-Library site.

The original Willits Justice Center site (39°24'42.3" N, 123°21'09.5" W) is located at 125 E. Commercial Street, Willits, CA 95490 on the roof of the Willits Justice Building within a mostly residential area with a children's park, daycare center, and police station nearby. The proposed relocation site (39°23'55.0" N, 123°21'31.4" W) is located at the Willits Unified School District at 1277 Blosser Lane, Willits, CA 95490, approximately 5,000 feet southeast of the original site location. The proposed relocation site is surrounded by a residential neighborhood, a small industrial park, Indian reservation and casino, and K-7 schools. Both sites are in an area characterized by residential and commercial land use. Therefore, the proposed relocation site is expected to measure similar $PM_{2.5}$ concentrations from similar sources due to the consistency in land use and proximity to sources, and will not prevent MCAQMD from meeting 40 CFR part 58, Appendix D requirements.

Based on the assessment of the scale of representation at both locations, EPA has determined that MCAQMD's request meets the requirement that the replacement site is at a nearby location with the same scale of representation and does not compromise data needed for implementation of the NAAQS. EPA thus approves relocation of the Willits Justice Center $PM_{2.5}$ SLAMS monitor to the proposed site. This approval assumes that the new site will meet all 40 CFR part 58 requirements, including the siting requirements specified in Appendix E. Please work with EPA 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, please attach this letter and include the relevant monitor and site information in the next California Air Resources Board Annual Monitoring Network Plan.

If you have any questions, please feel free to contact me at (415) 947-4134 or Dena Vallano of my staff at (415) 972-3134.

Sincerely,

Gwen Yoshimura, Manager
Air Quality Analysis Office
Air and Radiation Division

cc (via email): Manisha Singh, CARB
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EPA Site Closure Tests for CO Monitors

-Calexico-Ethel Street (060250005)

1-HOUR CO NAAQS: Less than 10% Chance of Exceeding 80% of the 35 ppm CO NAAQS

Year 1 DV (ppm)	Year 2 DV (ppm)	Year 3 DV (ppm)	Year 4 DV (ppm)	Year 5 DV (ppm)	Average DV (ppm)	Std. Dev. s	Student's t value (90% confidence)	Number of Data Values (n)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test
2016	2017	2018	2019	2020	2016-2020						
5.0	8.2	8.2	5.2	4.7	6.3	1.78	2.13	5	7.96	28.00	PASS

8-HOUR CO NAAQS: Less than 10% Chance of Exceeding 80% of the 9 ppm CO NAAQS

Year 1 DV (ppm)	Year 2 DV (ppm)	Year 3 DV (ppm)	Year 4 DV (ppm)	Year 5 DV (ppm)	Average DV (ppm)	Std. Dev. s	Student's t value (90% confidence)	Number of Data Values (n)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test
2016	2017	2018	2019	2020	2016-2020						
3.9	4.5	4.5	3.3	3.1	3.9	0.65	2.13	5	4.48	7.20	PASS

-Chico-East Avenue (060070008)

1-HOUR CO NAAQS: Less than 10% Chance of Exceeding 80% of the 35 ppm CO NAAQS

Year 1 DV (ppm)	Year 2 DV (ppm)	Year 3 DV (ppm)	Year 4 DV (ppm)	Year 5 DV (ppm)	Average DV (ppm)	Std. Dev. s	Student's t value (90% confidence)	Number of Data Values (n)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test
2016	2017	2018	2019	2020	2016-2020						
1.7	1.7	19.4	19.4	7.2	9.9	8.98	2.13	5	18.43	28.00	PASS

8-HOUR CO NAAQS: Less than 10% Chance of Exceeding 80% of the 9 ppm CO NAAQS

Year 1 DV (ppm)	Year 2 DV (ppm)	Year 3 DV (ppm)	Year 4 DV (ppm)	Year 5 DV (ppm)	Average DV (ppm)	Std. Dev. s	Student's t value (90% confidence)	Number of Data Values (n)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test
2016	2017	2018	2019	2020	2016-2020						
1.3	1.4	6.4	6.4	3.6	3.8	2.53	2.13	5	6.23	7.20	PASS

-Modesto-14th Street (060990005)

1-HOUR CO NAAQS: Less than 10% Chance of Exceeding 80% of the 35 ppm CO NAAQS

Year 1 DV (ppm)	Year 2 DV (ppm)	Year 3 DV (ppm)	Year 4 DV (ppm)	Year 5 DV (ppm)	Average DV (ppm)	Std. Dev. s	Student's t value (90% confidence)	Number of Data Values (n)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test
2016	2017	2018	2019	2020	2016-2020						
2.7	2.0	2.6	2.6	2.2	2.4	0.30	2.13	5	2.71	28.00	PASS

8-HOUR CO NAAQS: Less than 10% Chance of Exceeding 80% of the 9 ppm CO NAAQS

Year 1 DV (ppm)	Year 2 DV (ppm)	Year 3 DV (ppm)	Year 4 DV (ppm)	Year 5 DV (ppm)	Average DV (ppm)	Std. Dev. s	Student's t value (90% confidence)	Number of Data Values (n)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test
2016	2017	2018	2019	2020	2016-2020						
1.5	1.6	1.9	1.9	1.8	1.7	0.18	2.13	5	1.91	7.20	PASS

-Stockton-Hazelton (060771002)

1-HOUR CO NAAQS: Less than 10% Chance of Exceeding 80% of the 35 ppm CO NAAQS

Year 1 DV (ppm)	Year 2 DV (ppm)	Year 3 DV (ppm)	Year 4 DV (ppm)	Year 5 DV (ppm)	Average DV (ppm)	Std. Dev. s	Student's t value (90% confidence)	Number of Data Values (n)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test
2016	2017	2018	2019	2020	2016-2020						
2.0	2.3	3.0	3.0	2.6	2.6	0.43818	2.13	5	2.9974	28.0000	PASS

8-HOUR CO NAAQS: Less than 10% Chance of Exceeding 80% of the 9 ppm CO NAAQS

Year 1 DV (ppm)	Year 2 DV (ppm)	Year 3 DV (ppm)	Year 4 DV (ppm)	Year 5 DV (ppm)	Average DV (ppm)	Std. Dev. s	Student's t value (90% confidence)	Number of Data Values (n)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test
2016	2017	2018	2019	2020	2016-2020						
1.4	1.9	2.4	2.4	1.7	2.0	0.43932	2.13	5	2.3785	7.2000	PASS