Annual Network Plan

Covering Monitoring Operations in

25 California Air Districts

June 2023

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
AQS	Air Quality System
ARD	Air Resources District
ARM	Approved Regional Method
AQDA	Air Quality Data Action
CAMP	Community Air Monitoring Plans
CAN	Corrective Action Notification
CARB	California Air Resources Board
CASTNET	Clean Air Status and Trends Network
CBO	Community-based Organization
CBSA	Core-Based Statistical Area
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CSC	Community Steering Committees
CSN	Chemical Speciation Network
DV	Design Value
EJ	Environmental Justice
EMP	Enhanced Monitoring Plan
FEM	Federal Equivalent Method
FRM	Federal Reference Method
IMPROVE	Interagency Monitoring of Protected Visual Environments
MATES	Multiple Air Toxics Exposure
MLD	Monitoring and Laboratory Division
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
QC	Quality Control

QMB	Quality Management Branch
QMS	Quality Management Section
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SLAMS	State and Local Air Monitoring Site
SNAPS	Study of Neighborhood Air near Petroleum Sources
SO_2	Sulfur Dioxide
SPM	Special Purpose Monitor
STN	Speciated Trends Network
TPY	Tons per Year
TSA	Technical System Audit
U.S. EPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound

Executive Summary

The Annual Network Plan is required by Title 40, Code of Federal Regulations (CFR), Part 58.10 and provides detailed information about criteria pollutant monitoring sites and instruments operating in California. It is due by July 1st of each year to the U.S. Environmental Protection Agency (U.S. EPA) after a 30-day public comment period. 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), Aerometric Data Analysis and Management (ADAM), Community Air Quality Viewer (AQview), 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 details of 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.

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, supporting the development of emissions reduction programs, and supporting air quality research studies. 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. Fenceline 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 fenceline- 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 ongoing implementation of Assembly Bill 617 (AB 617), which was passed in 2017. Section 9 of this report includes some high-level discussion of community-scale air monitoring activities in California.

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 shows that they meet the Federal air monitoring and quality assurance requirements of 40 CFR 58.10 and Appendices A through E.

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 air districts in the CARB PQAO may elect to prepare their own ANP or have their information included in the CARB ANP. The CARB ANP covers the monitoring networks of 25 air districts within the CARB PQAO. Seven air districts in the CARB PQAO will prepare their own ANPs and submit them directly to the U.S. EPA. Three other air 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 2023 ANP details the operations of the monitoring networks in 2022 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 air districts, CARB, and other agencies such as the National Park Service (NPS), within the jurisdictions of the air 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 Site (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 air districts preparing their own ANPs are identified in Table 1 and Figure 1. Monitoring sites operated by air 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 2023 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.

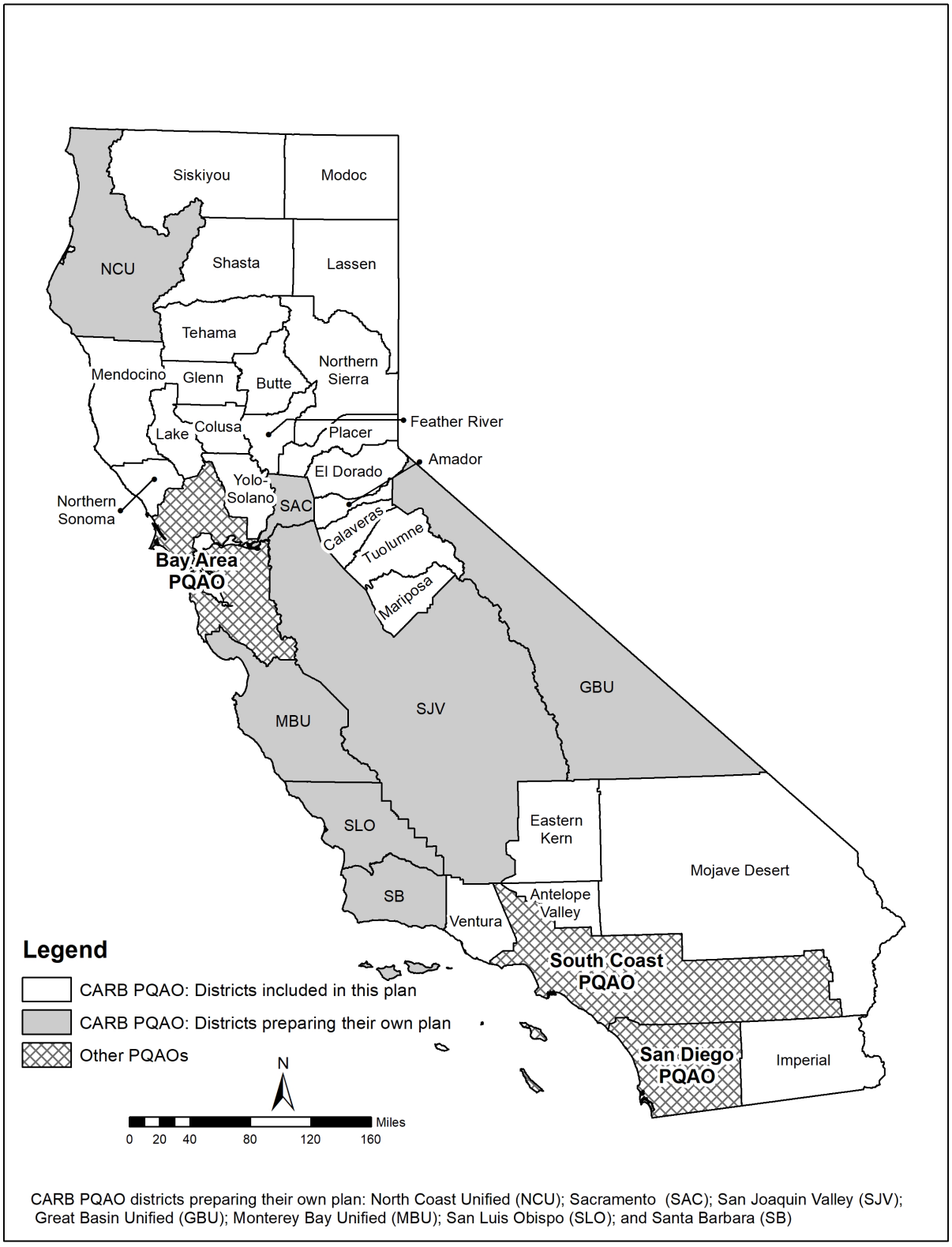
The final version of the CARB ANP is available for download from *https://www.arb.ca.gov/aqd/amnr/amnr.htm*.

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 Air Resources District
North Coast Unified AQMD	Sacramento Metropolitan AQMD
San Joaquin Valley APCD	San Luis Obispo County APCD
Santa Barbara County APCD	

* Lassen County APCD and Modoc County APCD are covered by this ANP; however, no ambient air quality monitors are currently sited in these districts.

Figure 1: California Primary Quality Assurance Organizations



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, 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 air 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, 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-Fairgrounds (06-037-9035)		1	1		1	1	
Butte	Chico-East (06-007-0008)	1	1	1		1	1	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 (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-Canal St (06-017-2004)			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	2	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	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	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	
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				
	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		

District	Site (AQS ID)	CO	NO_2	Ozone	SO_2	PM_{10}	$PM_{2.5}$	CARB Operated
	Victorville-Park (06-071-0306)		1	1		1	2	
Northern Sierra	Chester (06-063-1007)						1	
	Grass Valley (06-057-0005)			1			1	
	Portola (06-063-1010)						3	
	Quincy-N Church (06-063-1006)						1	
	Truckee-Fire Station (06-057-1001)						2	
Northern Sonoma	Cloverdale (06-097-0001)					1		
	Guerneville-Church (06-097-3002)					1		
	Healdsburg-Matheson (06-097-0002)					1		
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				
	Lassen Volcanic NP (06-089-3003)*			1				
	Redding-Health Dept (06-089-0004)			1		1	2	
	Shasta Lake-Lake (06-089-0009)			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	
Yolo-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	

* These sites are operated by National Park Service (NPS).
Note: CARB operating sites are delineated with grey shading.

Section 3: Site and Monitoring Information

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

Federal Site Type

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

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

U.S. EPA 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 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. Since local development may change the spatial scale of representativeness of a monitor, CARB periodically evaluates the relevant information to make sure the site type and spatial scale are still appropriate.

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	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	Lakeport			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						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			
	Lucerne Valley					pop/n	
	Mojave NP*			gen/r		pop/n	pop/n
	Phelan			pop/n			
	Trona-Athol/Telescope		source/n	pop/n	source/n	high,source/n	

District	Site	CO	NO_2	Ozone	SO_2	PM_{10}	$PM_{2.5}$
	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
Northern Sonoma	Cloverdale					pop/n	
	Guerneville-Church					pop/n	
	Healdsburg					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
Shasta	Anderson-North			pop/n			
	Lassen Volcanic NP*			gen/r			
	Redding-Health Dept			pop,high/n		high/n	pop/n
	Shasta Lake-Lake			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 58. Federal monitoring regulations require that each monitor measuring a criteria pollutant is sited to meet at least one monitoring objective. The three federal monitoring objectives are:

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

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

Federal Monitor Type

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

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

* 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 national ambient 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	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	Lakeport	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	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
	Lucerne Valley	NAAQS Comparison	SLAMS	
	Mojave NP	Public Info.	non-EPA Federal	
	Phelan	NAAQS Comparison	SLAMS	
	Trona-Athol/Telescope	NAAQS Comparison	SLAMS	

District	Site	Monitoring Objective	Monitor Type*	Network Affiliation**
	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	
Northern Sonoma	Cloverdale	NAAQS Comparison	SLAMS	
	Guerneville-Church	NAAQS Comparison	SLAMS	
	Healdsburg	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	
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	
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

U.S. EPA regulations (40 CFR Part 58.10) require that the annual monitoring network plan lists specific additional information that characterizes the nature and location of the monitors. U.S. EPA Region 9 identified all of the information that is required on each site/monitor basis. The full list of required information is included in Table 6. This detailed information for each site can be found in 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).
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)
Probe material for reactive gases $NO/NO_2/NO_y$, SO_2, O_3; PAMS: VOCs, Carbonyls

Table 6 continued

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

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

The federal regulations require that monitors are 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 and report under the pollutant codes of 88501 or 88502. 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)
	Grass Valley (06-057-0005)
	Portola (06-063-1010)
	Quincy-N Church Street (06-063-1006)[1]
	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)

[1]Quincy-monitor closed on August 2022

Core-Based Statistical Areas

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

U.S. EPA specifies the number of monitors required for each pollutant based on the CBSA. Table 8 contains a comprehensive list of CBSAs and associated air districts for California. Several of the 25 air districts covered by this ANP are located in CBSAs that also include air districts that are preparing their own ANPs. Information regarding monitors operated by air 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 air districts and CARB must communicate with each other when changes to the network are being considered. When proposed changes are communicated between air 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 air districts, the general public and affected CARB divisions. Any $PM_{2.5}$ network changes are thoroughly reviewed by CARB and air district working groups, both separately and in coordinated discussions, and impacts on all CFR requirements are assessed. CARB and the 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 ANPs 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 federal regulations (Appendix D of Title 40, Part 58 of the CFR). Generally, requirements are based on the population from the most recent census data, the severity of the air quality problem, as specified by the design value, or emissions.

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). There are no minimum monitoring requirements outside of MSAs. 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 2022. Sites from air 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*)	2022 Design Value (% of NAAQS) *DV Site*	Required # of Sites	SLAMS Sites Operating in 2022 (District where site is located) ***Highest Concentration Sites Denoted by Bold Text***
Bakersfield	909,235 (917,673)	0.094 ppm (134%) *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 (Eastern Kern)** Oildale-3311 Manor Street (San Joaquin Valley) Shafter-Walker Street (San Joaquin Valley)
Chico	211,632 (208,309)	0.071 ppm (101%) *Paradise*	1	Chico-East Avenue (Butte County) **Paradise-4405 Airport Road (Butte County)**
El Centro	179,702 (179,851)	0.077ppm (110%) *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)	0.102 ppm (146%) *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 (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)	0.078 ppm (111%) *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)	0.065 ppm (93%) *Anderson; Redding; Shasta*	1	Anderson-North Street (Shasta County) **Redding-Health Dept Roof (Shasta County)** Shasta Lake-13791 Lake Blvd (Shasta County)

CBSA	2020 Census Population (2021 Population Estimate*)	2022 Design Value (% of NAAQS) *DV Site*	Required # of Sites	SLAMS Sites Operating in 2022 (District where site is located) ***Highest Concentration Sites Denoted by Bold Text***
Riverside-San Bernardino-Ontario	4,599,839 (4,653,105)	0.113 ppm (161%) *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)	0.081 ppm (116%) *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 (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)	0.052 ppm (74%) *Sebastopol*	1	**Sebastopol (Bay Area)**
Vallejo-Fairfield	453,491 (451,716)	0.057ppm (81%) *Vallejo*	2	Fairfield-Chadbourne Road (Bay Area) Vallejo-304 Tuolumne Street (Bay Area) **Vacaville-Ulatis Drive (Yolo-Solano)**
Yuba City	181,208 (181,484)	0.076 ppm (109%) *Sutter Buttes*	1	**Sutter Buttes-S Butte (Feather River)** **Yuba City-Almond Street (Feather River)**

* 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 five 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 2022 at these sites was granted by U.S. EPA. The waiver must be updated each year, and a copy of the waiver request for 2023 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
061010004	Sutter Buttes	Feather River	1993
061030004	Tuscan Butte	Tehama County	1995

Section 5B: Nitrogen Dioxide (NO_2)

Minimum Number of NO_2 Monitoring Sites

Federal regulations 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 air 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 air 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	1	San Jose-Knox Ave; 060850006 (Bay Area) Pleasanton, 060010015, (Bay Area)

* Source: Traffic Census Program, California Department of Transportation *http://www.dot.ca.gov/trafficops/census/*.
** Near-road sites were in the planning/construction stages and not yet operating in 2022.

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 the Bay Area AQMD, the San Diego County APCD, the San Joaquin Valley APCD and the 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	Compton (060371302)
	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.

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)
Fresno	1,008,654 (1,013,581)	1	Fresno-2482 Foundry Park; 060192016 (San Joaquin Valley)
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 an air 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 the South Coast AQMD, Bay Area AQMD, and the Sacramento Metropolitan AQMD.

Several air 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. Information about these monitors is provided in Appendix A.

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

Section 5D: Sulfur Dioxide (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 an air 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 California Emissions Projection Analysis Model.

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) (2022 Data)*	Population 2020 Census (2022 Population Estimate)	PWEI	Required Sites	SLAMS Sites Operating in 2022
Los Angeles-Long Beach-Anaheim	Antelope Valley AQMD	South Coast AQMD	Los Angeles: 4,723 Orange: 418	13,200,998 (12,997,353)	67,876 (66,829)	1	Los Angeles-Main Street (South Coast) Los Angeles-Lax Hastings (South Coast)
Riverside-San Bernardino-Ontario	Mojave Desert AQMD	South Coast AQMD	Riverside: 290 San Bernardino: 1,048	4,599,839 (4,653,105)	6,155 (6,226)	1	Fontana (South Coast) Rubidoux (South Coast)

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

All air districts covered by this ANP met the minimum monitoring requirements for SO_2 in 2022. 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. Based on the 2020 National Emissions Inventory, U.S. EPA identified the Twentynine Palms United States Marine Corps Air Ground Combat Center in the Mojave Desert as a source that may have exceeded the threshold for Pb monitoring. CARB is currently working with U.S. EPA and the Mojave Desert AQMD in assessing the issue to decide if Pb monitoring is needed near this source. None of the other 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 air 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)	2022Max Concentration (% of NAAQS) *Max Concentration Site*	Required Sites	SLAMS Sites Operating in 2022 (District where site is located)
Bakersfield	909,235 (917,673)	416 µg/m^3 (277%) *Ridgecrest*	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)	75 µg/m^3 (50%) *Chico*	0	Chico (Butte County)
El Centro	179,702 (179,851)	866 µg/m^3 (577%) *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)	128 µg/m^3 (85%) *Long Beach (Hudson)/Webster*	4-8	Lancaster (Antelope Valley); Anaheim (South Coast); Azusa (South Coast); Glendora (South Coast); Los Angeles-N Main St (South Coast); Mission Viejo (South Coast); Santa Clarita (South Coast); South Long Beach (South Coast)
Oxnard-Thousand Oaks-Ventura	843,843 (839,784)	57 µg/m^3 (38%) *El Rio*	1-2	Simi Valley (Ventura County); El Rio (Ventura County)
Redding	182,155 (182,139)	53 µg/m^3 (35%) *Redding*	0	Redding (Shasta County)
Riverside-San Bernardino-Ontario	4,599,839 (4,653,105)	432µg/m^3 (288%) *Palm Springs*	6-10	Barstow (Mojave Desert); Lucerne Valley (Mojave Desert); Victorville (Mojave Desert); Hesperia (Mojave Desert); Banning (South Coast); Crestline (South Coast); Mecca (South Coast); Palm Springs (South Coast); Rubidoux (South Coast)
Sacramento-Roseville-Folsom	2,397,382 (2,411,428)	136 µg/m^3 (91%) *So. Lake Tahoe*	4-8	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)	46 µg/m^3 (31%) *Healdsburg*	0-1	Cloverdale (Northern Sonoma); Healdsburg (Northern Sonoma); Guerneville (Northern Sonoma)
Vallejo-Fairfield	453,491 (451,716)	33 µg/m^3 (22%) *Vacaville*	0-1	Vacaville (Yolo-Solano)
Yuba City	181,208 (182,484)	72 µg/m^3 (48%) *Yuba City*	0	Yuba City (Feather River)

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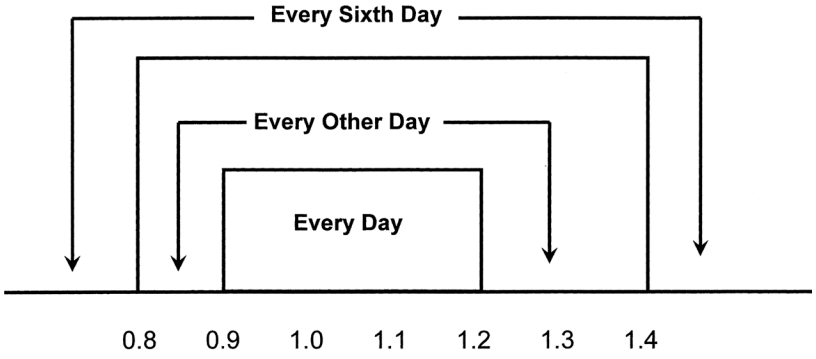
PM_{10} Sampling Frequency Requirements for Primary FRM Monitors

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 air 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	Current Sampling Frequency
Lakeport	Lake	060333002-1	35	0.23	1:6	1:6
Redding	Shasta	060890004-2	53	0.35	1:6	1:6
Red Bluff	Tehama	061030007-1	53	0.35	1:6	1:6
Vacaville	Yolo-Solano	060953001-2	33	0.22	1:6	1:6
West Sacramento	Yolo-Solano	061132001-1	54	0.36	1:6	1:6
Woodland	Yolo-Solano	061131003-1	64	0.43	1:6	1:6

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 $PM_{2.5}$

Metropolitan Statistical Area	2020 Census Population (2021 Population Estimate)	2022 Design Value (% of NAAQS) Design Value Site		Required Sites	SLAMS Sites Operating in 2022 (District where site is located) Highest Concentration Site Types Denoted by Bold Text
		24-hour	Annual		
Bakersfield	909,235 (917,673)	62 µg/m^3 (177%) *Bakersfield-California*	18.8 µ/m^3 (157%) *Bakersfield-Planz*	2	Mojave (Eastern Kern) Ridgecrest (Eastern Kern) Bakersfield-California (San Joaquin) Bakersfield-Planz (San Joaquin)
Chico	211,632 (208,309)	57 µg/m^3 (163%) *Chico*	11.6 µg/m^3 (97%) *Chico*	1	Chico (Butte)
El Centro	179,702 (179,851)	32 µg/m^3 (91%) *Calexico*	11.1 µg/m^3 (93%) *Calexico*	1	Brawley (Imperial) Calexico (Imperial) El Centro (Imperial)
Los Angeles-Long Beach-Anaheim	13,200,998 (12,997,353)	41 µg/m^3 (117%) *Pico Rivera*	13.4 µg/m^3 (112%) *Compton*	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/m^3 (60%) *El Rio, Piru, Simi Valley, Thousand Oaks*	7.8 µg/m^3 (65%) *Simi Valley, Thousand Oaks*	1	El Rio (Ventura) Ojai (Ventura) **Piru (Ventura)** **Simi Valley (Ventura)** Thousand Oaks (Ventura)
Redding	182,155 (182,139)	65 µg/m^3 (186%) *Redding*	9.3 µg/m^3 (78%) *Redding*	1	Redding (Shasta)
Riverside-San Bernardino-Ontario	4,599,839 (4,653,105)	40 µg/m^3 (114%) *Ontario*	14.0 µg/m^3 (117%) *Ontario*	3	Victorville (Mojave Desert) **Mira Loma (South Coast)** Ontario (South Coast)
Sacramento-Roseville-Folsom*	2,397,382 (2,411,428)	65 µg/m^3 (191%) *Auburn*	11.7 µg/m^3 (98%) *Del Pasot*	3	Auburn (Placer) **Del Paso-Avalon Dr (Sacramento)** Roseville- (Placer) Sacramento-Bercut (Sacramento) Woodland (Yolo-Solano)
Santa Rosa-Petaluma	488,863 (485,887)	22 µg/m^3 (63%) *Sebastopol*	7.3 µg/m^3 (63%) *Sebastopol*	0	Sebastopol (Bay Area)
Vallejo-Fairfield	453,491 (451,716)	33 µg/m^3 (94%) *Vallejo*	9.3 µg/m^3 (78%) *Vallejo*	1	**Vallejo (Bay Area)**
Yuba City	181,208 (182,484)	55 µg/m^3 (157%) *Yuba City*	13.8 µg/m^3 (115%) *Yuba City*	1	Yuba City (Feather River)

* Incomplete data

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 2022[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); 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)**; 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.

$PM_{2.5}$ 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 primary $PM_{2.5}$ 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 air 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	2022 24-hr DV	2022 Annual DV	Required Sampling Frequency	Current Sampling Frequency
El Centro	060251003	Imperial	21	9.0	1:3	1:3
Lakeport[1]	060333002	Lake	43	6.6	1:3	1:6
Truckee[2]	060571001	Northern Sierra	53*	8.5*	1:3	1:3
Quincy[3]	060631006	Northern Sierra	73*	12.1*	1:3	1:1
Portola[4]	060631010	Northern Sierra	62	17.0	1:3	1:3
Woodland[5]	061131003	Yolo-Solano	61*	10.6*	1:3	1:6

*DV based on incomplete data.
[1] 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.
[2]The Truckee FRM monitor stopped monitoring on 7/9/22 and an FEM monitor began monitoring on 10/1/22.
[3]The Quincy FRM monitor was replaced as the primary monitor by an FEM monitor on 10/1/22.
[4]The Portola FRM monitor was replaced as the primary monitor by an FEM monitor on 10/1/22.
[5]The Yolo-Solano APCD is currently evaluating the replacement of the Woodland primary FRM monitor with an FEM and began a parallel monitoring program on 1/1/23.

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 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 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 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 air 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 air 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 air districts covered by this ANP, although the Freson-Garland site is operated by CARB. More information about specific sites can be found in the ANPs submitted by air 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.

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, which 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.

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. Additionally, due to the land use development needs and age of the upper air profiler, the Simi Valley upper air profiler device located at the Simi Valley landfill will be retired and be replaced with a new measurement device, a ceilometer, in 2023. The ceilometer uses High-Performance Light Detection and Ranging (LiDAR) technology with depolarization measurement capable of unattended operation 24/7 in all conditions providing upper air measurements. The depolarization measurement enables differentiation between solid, liquid, or mixed-phase clouds and precipitation, providing ready-to-use information for atmospheric characterization. The depolarization measurement not only enables liquid/solid differentiation, but also makes it possible to detect dust and ash from wildfire smoke. The ceilometer will be located at the Ventura County ozone

design value site in Simi Valley. The Ventura County APCD continues to monitor NO2/NO/NOx at Simi Valley and El Rio sites; and surface meteorological parameters at its five monitoring sites.

Special Purpose Monitors (SPM)

In 2022, no regulatory SPM monitors were operating in the area covered by this ANP.

Section 7: Federal Quality Assurance Requirements

Section 7A: CARB PQAO Collocation Requirements

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

$PM_{2.5}$ Collocation Status

Federal regulations require that 15 percent of the FEM and FRM monitors in the network of primary $PM_{2.5}$ monitors must have a collocated monitor. Collocated FRM monitors must have the same method of measurement. For each site with collocated $PM_{2.5}$ FEM monitors, half of the collocated monitors must have the same method of measurement and half must be FRM monitors. If there are an odd number of required collocated monitors, then the 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 air 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	*None at time of publication*
145 (FRM)[2]	R&P Model 2025 with VSCC	8	1	Bakersfield-California – 145/145 (San Joaquin Valley) El Centro – 145/209(Imperial) Sacramento-Del Paso – 145/145 (Sacramento)
170 (FEM)[3]	Met One BAM 1020 with VSCC	54	8	Calexico – 170/143 (Imperial) Folsom – 170/170 (Sacramento) Fresno-Garland – 170/145 (San Joaquin Valley) 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)[4]	Met One BAM-1022 with VSCC or TE-PM2.5C	5	1	Redding – 209/143 (Shasta)
238 (FEM)	Teledyne TEOM T640X	2	1	Bishop/White Mountain – 238/145 (Great Basin)

[1]CARB is working with the air districts to replace the previous collocation site and anticipates resolution by the end of 2023.
[2]Two FRM (145) monitors (Portola and Truckee) closed in 2022 and are not included in this total.
[3]The Grass Valley FEM (170) monitor changed to FEM (209) on 6/1/22 and is not included in this total.
[4]Two FEM (209) monitors (Merced-M St and Fresno-Pacific) changed to FEM (170) on 3/04/22 and 3/11/22, respectively; Bakersfield-Golden closed the FEM (209) monitor on 1/20/22. These are not included in this total.
[5]Mammoth monitor is listed as SPM but included in this total since 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)
11	2	Keeler-Cerro – 127/127 (Great Basin) Sacramento-Del Paso – 063/063 (Sacramento)

*A number of FRM monitors were closed or changed to FEM in 2022. This count reflects monitors at the end of 2022.

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.

Section 7B: 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 Quality Management Branch (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 CARB meets its federally mandated PQAO responsibilities and provides quality assurance oversight to monitoring organizations within CARB's PQAO.

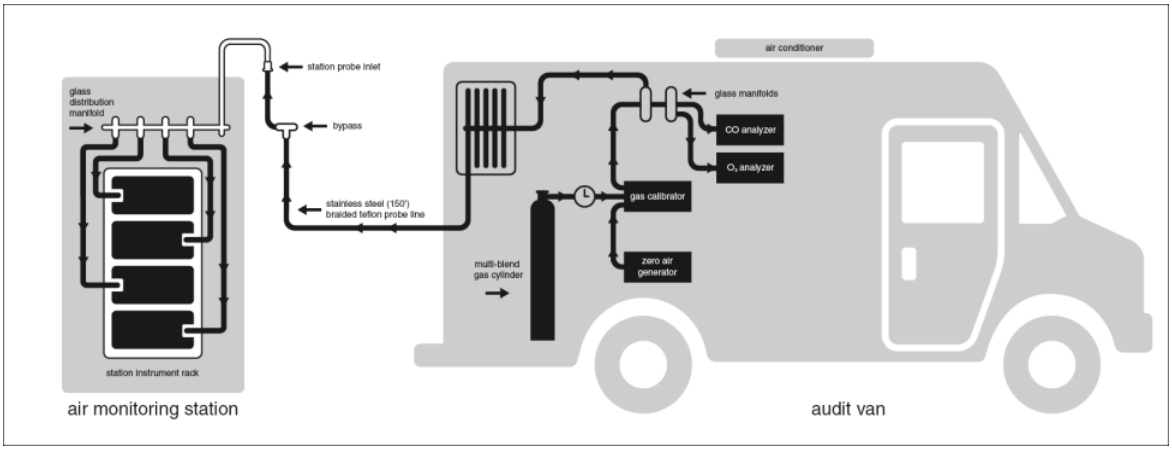
CARB Quality Assurance Activities

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 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 monitoring organization 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

QMS assesses the quality of data collected by air monitoring stations operating in California through the analysis, in accordance with 40 CFR 58, Appendix A, 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 air district operated sites, and weekly or bi-weekly at other air district sites. Precision checks for non-continuous, collocated particulate matter samplers are to be performed at least every 12 days.

Flow rate verifications (one-point checks) are conducted by air monitoring staff at least once per month on filter-based and continuous samplers. 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

A comprehensive corrective action system is an essential component for the enhancement of data quality and the facilitation of continuous improvement to the data collection process. 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). The CAN process may be initiated by any person in CARB's PQAO who identifies an air monitoring issue that impacts or may impact the quality of air monitoring data. The responsible monitoring organization is expected to investigate the issue and implement appropriate corrective action to resolve the issue and prevent recurrence. A copy of the completed CAN form including the corresponding corrective action is submitted to QMB for review. Once QMB and the responsible organization have worked together to implement appropriate corrective action, a CAN closure notice is sent by QMB to the responsible organization.

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 2022 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 2022, 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 May 18, 2023.

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.

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

District	Site (AQS ID)	Comment
Antelope Valley AQMD	Lancaster-Fairgrounds (060379035)	The Lancaster-Division street site (060379033) was shut down on 12/19/22 and a new site, Lancaster-Fairgrounds was started shortly after. This site move was approved by U.S. EPA. The Lancaster-Division street site was operated by Mojave Desert AQMD under contract to Antelope Valley AQMD. The new Lancaster-Fairgrounds site is being operated by Antelope Valley.
Butte County APCD	Paradise-Theater (060072002)	CARB is completing the consolidate of 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. Completion of the new Paradise-Clark station is pending final site modifications.
	Paradise-Airport (060070007)	
Eastern Kern APCD	Mojave-CA-58 (060290019)	CARB's Mojave site was relocated to a new site at 3200 Pat Avenue in late February 2023 with AQS number: 060290020.
El Dorado APCD	Placerville-Canal Street (060172004)	CARB completed the site move from the Placerville-Gold Nugget site (060170010) to the Placerville-Canal Street site which is located on El Dorado High School property. The Placerville-Gold Nugget site was terminated June 2022 and the new Placerville-Canal Street site has been fully operational beginning July 2022.
Imperial County APCD	El Centro (060251003)	The R&P Unit was effectively shut down January 18, 2022 as the primary sampling monitor.
	Niland (060254004)	The Ozone unit conversion of the IZS occurred October 20, 2022. In addition, Imperial County plans to install an additional BAM unit for PM2.5 sampling. The actual model type is still pending.
	Westmorland (060254003)	
Lake County AQMD	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 any current and future sampling frequency concerns.
Mendocino County AQMD	Ukiah-Gobbi Street (060450008)	District replaced the API T265 Chemiluminescence Ozone Analyzer with the API T400 Photometric Ozone Analyzer on March 31,2023.
Northern Sierra AQMD	Grass Valley (060570005)	District has replaced the $PM_{2.5}$ Met One BAM 1020 with a Met One BAM 1022 on 6/1/2022; this change does not require U.S. EPA approval.
	Portola (060631010)	District shut down the primary and QA-Audit PM2.5 FRM monitors on 11/1/2022 and 8/9/2022, respectively and replaced the $PM_{2.5}$ Met One BAM 1020 with a Met One BAM 1022 on July 2022; these changes do not require U.S. EPA approval.
	Quincy (060631006)	District shut down the PM2.5 FRM on August 2022 and has replaced the $PM_{2.5}$ Met One BAM 1020 with a Met One BAM 1022 on 10/1/2022; this change does not require U.S. EPA approval.
	Truckee (060571001)	District shut down the PM2.5 FRM on June 2022; this change does not require U.S. EPA approval.
Shasta County APCD	Anderson-North Street (060890007)	District is looking at shutting down the site. This came up during EPA TSA audit in 2022. District is attainment for the federal ozone standard and will operate more than the minimum monitors required.

District	Site (AQS ID)	Comment
	Redding-Health Department (060890004)	District is planning to replace HiVol monitor with BAM.
Tehama County APCD	Red Bluff-Walnut Street (061030007)	District plans to purchase a Met One BAM 1022 to provide PM2.5 monitoring. The existing Met One BAM 1020 will then replace the Sierra Anderson 1200 Hi-Vol PM10 monitor such that District can have continuous PM10 data. District expects this change to occur during 2023.
Yolo-Solano AQMD	Woodland (061131003)	District has replaced the Teledyne API 400E ozone analyzer with a Teledyne API T400 ozone analyzer. The 400E analyzer was at the end of its useful life and the T400 is the newest model for replacement. District has installed a PM2.5 FEM Met One BAM 1020 at the Woodland site to replace the FRM R&P Partisol-Plus 2025, currently operating on a 1 in 6 day schedule. The new BAM will result in greater data capture and less staff time for maintenance.
	Vacaville (060953003)	District has replaced the Teledyne API 400E ozone analyzer with a Teledyne API T400 ozone analyzer. The 400E analyzer was at the end of its useful life and the T400 is the newest model for replacement.
CARB	Calexico (06025000); Chico (060070008); Modesto (060990005); Stockton (060771003)	CARB is working with U.S. EPA to close CO monitors at Calexico, Chico, Modesto, and Stockton. A formal discontinuation request letter was submitted to the U.S. EPA Region 9 on 9/9/2022, and is included in Appendix C of this ANP.

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 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)	CARB's Stockton-Hazelton monitoring site (060771002) was relocated to the Stockton-University Park site (060771003). Both CARB's request and EPA's approval are included in Appendix C.
	Visalia Church St. site (061072002)	CARB's Visalia Church St. site (061072002) was relocated to Visalia W. Ashland Ave. (061072003) and became operational on January 11, 2022. Both CARB's request and EPA's approval are included in Appendix C.

Section 9: Environmental Justice and Community-Scale Monitoring in California

Consideration of Environmental Justice in California's Regulatory Monitoring Network

U.S. EPA encourages monitoring agencies to address and advance environmental justice through the development and implementation of ANP. CARB is fully committed to developing a suitable template to incorporate its Racial Equity Lens tool and Community Engagement Model to address and advance environmental justice into our monitoring network design. By embracing inclusivity and consideration of historically disadvantaged communities into our system modification process, CARB will support U.S. EPA's strategic plan to address representative shortcomings in environmental justice communities. CARB will seek to optimize future relocation efforts, inclusive of disadvantaged communities, by using resources such as *CalEnviroScreen*[2] (developed by CalEPA) and *EJScreen*[3] (developed by U.S. EPA) mapping tools to evaluate locations that are a benefit to underrepresented communities while meeting the criteria for regional SLAMS monitoring objectives. More structured procedures are anticipated to be unveiled as we work towards the next Five-Year Network Assessment Report. For example, CARB has extensively engaged with community members in the process of relocating the monitoring sites in Stockton.

Presently, more than one third of the regulatory monitoring sites in California are located within the disadvantaged communities and tribal communities as designated by CalEPA using *CalEnviroScreen* for California's Senate Bill (SB) 535 (De León, Chapter 830, Statutes of 2012).

California's Community-Scale Air Monitoring Efforts

In addition to considering environmental justice in regulatory network design, California has put tremendous efforts into community-scale monitoring. Besides the use of traditional regulatory monitors, emerging air quality sensors have been widely used in California's community-scale monitoring efforts, because they are generally low in cost, highly portable, and can require less power, siting infrastructure, and expertise than traditional air monitoring methods. The performance of the sensors, as well as the evaluation and correction approaches, are being improved over time. Data

[2] CalEnviroScreen developed by CalEPA: *https://oehha.ca.gov/calenviroscreen*

[3] EJScreen developed by U.S. EPA: *https://www.epa.gov/ejscreen*

from air sensors have been used to help understand spatial variability of air quality in the communities, identify areas with relatively higher pollutant concentrations for further investigation, complement existing regulatory air monitoring networks, and evaluate personal exposure to air pollution.

California's community-scale monitoring has been largely supported under CARB's Community Air Protection Program[4], with a focus to reduce exposure in communities most impacted by air pollution, as required by California's Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017).

Under the Community Air Protection Program, sixteen communities have been selected to develop Community Air Monitoring Plans (CAMP) and conduct community-scale monitoring as guided by the CAMPs. CAMPs are developed by close collaboration among CARB, air districts, and community steering committees (CSC). The community-scale monitoring is designed to provide real-time air quality information to the community, obtain detailed air pollution levels through the community, determine areas in the community of highest risk, quantify sources of air pollution within the community, and inform and potentially track community emissions reduction strategies. For the AB 617 monitoring networks across California, ambient concentrations are collected for a variety of pollutants including $PM_{2.5}$, PM_{10}, BC, CO, NO, NO_2, O_3, SO_2, H_2S, and CH_4. Air toxics are also monitored at a number of sites in some communities. As California moves forward with AB 617 community-scale monitoring, there has been increased stationary monitoring with FEMs (criteria pollutants) and non-FEMs (e.g., BC and H_2S), expanded air sensor network monitoring, as well as mobile monitoring. The numbers of air toxics (e.g., pesticides, BTEX, and VOCs) monitoring equipment and sites have also increased. The air districts also lead monitoring in response to episodic emissions events (e.g., odor complaints and fugitive emissions).

Additionally, included in AB 617 is a provision for grants to community-based organizations (CBO) and California Native American Tribes for technical assistance and to support their efforts in this process. Started in 2018, CARB's Community Air Grants Program has supported more than 50 projects to set up or expand the monitoring networks in some AB 617 communities, as well as many other disadvantaged and low-income communities, primarily using air sensors.

Besides AB 617 monitoring networks and Community Air Grants monitoring projects, there have also been many special projects/studies for community-scale monitoring conducted in California, by CARB, air districts, communities, some major facilities,

[4] CARB's Community Air Protection Program: *https://ww2.arb.ca.gov/capp*

researchers, as well as private entities. These special projects/studies are generally conducted in response to specific concerns from the communities. Some examples are the San Ysidro Monitoring Pilot Project to understand air quality in the US-Mexico border area (CARB), Study of Neighborhood Air near Petroleum Sources (SNAPS) (CARB), community monitoring near refineries (air districts and refineries), mobile monitoring across California (CARB, air district, researchers, and private entities), and many community air monitoring projects funded by U.S. EPA's Enhanced Air Quality Monitoring for Communities - Competitive Grant through the American Rescue Plan of 2021 (ARP).

In order to support the data collected under community-scale monitoring efforts, CARB has developed a centralized data portal and management system, AQview, to support a wide range of monitoring technologies, pollutants, and data providers[5]. AQview provides visualization and easy access of air quality data to community members, as well as the transparent information on how data are collected and processed. Currently, AQview houses all AB 617 air monitoring data as well as data from several Community Air Grant projects. AQview provides assessments of data quality (especially from the sensor networks) through robust quality control (QC) checks to identify and flag any data records that appear questionable or invalid. AQview's QC checks include instrument-based upper limit and lower limit checks, spike check, and repeating values check. CARB will soon add all the data from the public PurpleAir network to AQview. In the future, CARB will be working to constantly add more data from community-scale monitoring efforts into AQview, such as those from more non-AB 617 communities, pesticides monitoring, and special projects/studies as described above.

Figure 5 shows a map for all the current regulatory monitoring sites[6] and community-scale monitoring sites (with data available in CARB's AQview system), along with the designated disadvantaged communities under SB 535 and all the AB 617 communities in California. Table 31 provides a summary of all community-scale monitoring data in CARB's AQview system[7].

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[5] CARB's AQview system: *https://aqview.arb.ca.gov/*

[6] Information retrieved from CARB's Quality Assurance Air Monitoring Site List: *https://ww2.arb.ca.gov/applications/quality-assurance-air-monitoring-site-list-generator-1*

[7] Detailed information about community-scale monitoring data can be found: *https://aqview.arb.ca.gov/resources/files/Pollutants_in_AQview.pdf*

Figure 5. Current Regulatory Monitoring Sites and Community-Scale Monitoring Sites (with Monitoring Data Available in CARB's AQview System) with the Designated Disadvantaged Communities

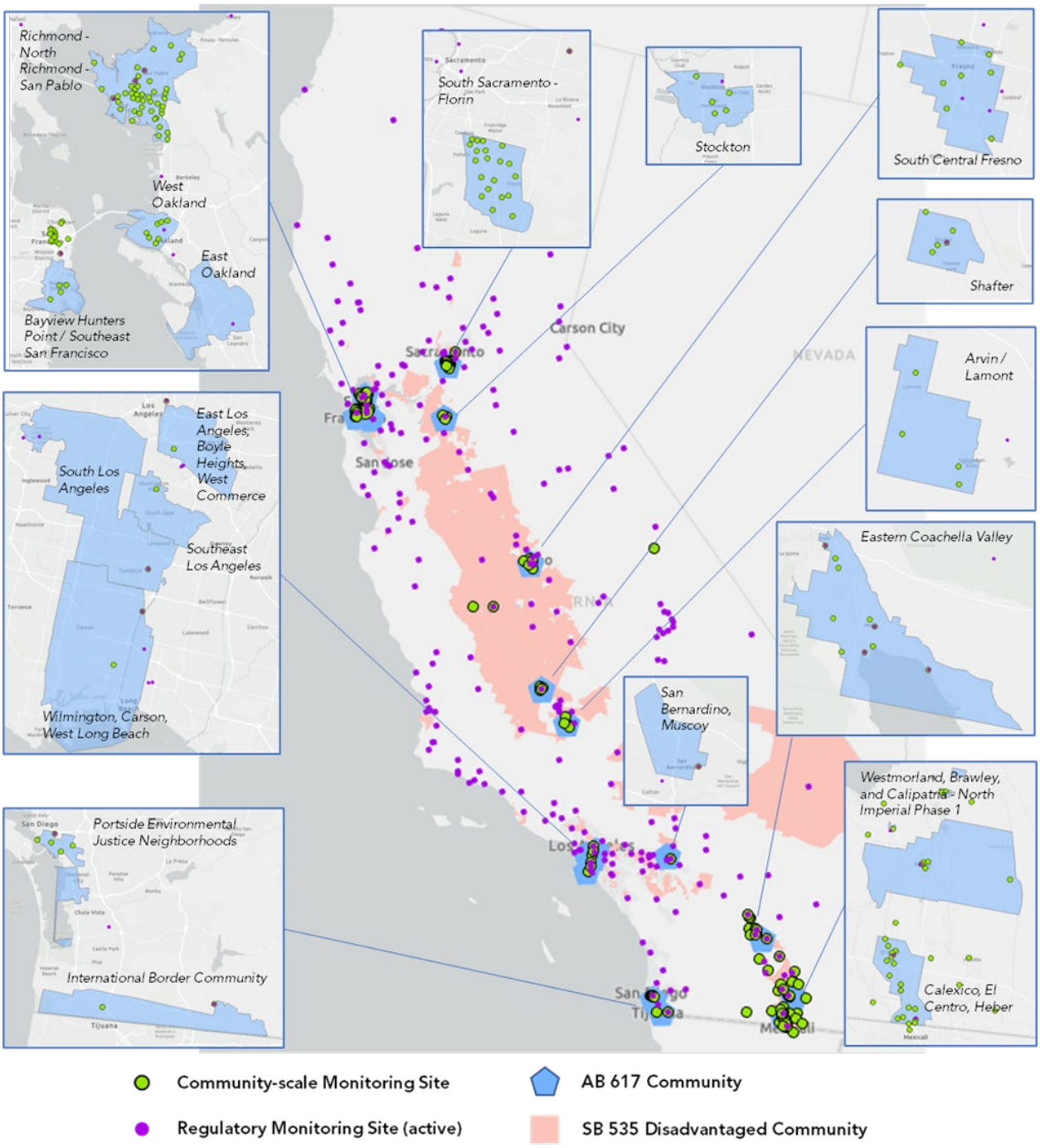

Table 31. List of All California AB 617 Monitoring Networks and Some Community Air Grant Projects with Monitoring Data Available in CARB's AQview System

District	AB 617 Community	Data Provider	Pollutants
AB 617 Monitoring Networks			
South Coast	East Los Angeles, Boyle Heights, West Commerce	South Coast AQMD	$PM_{2.5}$, PM_{10}, CO, Particle number, O_3, NO, NO_2, SO_2, CH_4, Total NMOC, BC, H_2S
	South Los Angeles	South Coast AQMD	$PM_{2.5}$, NO, NO_2, O_3, CO
	Southeast Los Angeles **	South Coast AQMD	$PM_{2.5}$, BC, Particle number, NO, NO_2, CH_4, H_2S
	San Bernardino, Muscoy	South Coast AQMD	$PM_{2.5}$, PM_{10}, BC, CO, Particle number, NO, NO_X, O_3
	Wilmington, West Long Beach, Carson	South Coast AQMD	$PM_{2.5}$, PM_{10}, BC, NO, NO_2, CO, Particle number, O_3, SO_2
	Eastern Coachella Valley	South Coast AQMD	$PM_{2.5}$, PM_{10}, BC, O_3, H_2S
San Diego	Portside EJ Neighborhoods	San Diego County APCD	BC
	International Border Community	San Diego County APCD	BC, $PM_{2.5}$*
San Joaquin Valley	Southwest Stockton	San Joaquin Valley APCD	$PM_{2.5}$, SO_2, NO, NO_2, Total VOCs*
	Arvin / Lamont	San Joaquin Valley APCD	$PM_{2.5}$, SO_2,, Total VOCs
	Shafter	San Joaquin Valley APCD	$PM_{2.5}$, PM_{10}, SO_2, H_2S, NO*, NO_2*, NO_X*, O_3, CO, Total VOCs*, BTEX*
	South Central Fresno	San Joaquin Valley APCD	$PM_{2.5}$, CO, SO_2, H_2S, NO, NO_X, O_3, Total VOCs*, BTEX*
Imperial County	Calexico, El Centro, Heber	Comité Civico del Valle, Inc	$PM_{2.5}$, PM_{10}
Bay Area	Richmond, North Richmond, San Pablo	Groundwork Richmond	$PM_{2.5}$, PM_{10}
	West Oakland **	Aclima	$PM_{2.5}$, O_3, NO_2
Sacramento Metro	South Sacramento, Florin	Sacramento Metropolitan AQMD	$PM_{2.5}$, PM_{10}, PM_{10} Metals*, BC*, VOCs*
Community Air Grant Projects (currently with data available in AQview)			
South Coast	N/A	Comité Civico del Valle, Inc	$PM_{2.5}$, PM_{10}

District	AB 617 Community	Data Provider	Pollutants
	N/A	Soboba Band of Luiseno Indians	$PM_{2.5}$, PM_{10}
San Joaquin Valley	N/A	Comité Civico del Valle, Inc on behalf of LEAP Institute	$PM_{2.5}$, PM_{10}
Imperial County	N/A	Comité Civico del Valle, Inc	$PM_{2.5}$, PM_{10}
Bay Area	N/A	Brightline Defense Project	$PM_{2.5}$, PM_{10}
	N/A	Comité Civico del Valle, Inc on behalf of Greenaction for Health and Environmental Justice	$PM_{2.5}$, PM_{10}
Great Basin	N/A	Big Pine Paiute Tribe of the Owens Valley	$PM_{2.5}$, PM_{10}

** Pollutants are measured at limited sites*
*** Data Available soon*

Section 10: 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*.

Agency contacts for CARB

CARB's ANP:

Sunghoon Yoon, Air Pollution Specialist, Air Quality Analysis Section
sunghoon.yoon@arb.ca.gov
(916) 323-8543

Jin Xu, Manager, Air Quality Analysis Section
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Collection of the ambient data:

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(916) 327-1238

Kathleen Gill, Chief, Air Quality Surveillance Branch
kgill@arb.ca.gov
(916) 324-7630

Regarding quality oversight of the monitoring program:

Manisha Singh, Chief, Quality Management Branch
Manisha.Singh@arb.ca.gov
(916) 327-1501

Questions on quality assurance:
Melissa Niederreiter, Manager, Quality Management Section
Melissa.Niederreiter@arb.ca.gov
(916) 277-0526

Agency contacts for the air districts covered by this ANP

Amador County Air Pollution Control District, Jackson, CA
Herminia Perry, Air Pollution Control Officer
hperry@amadorgov.org
(209) 257-0112

Antelope Valley Air Quality Management District, Lancaster, CA
Bret Banks, Air Pollution Control Officer
bbanks@avaqmd.ca.gov
(661) 723-8070

Butte County Air Quality Management District, Chico, CA
Stephen Ertle, Air Pollution Control Officer
sertle@bcaqmd.org
(530) 332-9400

Calaveras County Air Pollution Control District, San Andreas, CA
Lisa Medina, Air Pollution Control Officer
lmedina@co.calaveras.ca.us
(209) 754-6722

Colusa County Air Pollution Control District, Colusa, CA
Ana Allen, Air Pollution Control Officer
mallen@countyofcolusa.com
(530) 458-5000

Eastern Kern Air Pollution Control District, Bakersfield, CA
Glen Stephens, Air Pollution Control Officer
glens@co.kern.ca.us
(661) 862-8642

El Dorado County Air Quality Management District, Placerville, CA
Dave Johnston, Air Pollution Control Officer
dave.johnston@edcgov.us
(530) 621-7501

Feather River Air Quality Management District, Yuba City, CA
Christopher D. Brown, Air Pollution Control Officer
apco@fraqmd.org
(530) 634-7659, x210

Glenn County Air Pollution Control District, Willows, CA
Marcie Skelton, Air Pollution Control Officer
mskelton@countyofglenn.net
(530) 934-6500

Imperial County Air Pollution Control District, El Centro, CA
Belen Leon, Air Pollution Control Officer
belenleon@co.imperial.ca.us
(442) 265-1800

Lake County Air Quality Management District, Lakeport, CA
Douglas Gearhart, Air Pollution Control Officer
dougg@lcaqmd.net
(707) 263-7000

Lassen County Air Pollution Control District, Susanville, CA
Erik Edholm, Air Pollution Control Officer
eedholm@cityofsusanville.org
(530) 257-1057

Mariposa County Air Pollution Control District, Mariposa, CA
Eric Sergienko, Air Pollution Control Officer
esergienko@mariposacounty.org
(209) 966-2220

Mendocino County Air Quality Management District, Ukiah, CA
Barbara Moed, Air Pollution Control Officer
moedb@mendocinocounty.org
(707) 463-4354

Modoc County Air Pollution Control District, Alturas, CA
Bonnie Bunyard, Air Pollution Control Officer
bonniebunyard@co.modoc.ca.us
(530) 233-6401

Mojave Desert Air Quality Management District, Victorville, CA
Brad Poiriez, Air Pollution Control Officer
bradp@mdaqmd.ca.gov
(760) 245-1661

Northern Sierra Air Quality Management District, Grass Valley, CA
Julie Hunter, Air Pollution Control Officer
Julieh@myairdistrict.com
(530) 274-9360

Northern Sonoma County Air Pollution Control District, Healdsburg, CA
Robert Bamford, Air Pollution Control Officer
robert.bamford@sonoma-county.org
(707) 433-5911

Placer County Air Pollution Control District, Auburn, CA
Erik White, Air Pollution Control Officer
ewhite@placer.ca.gov
(530) 745-2330

Shasta County Air Quality Management District, Redding, CA
Paul Hellman, Air Pollution Control Officer
phellman@co.shasta.ca.us
(530) 225-5674

Siskiyou County Air Pollution Control District, Yreka, CA
Jim Smith, Air Pollution Control Officer
jsmith@co.siskiyou.ca.us
(530) 841-4025

Tehama County Air Pollution Control District, Red Bluff, CA
Joe Tona, Air Pollution Control Officer
jtona@tehcoapcd.net
(530) 527-3717

Tuolumne County Air Pollution Control District, Sonora, CA
Kelle Schroeder, Air Pollution Control Officer
KSchroeder@co.tuolumne.ca.us
(209) 533-5693

Ventura County Air Pollution Control District, Ventura, CA
Ali Reza Ghasemi, Air Pollution Control Officer
aghasemi@vcapcd.org
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Yolo-Solano Air Quality Management District, Davis, CA
Gretchen Bennitt, Air Pollution Control Officer
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(530) 757-3673

Appendices to the 2023 Annual Network Plan

List of Appendices

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Appendix A

Detailed Site Reports

Table of Contents

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)	10.7				
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	2/15/2022				
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)	N/A	15.1	14.5	N/A	N/A
Will there be changes within the next 18 months?	shut down 12/19/22	shut down 12/19/22	shut down 12/19/22	shut down 12/19/22	shut down 12/19/22
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	N/A	3/1/2022	3/1/2022	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	3/1/2022 9/20/2022	3/1/2022 9/20/2022

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 B4, Chico, 95926				
County	Butte				
Distance to roadways (meters)	895 to CA-99				
Traffic Count (AADT,year)	47,200 (2020)				
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	CARB	CARB	CARB	CARB	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	CARB	CARB	CARB	CARB	CARB
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)	12.2	18.1	12.5	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	12/12/2022	12/12/2022	8/4/2022	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	2/24/2022 12/12/2022	2/24/2022 12/12/2022

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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Neighborhood				
Monitoring start date	1/1/2001				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.8				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	No				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	5/10/2022 10/18/2022				

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)	463 to CA-191				
Traffic Count (AADT,year)	5,000 (2020)				
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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
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)	4.9				
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	8/5/2022				
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)	125 to CA-191				
Traffic Count (AADT,year)	9,500 (2020)				
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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
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	2/24/2022 8/5/2022				

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 1020N	Met One BAM 1020		
Method code	87	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	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)	13.3	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	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly	Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/16/2022	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/16/2022 9/6/2022	2/16/2022 9/6/2022		

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	Primary		
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 1020		
Method code	87	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	Regional	Neighborhood	Neighborhood		
Monitoring start date	07/01/1996	2/1/2016	7/1/2021		
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	6.4		
Distance from supporting structure (meters)	2	2.2	4.2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>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)	13.9	N/A	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	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	4/19/2022	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/19/2022 10/13/2022	4/19/2022 10/13/2022		

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, 2				
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	2/3/2022 8/30/2022				

Local Site Name	Mojave-CA58				
AQS ID	06-029-0019				
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	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	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)	9.5	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	2/2/2022	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/2/2022 8/30/2022	2/2/2022 8/30/2022		

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	2/3/2022 8/30/2022	2/3/2022 8/30/2022			

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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
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)	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	5/27/2022				
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)	2,500				
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	44201-1				
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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
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)	1.8				
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)	17.5				
Will there be changes within the next 18 months?	Back online for 2016 season				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	6/21/2022				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Placerville - Canal				
AQS ID	06-017-2004				
GPS Coordinates	38.73319, -120.81372				
Street Address	561 Canal St, Placerville, CA 95667561 Canal St, Placerville, CA 95667				
County	El Dorado				
Distance to roadways (meters)	19 to US-50				
Traffic Count (AADT,year)	49,500				
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	44201-1				
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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Neighborhood				
Monitoring start date	6/16/2022				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	10.4				
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)	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)	17.5				
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	5/12/2022				
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)	17,500				
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	81102-5				
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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Middle				
Monitoring start date	12/1/1992				
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)	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)	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	5/26/2022 10/17/2022				

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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
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)	18.6				
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	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	6/2/2022				
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	CARB	CARB	CARB	CARB	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	CARB	CARB	CARB	CARB	CARB
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)	14.9	11.8	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	8/23/2022	8/23/2022	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	2/22/2022 8/23/2022	2/22/2022 8/23/2022	2/22/2022 8/23/2022

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	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	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)	13.3	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	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	4/18/2022	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/18/2022 10/18/2022	4/18/2022 10/18/2022		

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, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	81102	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	Met One BAM 1020	Met One BAM 1022			
Method code	122	209			
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	8/11/2009	6/23/2021			
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)	12.4	12.1			
Distance from supporting structure (meters)	2.4	2.1			
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)	N/A (No trees)	N/A (No trees)			
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	Monthly	Monthly			
Frequency of one-point QC check for gaseous instruments	N/A	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	3/15/2022 9/28/2022	3/15/2022 9/28/2022			

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, 3	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	
Parameter Code	42602	44201	81102	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Highest Concentration	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 200	Teledyne API 400	Met One BAM 1020	Met One BAM 1022	
Method code	99	87	122	209	
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	
Collecting Agency	Imperial County	Imperial County	Imperial County	Imperial County	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	CARB	CARB	CARB	CARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	1/1/1980	02/01/1988	7/1/2015	11/13/2021	
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)	11.9	11.9	12.3	12.4	
Distance from supporting structure (meters)	1.9	1.9	2.3	2.4	
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	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	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.6	14.7	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	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	3/10/2022	3/10/2022	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	3/10/2022 9/28/2022	3/10/2022 9/28/2022	

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)	8.9	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	3/16/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/16/2022 9/29/2022			

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)	6.7	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	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	3/15/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/15/2022 9/29/2022			

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:	Concrete				
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	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	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)	>19	>19	>19	>19	
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	5.1	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	3/8/2022	3/8/2022	3/8/2022	3/8/2022	
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.

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:	Concrete				
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	Supplementary	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	4/1/2021	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)	>19	>19	>19		
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	Monthly	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	3/8/2022 9/27/2022	3/8/2022 9/27/2022	3/8/2022 9/27/2022		

Lake County AQMD

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	CARB	CARB	CARB		
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)	4.3	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	12/6/2022	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	5/25/2022 12/6/2022	5/25/2022 12/6/2022		

Note: The Lake County AQMD is working with EPA to resolve District staffing and funding issues, as well as identifying equipment options for PM10 & PM2.5 to resolve the sampling frequency notes for Lakeport.

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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
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)	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	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/4/2022				
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	CARB	CARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	CARB	CARB			
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	4/7/2022 10/5/2022	4/7/2022 10/5/2022			

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)	8.2				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/5/2022				
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	5/25/2022 11/17/2022				

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)	9.9				
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	Weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/26/2022				
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	5/26/2022 11/17/2022				

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	5/25/2022 11/17/2022				

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	NO2, 1	Ozone, 1	PM10, 1		
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary		
Parameter Code	42602	44201	81102		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 200U	Teledyne API 400T	Met One BAM 1020		
Method code	99	87	122		
FRM/FEM/ARM/Other	FRM	FEM	FEM		
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Spatial scale	Middle	Middle	Neighborhood		
Monitoring start date	01/01/1973	01/01/1974	01/01/2014		
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)	4.5	4.5	6		
Distance from supporting structure (meters)	1	1	2.5		
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)	>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	Teflon	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.6	13.6	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	N/A		
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	Every 2 weeks	Every 2 weeks	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/17/2022	3/17/2022	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	3/17/2022 9/21/2022		

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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
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)	14.4				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/22/2022				
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)	2.7	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	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	3/3/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/3/2022 9/21/2022			

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	11/30/2022				
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	3/3/2022 9/21/2022				

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				

*Last Sample Date was 10/31/2020; Site is not currently scheduled to be audited due to location, access, and power issues.

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, 17 to Beekley Rd				
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)	2.9				
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	Every 2 weeks				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/14/2022				
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	NO2, 1	Ozone, 1	PM10, 2		
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary		
Parameter Code	42602	44201	81102		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Source Impact	Population Exposure	Highest Concentration; Source Impact		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 200U	Teledyne API 400T	Met One BAM 1020		
Method code	99	87	122		
FRM/FEM/ARM/Other	FRM	FEM	FEM		
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	04/01/1997	04/01/1997	6/1/1997		
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	4.6		
Distance from supporting structure (meters)	1.2	1.2	>10		
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	Teflon	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.5	7.6	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	N/A		
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	Every 2 weeks	Every 2 weeks	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/21/2022	9/21/2022	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	4/5/2022 9/21/2022		

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	NO2, 1	Ozone, 1			
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A			
Parameter Code	42602	44201			
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 200U	Teledyne API 400T			
Method code	99	87			
FRM/FEM/ARM/Other	FRM	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	01/01/2000	01/01/2000			
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)	7.3	7.3			
Distance from supporting structure (meters)	1.9	1.9			
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)	N/A (no trees)	N/A (no trees)			
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	Teflon			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.2	3/2/2022			
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	N/A			
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	Every 2 weeks			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	17.0	3/2/2022			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A			

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	Met One BAM 1020		
Method code	122	170	170		
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	N/A		
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	3/2/2022 9/22/2022	3/2/2022 9/22/2022	3/2/2022 9/22/2022		

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)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	731				
FRM/FEM/ARM/Other	Other				
Collecting Agency	Northern Sierra AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Northern Sierra AQMD				
Spatial scale	Neighborhood				
Monitoring start date	3/1/2020				
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	2/10/2022 8/2/2022				

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, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1022			
Method code	87	209			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Northern Sierra	Northern Sierra			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Northern Sierra	Northern Sierra			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	06/01/1993	12/6/2017			
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)	11.9	12.1			
Distance from supporting structure (meters)	3.8	4			
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)	270	270			
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)	13.0	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	Weekly	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	7/25/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/9/2022 7/25/2022			

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	Primary		
Parameter Code	88101	88101	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS; Public Info		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	CSN supplemental	CSN supplemental	CSN supplemental		
Instrument manufacturer and model	Thermo Scientific Partisol 2025i	Thermo Scientific Partisol 2025i	Met One BAM 1022		
Method code	145	145	209		
FRM/FEM/ARM/Other	FRM	FRM	FEM		
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	10/1/2022		
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?	clsoed 11/1/2022	clsoed 8/9/2022	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	2/11/2022 8/2/2022	2/11/2022 8/2/2022	2/11/2022 8/2/2022		

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, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	88101	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	Thermo Scientific Partisol 2025i	Met One BAM 1022			
Method code	118	209			
FRM/FEM/ARM/Other	FRM	FEM			
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	10/1/2022			
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	12.1			
Distance from supporting structure (meters)	2	4			
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?	Closed August 2022	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	2/10/2022 8/2/2022	2/10/2022 8/2/2022			

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?	Closed June 2022	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	2/9/2022 n/a	2/9/2022 7/25/2022			

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	5/24/2022 11/16/2022				

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	5/24/2022 11/16/2022				

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	ARB				
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	5/24/2022 11/16/2022				

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 T400	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)	14.5	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	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	8/10/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/7/2022 8/10/2022			

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)	14.1	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	8/9/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/8/2022 8/9/2022			

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)	10.9	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	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	8/8/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/7/2022 8/8/2022			

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)	13.5	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	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	8/12/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/8/2022 8/12/2022			

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	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	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)	14.5	14.6	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	4/20/2022	4/20/2022	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	4/20/2022 10/27/2022	4/20/2022 10/27/2022	

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				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Shasta County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Shasta County				
Spatial scale	Neighborhood				
Monitoring start date	05/01/1993				
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)	12.6				
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	3/15/2022				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

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	11.5				
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	3/15/2022				
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	PM10, 2	PM2.5, 1	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Supplementary	Primary	
Parameter Code	44201	81102	88101	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure; Highest Concentration	Highest Concentration	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	Sierra Andersen 1200	R & P 2000	Met One BAM 1022	
Method code	87	63	143	209	
FRM/FEM/ARM/Other	FEM	FRM	FRM	FEM	
Collecting Agency	Shasta County	Shasta County	Shasta County	Shasta County	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB	N/A	
Reporting Agency	Shasta County	ARB	ARB	Shasta County	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	05/01/1990	01/01/1988	02/19/1998	2/23/2019	
Current sampling frequency	Continuous	1:6	1:12	Continuous	
Required sampling frequency including exceptional events	N/A	1:6	1:12	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	9.6	8.3	8.7	9	
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	N/A	>2	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, Pyrex Borosilicate	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.2	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	Yes	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes	No	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Quarterly	Monthly	Monthly	
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	3/16/2022	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	3/16/2022 8/23/2022	3/16/2022 8/23/2022	3/16/2022 8/23/2022	

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, Pyrex Borosilicate				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	15.5				
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		Notes: * Cell tower is not considered an obstruction. Distance to probe is 6m.		
Frequency of one-point QC check for gaseous instruments	weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/16/2022				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

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			
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	3/17/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/17/2022 8/24/2022			

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	CARB	N/A		
Reporting Agency	CARB	CARB	CARB		
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)	8.1	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	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	3/14/2022	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/14/2022 8/22/2022	3/14/2022 8/22/2022		

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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
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)	5.7				
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	5/9/2022				
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	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
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)	10.0				
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	Monthly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/15/2022				
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)	13.2	11.6	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	11/16/2022	11/16/2022	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	4/27/2022 11/16/2022	4/27/2022 11/16/2022	

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)	11.2	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	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	11/9/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/27/2022 11/9/2022			

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	11/9/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/27/2022 11/9/2022			

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)	11.6	9.9	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	11/15/2022	11/15/2022	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	4/26/2022 11/15/2022	4/26/2022 11/15/2022	4/26/2022 11/15/2022

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)	13.3	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	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	11/14/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/26/2022 11/14/2022			

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	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	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)	10.0	9.8	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	12/6/2022	12/6/2022	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	2/22/2022 9/20/2022		

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	5/12/2022 10/19/2022				

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 T400				
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	5/11/2022				
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	Monthly				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	5/12/2022 10/19/2022				

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	PM2.5, 2	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Supplementary	
Parameter Code	44201	81102	88101	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 T400	GMW Model 1200	R & P 2025	Met One BAM 1020	
Method code	87	63	145	170	
FRM/FEM/ARM/Other	FEM	FRM	FRM	FEM	
Collecting Agency	Yolo-Solano AQMD	Yolo-Solano AQMD	Yolo-Solano AQMD	Yolo-Solano AQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB	N/A	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	05/27/1998	10/26/1998	01/09/1999	12/12/2022	
Current sampling frequency	Continuous	1:6	1:6	Continuous	
Required sampling frequency including exceptional events	N/A	1:6	1:6	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	3.6	2.2	2.1	4.8	
Distance from supporting structure (meters)	1	>2	2	2.3	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.7	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	No	Yes	Yes	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Monthly	Monthly	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly	
Frequency of one-point QC check for gaseous instruments	Weekly	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/11/2022	N/A	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	5/11/2022 10/19/2022	5/11/2022 10/19/2022	no audit yet	

San Joaquin Valley APCD

*CARB operated sites outside of the CARB ANP

Local Site Name	Arvin–Di Giorgio				
AQS ID	06-029-5002				
GPS Coordinates	35.2391 N, -118.7886 W				
Street Address	19405 Buena Vista Blvd, Arvin CA 93203				
County	Kern				
Distance to roadways (meters)	10 m (east)				
Traffic Count (AADT,year)	712/2018 (Traffic count for Buena Vista Blvd east of Tejon Hwy., Source: Kern Council of Governments.)				
Ground Cover	Dirt, vegetative				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone				
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)	UNOFFICIAL PAMS				
Instrument manufacturer and model	Teledyne API 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	11/16/2009				
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)	1.8				
Distance from obstructions on roof (meters)	No Obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No Obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7				
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	10/18/2022				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Bakersfield - Airport				
AQS ID	06-029-0016				
GPS Coordinates	35.3246 N, -118.9976 W				
Street Address	401 E. Planz Rd., Bakersfield CA 93307				
County					
Distance to roadways (meters)	500 m (west)				
Traffic Count (AADT,year)	17,987 / 2018 (S. Union Ave between E. Planz Rd and E White Lane, Source: Kern Council of Governments)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	PM2.5				
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	Thermo 2025i				
Method code	145				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	2/18/2000				
Current sampling frequency	1:3				
Required sampling frequency including exceptional events	0.04375				
Sampling season	1-Jan-31-Dec				
Probe height (meters)	2.2				
Distance from supporting structure (meters)	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)	N/A				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10m				
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	Monthly				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	3/24/2022 9/13/2022				

Local Site Name	Bakersfield–California				
AQS ID	06-029-0014				
GPS Coordinates	35.35662, -119.06261				
Street Address	5558 California Ave., Bakersfield CA 93309				
County	Kern				
Distance to roadways (meters)	300 m (south)				
Traffic Count (AADT,year)	33,244/2017				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone	NO2			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	42602			
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	Thermo 42 IQ			
Method code	87	74			
FRM/FEM/ARM/Other	FEM	FRM			
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	3/1/1994	4/1/1994			
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)	6.8	6.8			
Distance from supporting structure (meters)	3	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)	>10m	>10m			
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	Teflon			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.9	7.1			
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	N/A			
Frequency of one-point QC check for gaseous instruments	5 Days/Week	5 Days/Week			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/13/2022	9/13/2022			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A			

(Continued)

Local Site Name	Bakersfield–California				
AQS ID	06-029-0014				
GPS Coordinates	35.35662, -119.06261				
Street Address	5558 California Ave., Bakersfield CA 93309				
County	Kern				
Distance to roadways (meters)	300 m (south)				
Traffic Count (AADT,year)	33,244/2017				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	PM10	PM2.5	PM2.5	PM2.5	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	QA-Collocated	
Parameter Code	81102	88502	88101	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	Met One BAM 1020	Met One BAM 1020	Thermo 2025i	Thermo 2025i	
Method code	122	731	145	145	
FRM/FEM/ARM/Other	FEM	Non-FEM	FRM	FRM	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	ARB	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	1/27/2021	1/27/2021	1/1/1999	36161	
Current sampling frequency	Continuous	Continuous	1:1	1:12	
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	1-Jan-31-Dec	
Probe height (meters)	6.3	6.6	6.3	6.3	
Distance from supporting structure (meters)	2.5	2.8	2.5	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)	N/A	N/A	N/A	N/A	
Height above probe for obstructions not on roof (meters)	N/A	NA	N/A	N/A	
Distance to nearest tree drip line (meters)	> 10m	> 10m	> 10m	> 10m	
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	> 2M	> 2M	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes	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	Semi-Monthly	Semi-Monthly	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	3/23/2022 9/13/2022	3/23/2022 9/13/2022	3/23/2022 9/13/2022	3/23/2022 9/13/2022	

Local Site Name	Edison				
AQS ID	06-029-0007				
GPS Coordinates	35.3456 N, -118.8518 W				
Street Address	Johnson Farm-Shed Rd, Edison CA				
County	Kern				
Distance to roadways (meters)	450 m (south)				
Traffic Count (AADT,year)	2,753/2020 (Traffic count for nearest roads: Edison Hwy. and Comanche Dr.,				
Ground Cover	Dirt, vegetative				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone,1	NO2,1			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	42602			
Basic monitoring objective(s)	NAAQS, Research, Public Info.	NAAQS, Research, Public Info.			
Site type(s)	Highest Concentration, Regional Transport	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Teledyne API 200E			
Method code	87	99			
FRM/FEM/ARM/Other	FEM	FRM			
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	1/1/1981	1/1/1980			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	01/01 – 12/31	01/01 – 12/31			
Probe height (meters)	5.4	5.4			
Distance from supporting structure (meters)	1.5	1.5			
Distance from obstructions on roof (meters)	None	None			
Height above probe for obstructions on roof (meters)	None	None			
Distance from obstructions not on roof (meters)	None	None			
Height above probe for obstructions not on roof (meters)	None	None			
Distance to nearest tree drip line (meters)	16.1	16.1			
Distance to furnace or incinerator flue (meters)	None	None			
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	Teflon			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.5	14.5			
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	7.7	7.9			
Frequency of flow rate verification for automated PM analyzers	N/A	N/A			
Frequency of one-point QC check for gaseous instruments	Daily	Daily			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/31/2022	8/31/2022			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A			

Local Site Name	Fresno – Garland				
AQS ID	06-019-0011				
GPS Coordinates	36.7853 N, -119.7732 W				
Street Address	3727 N. First St., Ste.104, Fresno CA 93726				
County	Fresno				
Distance to roadways (meters)	30 m (south)				
Traffic Count (AADT,year)	7,520/2011 (First Street near Dakota Avenue. Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2013)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Fresno				
Pollutant, POC	Ozone	NO2	CO	SO2	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	
Parameter Code	44201	42602	42101	42401	
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)	NCore	Ncore	Ncore	Ncore	
Instrument manufacturer and model	Teledyne API T400	Thermo 42IQ	Teledyne API T300	Thermo 43IQ	
Method code	87	74	593	560	
FRM/FEM/ARM/Other	FEM	FRM	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	Urban	Urban	Urban	Urban	
Monitoring start date	12/23/2011	2/1/2012	1/18/2012	1/18/2012	
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)	6.8	6.8	6.6	6.6	
Distance from supporting structure (meters)	2.8	2.8	2.8	2.8	
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	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)	17.3		13.4	15	
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	5 Times/Week	5 Times/Week	5 Times/Week	5 Times/Week	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/10/2022	Unit malfunctioned prior to audit	2/3/2022	2/3/2022	
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	Fresno – Garland				
AQS ID	06-019-0011				
GPS Coordinates	36.7853 N, -119.7732 W				
Street Address	3727 N. First St., Ste.104, Fresno CA 93726				
County	Fresno				
Distance to roadways (meters)	30 m (south)				
Traffic Count (AADT,year)	7,520/2011 (First Street near Dakota Avenue. Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2013)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Fresno				
Pollutant, POC	PM10	PM2.5	PM10-2.5	PM2.5	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	QA Collocated	
Parameter Code	81102	88502	86101	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)	NCore	Ncore	Ncore	Ncore	
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	-	R&P/Thermo 2025	
Method code	FEM	FEM	Other	FRM	
FRM/FEM/ARM/Other	FEM	FEM	FRM	FRM	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	ARB	ARB	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	1/1/2012	1/1/2012	1/1/2012	1/1/2012	
Current sampling frequency	Continuous	Continuous	Continuous	1:3	
Required sampling frequency including exceptional events	N/A	N/A	N/A	0.04375	
Sampling season	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	
Distance from supporting structure (meters)	2.5	2.5	2.5	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)	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)	1	1	-	1	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	N/A	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	Bi-Monthly	Bi-Monthly	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	2/10/2022, 8/9/2022	2/10/2022, 8/9/2022	2/10/2022, 8/9/2022	2/10/2022, 8/9/2022	

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	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	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)	7.6	6.7	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	10/26/2022	10/26/2022	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	5/18/2022 10/26/2022	5/18/2022 10/26/2022	

Local Site Name	Oildale				
AQS ID	06-029-0232				
GPS Coordinates	35.4380 N, -119.0167 W				
Street Address	3311 Manor St, Oildale CA 93308				
County	Kern				
Distance to roadways (meters)	150 m (northwest)				
Traffic Count (AADT,year)	6,683/2018 (Manor St. between Day Ave and Felton St., Source: Kern Council of Governments.)				
Ground Cover	Dirt, vegetative				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone	PM10			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Highest Concentration	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	None	None			
Instrument manufacturer and model	Teledyne API T400	Met One 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	Urban	Middle			
Monitoring start date	1/1/1984	6/1/2017			
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)	5.8	6			
Distance from supporting structure (meters)	1.9	2.1			
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)	10	N/A			
Height above probe for obstructions not on roof (meters)	5	N/A			
Distance to nearest tree drip line (meters)	10	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)	16.6	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	Bi-Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A	N/A			
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	9/15/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/22/2022 9/15/2022			

Local Site Name	Shafter				
AQS ID	06-029-6001				
GPS Coordinates	35.5034 N, -119.2726 W				
Street Address	578 Walker St., Shafter, CA 93263				
County	Kern				
Distance to roadways (meters)	10m (southwest)				
Traffic Count (AADT,year)	4,002/2018 (Central Ave and Walker St., Source: Kern Council of Governments.)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone	NO2			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	42602			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	PAMS	PAMS			
Instrument manufacturer and model	Teledyne API T400	Thermo 42IQ			
Method code	87	74			
FRM/FEM/ARM/Other	FEM	FRM			
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	7/1/1989	7/1/1989			
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)	7.3	7.3			
Distance from supporting structure (meters)	2.6	2.6			
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)	N/A	N/A			
Distance to furnace or incinerator flue (meters)	2	2			
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	Teflon			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.8	15.5			
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	N/A			
Frequency of one-point QC check for gaseous instruments	5 Days/Week	5 Days/Week			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/30/2022	11/8/2022			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A			

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	CARB	CARB	CARB	CARB	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	CARB	CARB	CARB	CARB	CARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	11/5/2021	11/5/2021	11/5/2021	11/5/2021	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)	12.0	9.9	16.8	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	2/17/2022	2/2/2022	2/17/2022	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	2/17/2022 9/8/2022	2/17/2022 9/8/2022

Local Site Name	Visalia – Church St				
AQS ID	06-107-2002				
GPS Coordinates	36.3325 N, -119.2909 W				
Street Address	310 N. Church St., Visalia CA 93291				
County	Tulare				
Distance to roadways (meters)	25 m (west)				
Traffic Count (AADT,year)	10,000/2017(Traffic count for nearest roads: N Court St and W School Ave, Source: Caltrans AADT 2017)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Visalia–Porterville				
Pollutant, POC	Ozone	NO2	PM10	PM2.5	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	
Parameter Code	44201	42602	81102	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	General/Background	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	None	None	None	None	
Instrument manufacturer and model	Teledyne API T400	Thermo 42 IQ	Met One 1020	Met One 1020	
Method code	87	74	122	731	
FRM/FEM/ARM/Other	FEM	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	1/1/1979	1/1/1979	8/1/2015	12/1/2020*	
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)	6.8	6.8	6.3	6.5	
Distance from supporting structure (meters)	2.8	2.8	2.3	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)	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	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.8	14.7	N/A	NA	
Will there be changes within the next 18 months?	Yes	Yes	Yes	Yes	
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	Bi-Monthly	Bi-Monthly	
Frequency of one-point QC check for gaseous instruments	5 Days/Week	5 Days/Week	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	11/3/2022	11/3/2022	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	5/17/2022 11/3/2022	5/17/2022 11/3/2022	

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, 3	PM2.5, 3	PM2.5, 2
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	Collocate
Parameter Code	42602	44201	81102	88101	88502
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	Public Information
Site type(s)	Highest Exposure	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s)	N/A	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	Thermo 2000i
Method code	87	74	122	170	143
FRM/FEM/ARM/Other	FEM	FRM	FEM	FEM	FRM
Collecting Agency	CARB	CARB	CARB	CARB	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	CARB
Reporting Agency	CARB	CARB	CARB	CARB	CARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	12/1/1998	5/15/2013	4/1/2007	12/11/2020	12/11/2020
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	1:12
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	1:12
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)	10	10	10	10	10
Distance from supporting structure (meters)	2	2	2	2	2
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	No Obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	No Obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters	>10 meters	>10 meters
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.02	9.47	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	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	semi-monthly	semi-monthly	N/A
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	8/24/2022	8/24/2022	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors			2/10/2023 8/24/2022	2/10/2023 8/24/2022	2/10/2023 8/24/2022

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)	13.8	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	Daily	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/14/2022	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/14/2022 11/10/2022			

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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 five 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.

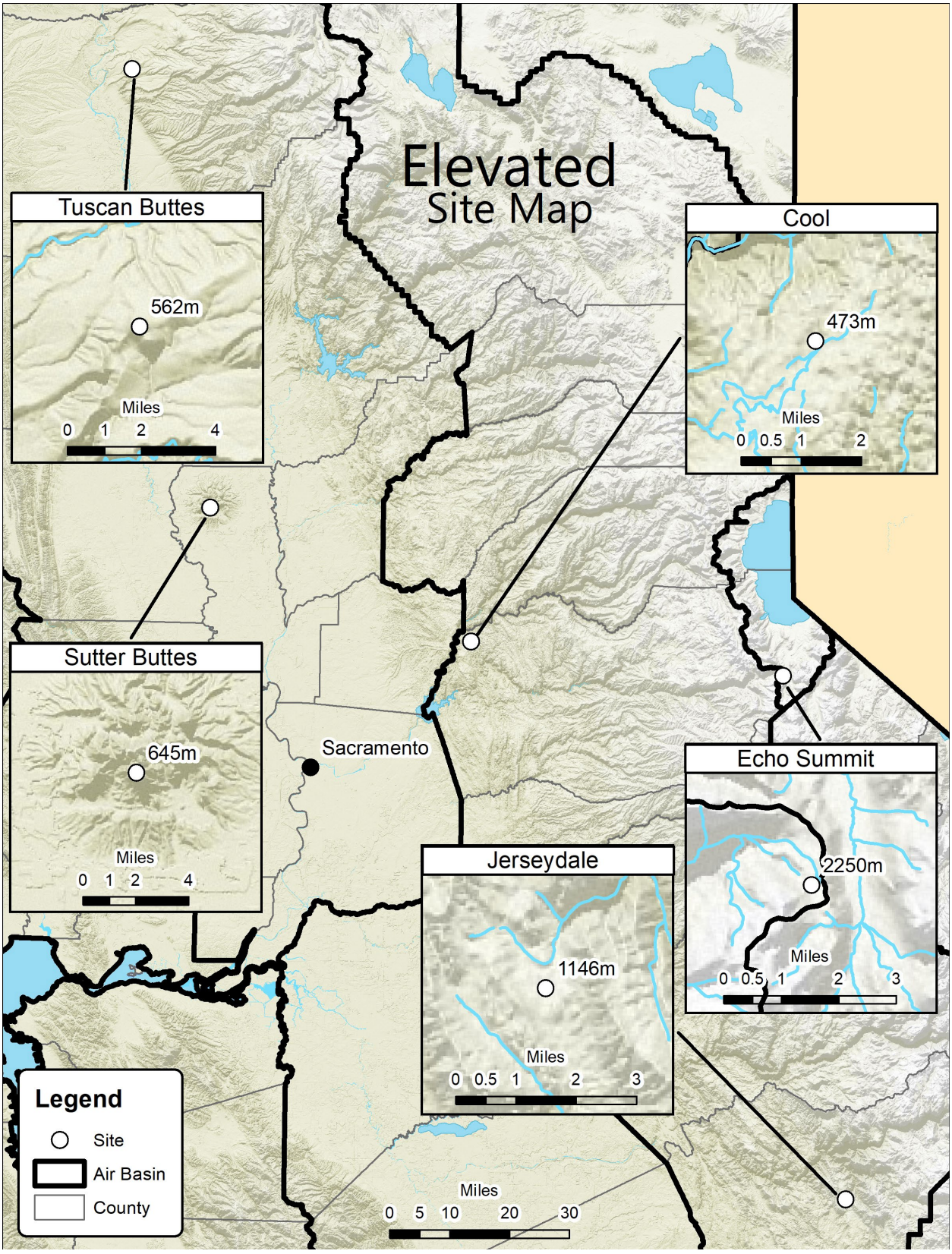
CARB staff has updated several tables and graphs which demonstrated in the past that an April through October monitoring season is adequate for the five seasonal ozone monitors. The following analyses provide the justification needed for the U.S. EPA to continue to grant a waiver for the seasonal sites,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

TABLE 1
SEASONAL OZONE MONITORS

Site Name	AQS ID	County	Start Year	Current Operating Season	Preliminary 2022 Design Value (ppm)[1]
Echo Summit[2]	060170012	El Dorado	2000	April-October	0.072
Cool	060170020	El Dorado	1996	April-October	0.077
Jerseydale[3]	060430006	Mariposa	1995	April-October	0.083
Sutter Buttes	061010004	Sutter	1993	April-October	0.076
Tuscan Butte	061030004	Tehama	1995	April-October	0.073

[1]Ozone data obtained on April 17, 2023, from CARB's AQMIS database: *https://www.arb.ca.gov/aqmis2/aqmis2.php*
[2]Echo Summit site did not operate in April during 2019, 2020, 2021 and 2022.
[3]Jerseydale site did not operate in April of 2019.
*White Cloud Mountain site has not operated since 2016 due to shelter and power issues. CARB received approval to close the site in October 2022.

FIGURE 1
CARB SEASONAL OZONE MONITORING SITES



Ozone concentration data used in the analyses were retrieved from CARB's AQMIS databases in April 2023. Average of the monthly maximum 8-hour ozone concentrations for each seasonal site covering a 5-year period from 2018 to 2022 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 2019 through 2021; Jerseydale in 2019) or their April data was invalidated or incomplete (Echo Summit in 2018; 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 16 percent higher than the averages of the preceding months (April and 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 11 percent, which is 1.8 times higher than those between the months of April to May (7 percent). In addition, on average, the concentrations dropped 13 percent from September to October, and 24 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 high concentrations, across all of the seasonal sites, occurred either before June or after September (Tuscan Butte, 2021 and 2022), and none of them occurred outside the seasonal monitoring period of April to October.

The Sutter Buttes and the Tuscan Butte sites present unique situations. Sutter Buttes and Tuscan Butte are high elevation sites, located on isolated hilltops (refer to Figures 7 and 8). 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 only one exceedance of the 0.070 ppm standard and a few exceedances 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, Sutter Buttes, and Tuscan Butte locations. For instance, all five 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, 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

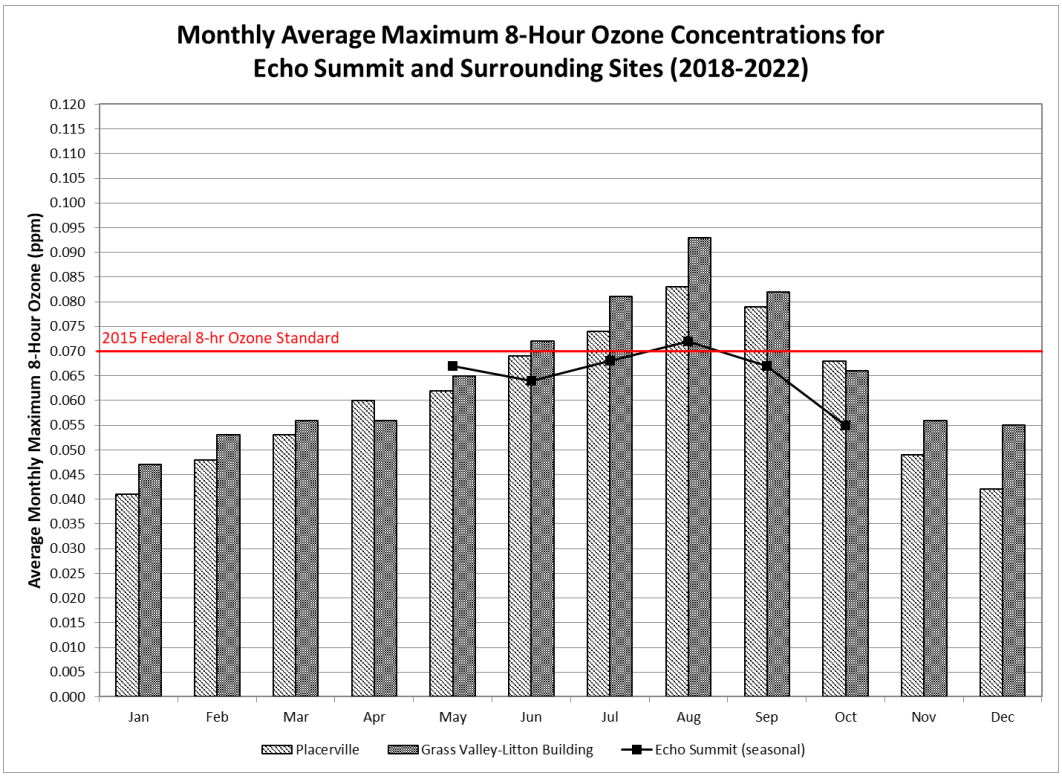


FIGURE 3

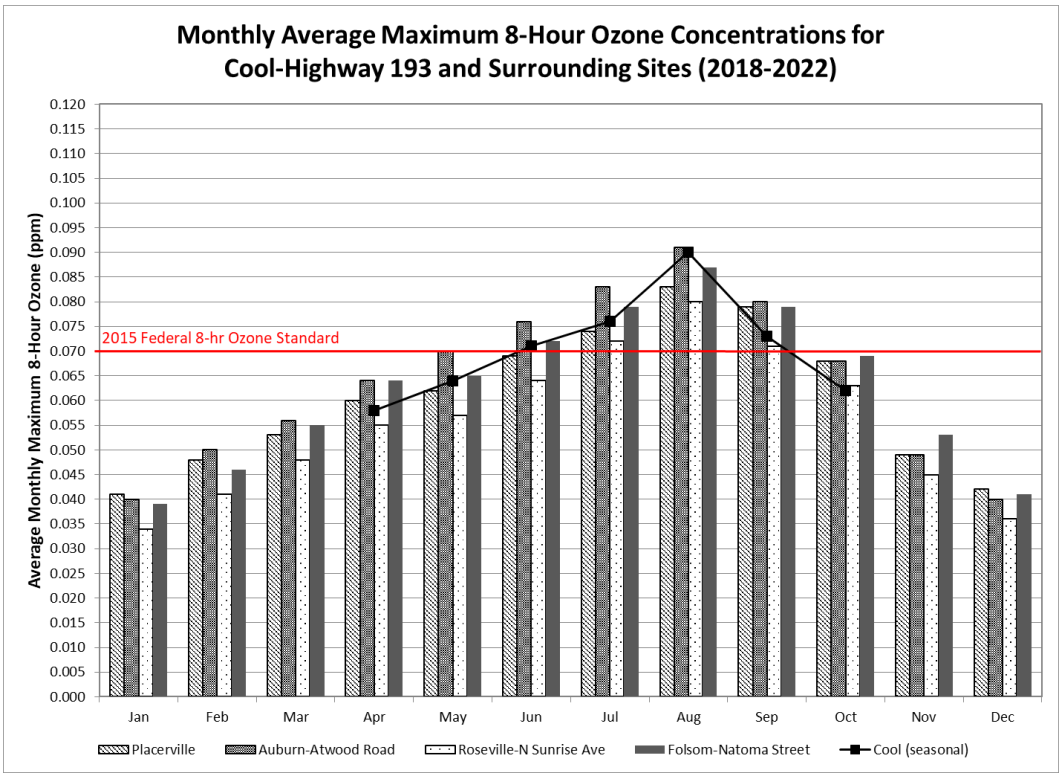


FIGURE 4

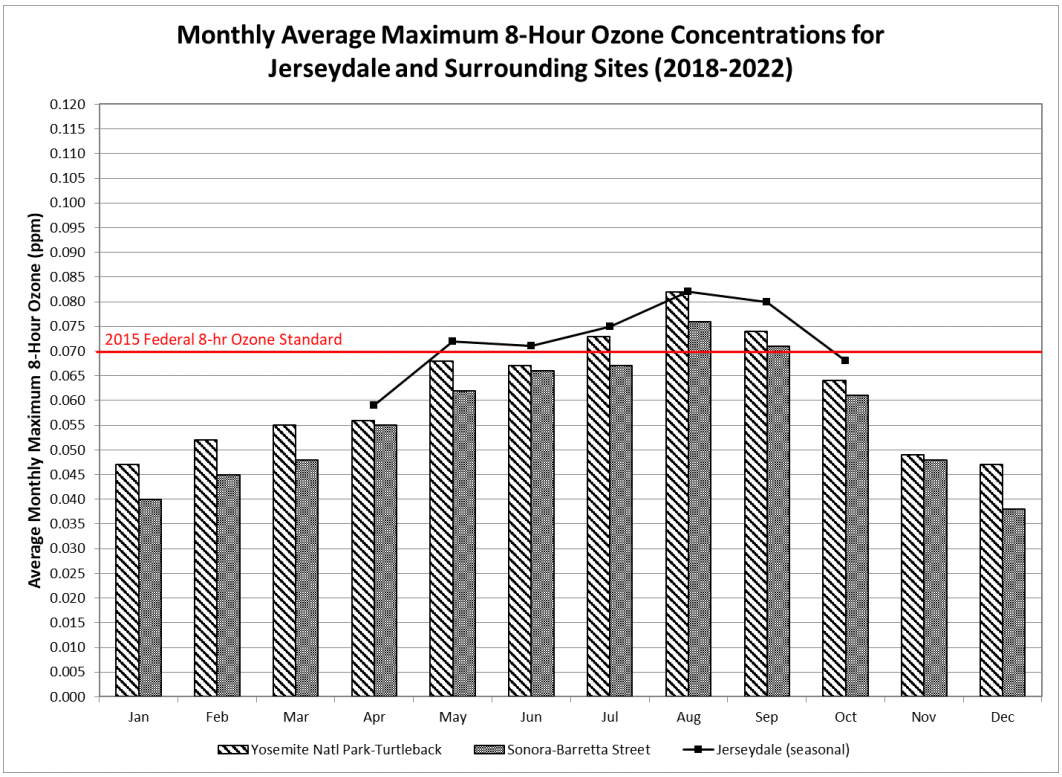
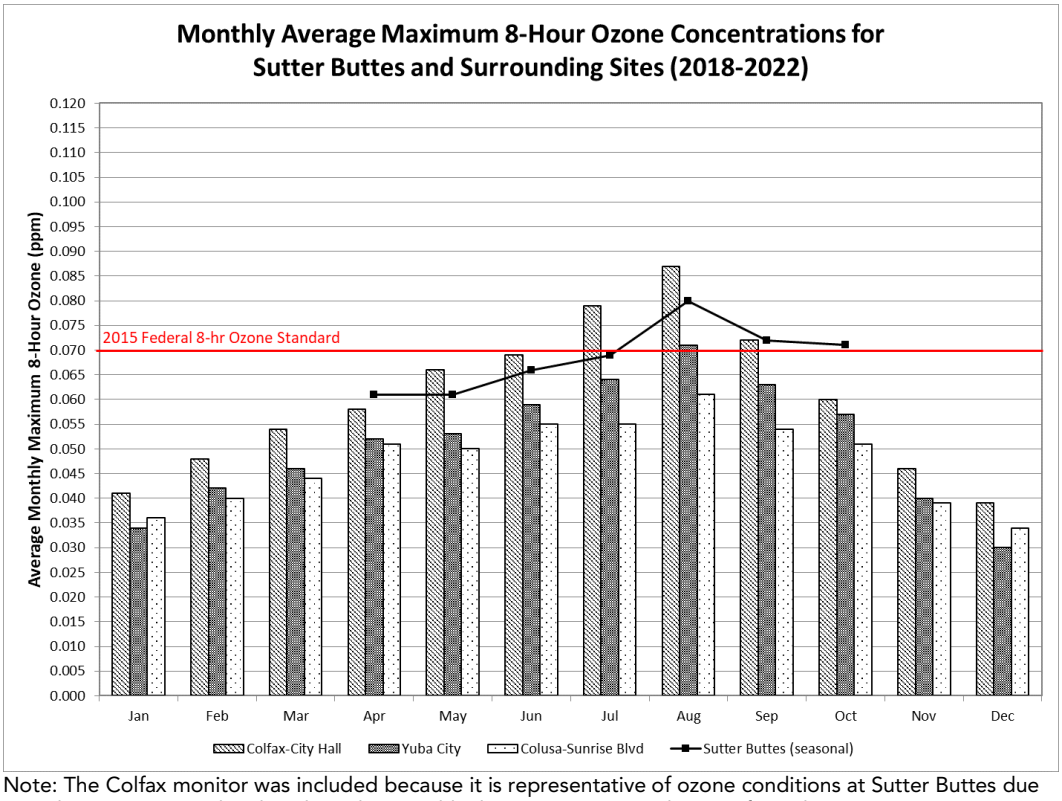


FIGURE 5



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

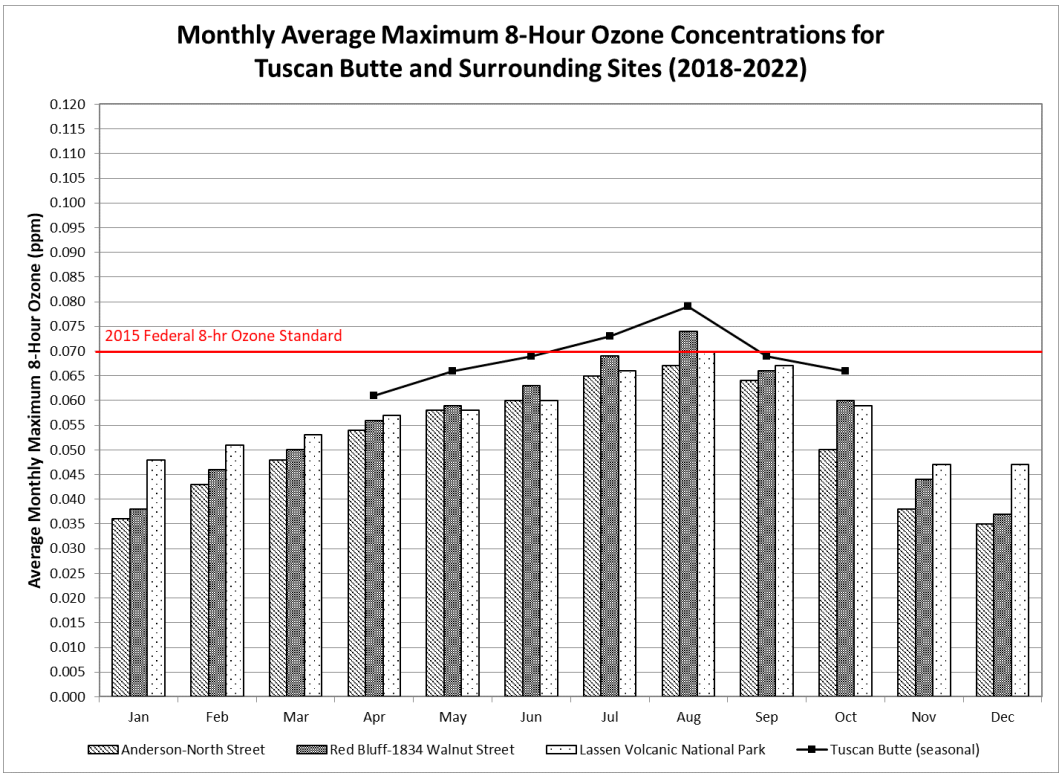

Monthly Average Maximum 8-Hour Ozone Concentrations for Tuscan Butte and Surrounding Sites (2018-2022)
Average Monthly Maximum 8-Hour Ozone (ppm)
0.120
0.115
0.110
0.105
0.100
0.095
0.090
0.085
0.080
0.075
0.070
0.065
0.060
0.055
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
2015 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	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
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
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

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	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
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
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

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	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barrett a Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '22	0.042	0.044	0.043	0.038	---	---	0.040	0.049	---	0.052	0.046	0.039	0.035	0.039	---	---	0.050	0.038
FEB '22	0.044	0.052	0.051	0.042	---	---	0.048	0.055	---	0.052	0.052	0.044	0.043	0.045	---	---	0.054	0.046
MAR '22	0.050	0.056	0.057	0.046	---	---	0.054	0.057	---	0.055	0.052	0.050	0.046	0.045	---	---	0.056	0.052
APR '22	0.052	0.062	0.060	0.052	0.058	---	0.063	0.060	0.062	0.058	0.056	0.054	0.060	0.053	0.066	0.061	0.058	0.059
MAY '22	0.052	0.070	0.064	0.050	0.066	0.066	0.069	0.063	0.084	0.056	0.056	0.053	0.064	0.060	0.062	0.062	0.081	0.057
JUN '22	---	0.071	0.066	0.062	0.072	0.059	0.066	0.070	0.068	0.061	---	0.066	0.069	0.061	0.068	0.070	0.061	0.058
JUL '22	0.069	0.076	0.070	0.057	0.076	0.072	0.068	0.073	---	0.058	0.062	0.068	0.075	0.056	0.069	0.073	0.070	---
AUG '22	0.061	0.080	0.071	0.061	0.079	0.061	0.074	0.076	0.066	0.058	0.066	0.066	0.075	0.061	0.076	0.069	0.066	0.064
SEP '22	0.069	0.075	0.069	0.052	0.072	0.064	0.072	0.078	0.086	0.065	0.079	0.070	0.067	0.073	0.066	0.069	0.070	0.057
OCT '22	---	0.070	0.054	0.056	0.066	0.055	0.067	0.071	0.066	0.056	0.061	0.065	0.063	0.054	0.071	0.070	0.063	0.055
NOV '22	0.038	0.046	0.042	0.035	---	---	0.049	0.057	---	0.050	0.040	0.041	0.041	0.037	---	---	0.049	0.034
DEC '22	---	0.042	0.042	0.035	---	---	0.043	0.093	---	0.046	0.039	0.035	0.044	0.033	---	---	0.047	0.025

Notes:

1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Highlighted cells indicate the maximum 8-hour average concentration for each site during each calendar year.
3. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.
4. Data for the Placerville-Gold Nugget Way and Placerville-Canal Street monitoring sites were merged to make a continuous Placerville record for the 5-year period.
5. Months with no data or less than 75% data completeness are denoted by "---".

* 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); Placerville-Canal Street (060172004); 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)

	2018 4th Highest	Date	2019 4th Highest	Date	2020 4th Highest	Date	2021 4th Highest	Date	2022 4th Highest	Date
Anderson-North Street	0.076	8/8/2018	0.063	6/3/2019	0.066	9/15/2020	0.063	8/25/2021	0.066	7/25/2022
Auburn-Atwood Road	0.098	8/9/2018	0.079	7/31/2019	0.083	9/1/2020	0.085	9/24/2021	0.075	7/23/2022
Colfax-City Hall	0.097	8/9/2018	0.072	7/31/2019	0.08	8/23/2020	0.076	8/24/2021	0.070	7/29/2022
Colusa-Sunrise Blvd	0.061	8/25/2018	0.053	6/12/2019	0.052	9/5/2020	0.061	8/30/2021	0.057	8/18/2022
Cool	0.092	8/1/2018	0.070	8/16/2019	0.078	8/23/2020	0.08	7/23/2021	0.074	7/25/2022
Echo Summit	0.075	8/25/2018	0.059	10/7/2019	0.073	9/15/2020	0.081	8/22/2021	0.064	7/14/2022
Folsom-Natoma Street	0.079	7/18/2018	---	---	---	---	0.085	9/24/2021	0.070	9/6/2022
Grass Valley-Litton Building	0.095	8/8/2018	0.072	7/25/2019	0.08	8/29/2020	0.09	9/10/2021	0.075	8/16/2022
Jerseydale	0.077	9/27/2018	0.071	8/3/2019	0.091	8/20/2020	0.081	6/17/2021	0.079	9/8/2022
Lassen Volcanic Natl Park	0.077	8/10/2018	0.059	9/15/2019	0.069	9/14/2020	0.075	8/23/2021	0.061	6/22/2022
Placerville	0.095	8/8/2018	0.071	8/16/2019	0.086	8/22/2020	0.075	9/24/2021	0.066	9/2/2022
Red Bluff-Walnut Street	0.075	8/3/2018	0.065	8/14/2019	0.061	9/6/2020	0.075	7/22/2021	0.066	6/22/2022
Roseville-N Sunrise Ave	0.080	8/9/2018	0.067	6/5/2019	0.07	8/23/2020	0.075	9/3/2021	0.070	7/23/2022
Sonora-Barretta Street	0.084	8/5/2018	0.069	9/14/2019	0.08	8/24/2020	0.068	8/25/2021	0.061	8/16/2022
Sutter Buttes	0.080	7/28/2018	0.065	7/31/2019	0.083	9/13/2020	0.077	9/3/2021	0.069	7/24/2022
Tuscan Butte	0.082	8/25/2018	0.066	6/12/2019	0.074	8/20/2020	0.077	5/13/2021	0.070	10/21/2022
Yosemite Natl Park-Turtleback	0.085	7/25/2018	0.068	8/3/2019	0.084	8/20/2020	0.08	8/24/2021	0.069	7/25/2022
Yuba City-Almond Street	0.065	7/31/2018	0.061	8/15/2019	0.066	9/5/2020	0.072	9/13/2021	0.058	6/23/2022

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 2019 through 2022.
3. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.
4. Data for the Placerville-Gold Nugget Way and Placerville-Canal Street monitoring sites were merged to make a continuous Placerville record for the 5-year period.
5.Months with no data or less than 75% data completeness are denoted by "---".
* 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); Placerville-Canal Street (060172004); Red Bluff- Walnut Street (061030007); Roseville-N Sunrise Ave (060610006); Sonora-Barretta Street (06109000); Yosemite Natl Park-Turtleback (060430003); Yuba City (061010003)

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	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
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																		
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																		

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	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
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																		
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																		

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	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '22																		
FEB '22																		
MAR '22																		
APR '22																		
MAY '22									2								1	
JUN '22		1			1													
JUL '22		5			4	1		4					2			2		
AUG '22		5	1		4		2	4					1		2			
SEP '22		2			3		1	3	3		2			1				
OCT '22								1							1			
NOV '22																		
DEC '22								1										

Notes:
1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Highlighted cells indicate the maximum 8-hour average concentration for each site during each calendar year.
3. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.
4. Data for the Placerville-Gold Nugget Way and Placerville-Canal Street monitoring sites were merged to make a continuous Placerville record for the 5-year period.
5. Months with no data or less than 75% data completeness are denoted by "---".

* 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); Placerville-Canal Street (060172004); Red Bluff-Walnut Street (061030007); Roseville-N Sunrise Ave (060610006); Sonora-Barretta Street (06109000); Yosemite Natl Park-Turtleback (060430003); Yuba City (061010003)

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	Yosemite Natl Park-Turtleback	Yuba City
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																		
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																		

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	Yosemite Natl Park-Turtleback	Yuba City
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																		
JAN '21																		
FEB '21										1								
MAR '21		3	3				1	2		4	1							
APR '21		9	5		2		7			4	7	4		2	5	4	5	3
MAY '21	3	13	7		3	2	9	13		4	8	6	1	7	3	8	13	3
JUN '21	2	18	14		10	6	14	19		9	10	14	2	5	10	15	12	4
JUL '21	9	30	28	1	23	16	21	30		26	22	24	17	19	14	28	31	12
AUG '21	12	27	21	6	24	21	16	25		25	19	23	16	18	23	26	29	14
SEP '21	5	22	19	8	20			21		17	19	20	16	12	21	21	25	16
OCT '21		7	7		7			7		4	6	3	3	3	6	6	7	3
NOV '21																		
DEC '21																		

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	Yosemite Natl Park-Turtleback	Yuba City
JAN '22																		
FEB '22								1										
MAR '22		2	1					2	1	1							2	
APR '22		5	5		3		4	5	7	2	1		2		4	5	5	3
MAY '22		7	3		6	6	4	6	11	3	1		3	2	4	2	8	1
JUN '22	2	14	11	1	15	6	12	15	16	7	1	5	11	1	7	11	13	3
JUL '22	15	21	23	1	21	10	12	23	13	8	11	16	18	1	21	21	19	1
AUG '22	13	23	12	3	19	8	16	26	16	3	13	15	17	4	17	18	21	5
SEP '22	7	15	10		16	6	17	19	18	5	10	9	14	6	15	14	14	1
OCT '22	6	16		3	14	1	10	21	13	1	7	10	10		19	12	10	1
NOV '22								1										
DEC '22								1										

Notes:
1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Highlighted cells indicate the maximum 8-hour average concentration for each site during each calendar year.
3. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.
4. Data for the Placerville-Gold Nugget Way and Placerville-Canal Street monitoring sites were merged to make a continuous Placerville record for the 5-year period.
5. Months with no data or less than 75% data completeness are denoted by "---".

* 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); Placerville-Canal Street (060172004); Red Bluff-Walnut Street (061030007); Roseville-N Sunrise Ave (060610006); Sonora-Barretta Street (06109000); Yosemite Natl Park-Turtleback (060430003); Yuba City (061010003)

FIGURE 7
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 8
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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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

April 11, 2023

Kathleen Gill
Chief, Air Quality Surveillance Branch
California Air Resources Board
4001 Iowa Avenue
P.O. Box 550099
Riverside, California 92507

Dear Kathleen Gill:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board (CARB) relocation of the O_3, $PM_{2.5}$, and PM_{10} State/Local Air Monitoring Station (SLAMS) monitors from the Mojave Poole site (Air Quality System (AQS) Site ID: 06-029-0011) to the Mojave CA-58 site (AQS ID: 06-029-0019). On February 7, 2023, CARB sent a letter to the EPA with a request for EPA approval of this network change. In this letter, CARB explained the need to relocate the Mojave Poole monitoring site due to logistics beyond CARB's control (i.e., land use changes). Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors.

The Mojave Poole O_3, $PM_{2.5}$, and PM_{10} monitors were not eligible for removal under 40 CFR 58.14(c)(1) - (c)(5). These monitor relocations were 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."

The original Mojave Poole site was located at 923 Poole Street, Mojave, CA 93501. The relocation site, Mojave CA-58, is located at 1773 CA-58 Business, Mojave, CA 93501, approximately 1,372 meters southwest of the original site location. Both sites have a neighborhood scale of representation, meaning they are expected to have relatively uniform land use in the 0.5 to 4.0 kilometers spatial range. Both sites are in an area characterized by residential and commercial land use. The original and proposed relocation site are expected to measure similar O_3, $PM_{2.5}$, and PM_{10}, concentrations from similar sources due to the consistency in land use and proximity to sources. This relocation will not prevent CARB from meeting 40 CFR part 58, Appendix D requirements.

In addition, CARB provided data for O_3, $PM_{2.5}$, and PM_{10} at Mojave Poole from January 1, 2019 through August 31, 2020 and at Mojave CA-58 from January 2021 through December 2022. The resulting data

supported the expectation of similar concentrations from similar sources for all pollutants. CARB also provided wind roses of data collected at Mojave Poole from January 2019 through August 31, 2020 and Mojave CA-58 from January 6, 2021 through December 14, 2022, showing similar wind speeds and direction between the two sites.

Based on the assessment of the scale of representation and monitoring data at both locations, EPA has determined that CARB'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 Mojave Poole O_3, $PM_{2.5}$, and PM_{10} SLAMS monitors to the proposed site, Mojave CA-58. 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 your next Annual Monitoring Network Plan.

If you have any questions, please feel free to contact me at (415) 972-3134 or Julia Carlstad at (415) 947-4107.

Sincerely,

Dena Vallano, Manager
Monitoring and Analysis Section
Air and Radiation Division

cc (via email): Glen Stephens, Eastern Kern Air Pollution Control District
Gary Ray, Eastern Kern Air Pollution Control District
Walter Ham, CARB
Michael Benjamin, CARB
Michael Miguel, CARB
Manisha Singh, CARB
Sylvia Vanderspek, CARB
Jin Xu, CARB
Melissa Niederreiter, CARB
Adolfo Garcia, CARB
Thomas Lovejoy, CARB

Shasta County

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

Paul A. Hellman
Director
Adam Fieseler
Assistant Director

March 30, 2023

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

Sent via email: Vallano.Dena@epa.gov

RE: REQUEST TO DISCONTINUE MONITORING AT ANDERSON - NORTH STREET MONITORING SITE – SHASTA COUNTY, CA (AQS SITE ID: 06-089-0007)

Dear Ms. Vallano,

The Shasta County Air Quality Management District (District) is requesting approval from U.S. EPA to discontinue monitoring at the Anderson – North Street site (AQS site ID: 06-089-0007). Ozone has been monitored at the Anderson – North Street site since June 1993 as part of the California State and Local Air Monitoring (SLAMS) network. The District will continue to operate the ozone monitors at the Redding – Health Department site (AQS site ID: 06-089-0004) and the Shasta Lake – Lake Blvd site (AQS site ID: 06-089-0009) which are collected with SLAMS and Federal Equivalency Method (FEM)/Federal Reference Method (FRM) monitors. In addition, the National Park Service maintains an ozone monitor at the Lassen Volcanic Park near the Manzanita Lake Ranger Station (AQS site ID: 06-089-3003) dedicated as a non-EPA Federal monitor.

40 CFR Part 58 contains requirements for measuring ambient air quality, reporting for ambient air quality data, as well as requirements for network modifications, including minimum network requirements to provide support for State Implementation Plans (SIP), national air quality assessments, and policy decisions. These minimums are described within the network design requirements, which include the minimum number of monitors required and their placement.

The discontinuation of monitoring at the Anderson – North Street site will not compromise the minimum monitoring requirements for ozone in the Redding Metropolitan Statistical Area. 40 CFR Part 58, §58.14 allows for network modifications, including station discontinuation. Any discontinuation is subject to the review and approval of the regional administrator. Requests for discontinuation may be approved on a case-by-case basis if discontinuance does not compromise data collection needed for implementation of the National Ambient Air Quality Standards (NAAQS) and if the requirements of Appendix D to this part, if any, continue to be met.

The request for closure of the ozone monitor at the Anderson – North Street site follows the criteria in S40 CFR Part 58, §58.14, of Title 40 of the Code of Federal Regulations.

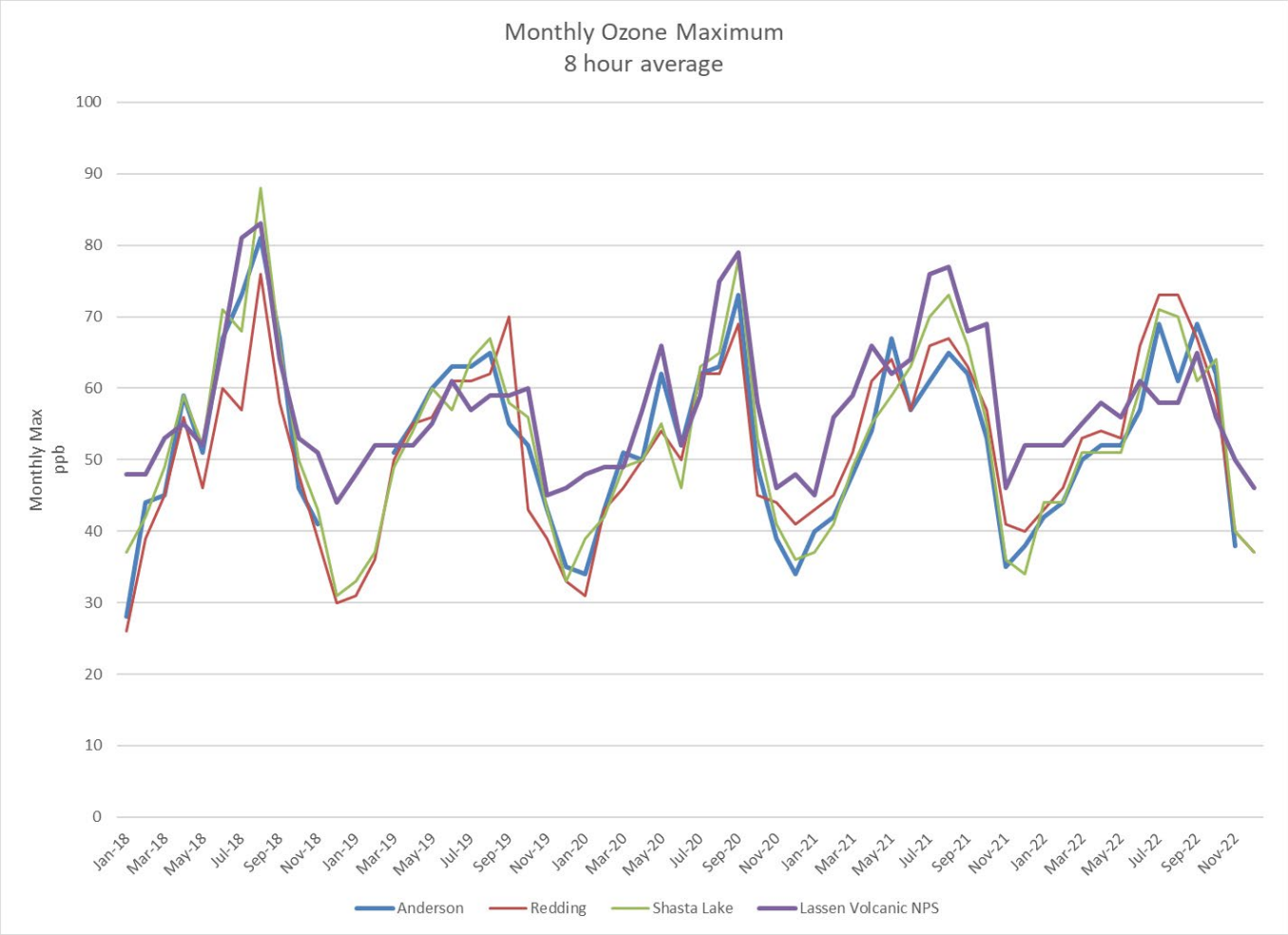
- Public notice of the proposed site change will be published in the *Annual Network Plan, Covering Monitoring Operations in 25 California Air Districts* as soon as possible, projected July 2023.
- Table 1 indicates that there is a greater than 10% chance that the Anderson – North Street site will exceed 80% of the NAAQS.
- Figure 1 shows the monthly hourly ozone maximum at the Anderson – North Street site, and the monthly maximum ozone concentration is consistently at lower concentrations than the nearby monitoring stations at the Redding – Health Department site and Shasta Lake – Lake Blvd site.

- Figure 2 indicates that Shasta County is in attainment for ozone for the NAAQS. Therefore, the ozone monitor is not specifically required by an attainment or maintenance plan.
- Ozone will continue to be monitored by the District at the Redding – Health Department and Shasta Lake – Lake Blvd sites. The National Park Service will continue to monitor ozone near the Manzanita Lake Ranger Station (non-EPA Federal monitor).
- The District is requesting that EPA conduct a case-by-case evaluation for these monitoring sites.

Table1

O3 NAAQS: 8-hour												
Site	Year 1 Design Value (ppb)	Year 2 Design Value (ppb)	Year 3 Design Value (ppb)	Year 4 Design Value (ppb)	Year 5 Design Value (ppb)	Average Design Value (ppb)	Std. Dev. *s*	Student's *t* value (90% confidence)	Number of Data Values (*n*)	90% Upper CI (ppb)	80% of 70 ppb NAAQS (ppb)	Test
	2018	2019	2020	2021	2022	2017-2021						
Anderson (06-089-0007)	68	66	68	64	65	*66.20*	*1.79*	*2.13*	5	*67.9*	56	FAIL
Redding (06-089-0004)	67	63	60	62	65	*63.40*	*2.70*	*2.13*	5	*66.0*	56	FAIL
Shasta Lake (06-089-0009)	76	71	68	64	65	*68.80*	*4.87*	*2.13*	5	*73.4*	56	FAIL
Shasta Lake Lassen Volcanic NPS (06-089-3003)	68	66	68	67	68	*67.40*	*0.89*	*2.13*	5	*68.3*	56	FAIL

Figure 1

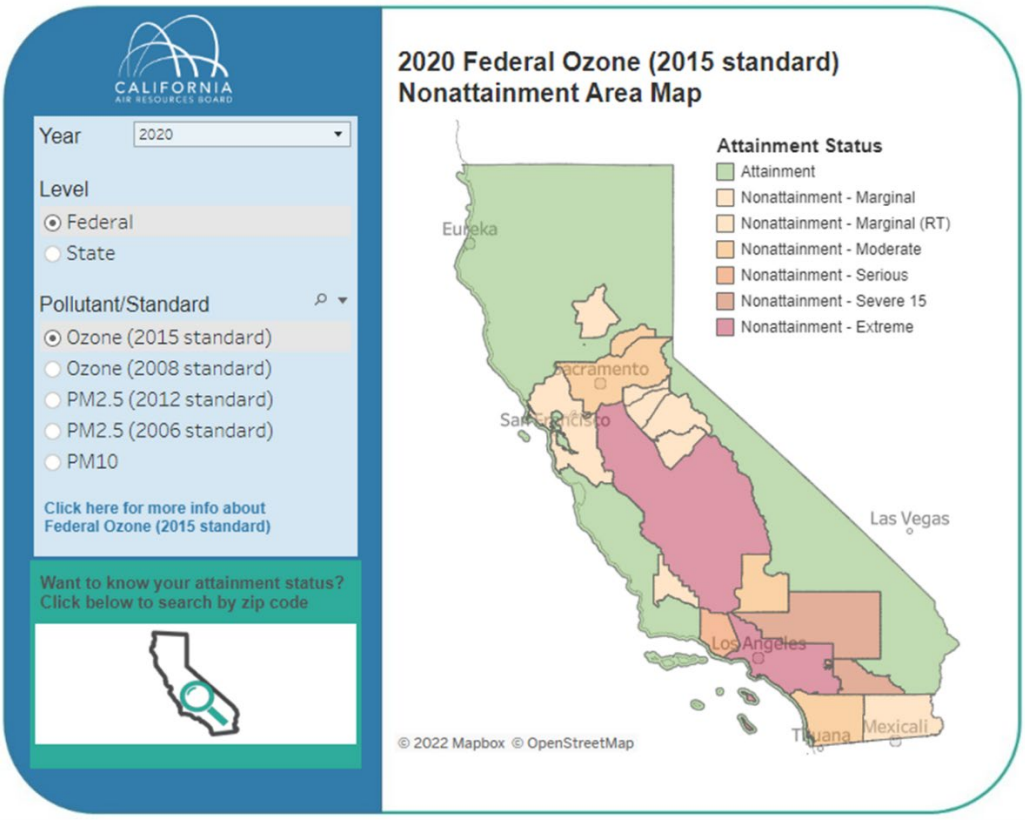


Additional site meta data is available in the attachments, excerpted from the *Annual Network Plan, Covering Monitoring Operations in 25 California Air Districts* dated July 2022, Appendix A, page 60.

40 CFR Part 58, Appendix D describes specific requirements for the number and location of FRM, FEM, and Approved Regional Method (ARM) sites for specific pollutants. Appendix D also states that the ambient air monitoring networks must be designed to meet the following three basic monitoring objectives as follows:

a. Provide air pollution data to the general public in a timely manner.
b. Support compliance with ambient air quality standards and emissions strategy development.
c. Support air pollution research studies.

Figure 2



Source: https://ww2.arb.ca.gov/aaqs-designation-tool

The District is included in the 2022 Annual Network Plan authored by the California Air Resources Board. The District currently operates three ambient air quality monitors for ozone. Attached is Table 10 from the *Annual Network Plan, Covering Monitoring Operations in 25 California Air Districts* dated July 2022, Section 5A, page 20, which details the minimum monitoring requirements and the highest ozone for the air districts in the California Air Resources Board Primary Quality Assurance Organization. The highest concentration in Redding Metropolitan Statistical Area, as identified in the 2022 Annual Network Plan, was at the Redding-Health Department site, inside the city limits of Redding.

In addition, 40 CFR Part 58, Appendix D also states that the optimum size of a particular network involves trade-offs among data needs and available resources. During EPA's 2022 Technical Service Audit (TSA) of the ozone

monitoring network in Shasta County, it was identified that the District does not currently possess the required equipment and funding to run all three (3) of its ozone monitoring stations to current standards. This is in part due to the new interpretation of requirements regarding quality control equipment used to run precision checks on ozone analyzers. While the District does operate reliable calibration equipment, it only has two units in service which meets the revised requirements as identified in the EPA TSA. Also identified in the TSA were issues with the layout of one of the ozone monitoring sites. The ozone monitor at the Anderson site is sequestered in a small boiler room at a police station where access is difficult, and storage of paints and nearby cleaners may theoretically affect the analyzer.

With the removal of the Anderson site, the District would still meet or surpass all requirements of 40 CFR Part 58, Appendix D. Furthermore, it would not compromise any necessary data collection for the implementation of the NAAQS. The District would also continue to meet all three basic monitoring objectives previously described. Discontinuing the ozone monitor at the Anderson site will free up resources and allow the District to focus on more critical monitoring activities.

Pending your approval, due to current resource and budget constraints as well as marginally sited equipment, the District is requesting to permanently shut down the Anderson North Street site (AQS site ID: 06-089-0007) at the end of the quarter following EPA approval. Please feel free to contact Rob Stahl, Air Quality District Manager, with any questions or concerns at 530-225-5674.

Sincerely,

Paul Hellman
Air Pollution Control Officer

PH/RS/md

Enclosures

CC: Shaye Hong, US Environmental Protection Agency, sent via email: Hong.Shaye@epa.gov
Jin Xu, California Air Resources Board, sent via email: Jin.Xu@arb.ca.gov
Louise Sorensen, California Air Resources Board, sent via email: Louise.Sorensen@arb.ca.gov
Melissa Niederreiter, California Air Resources Board, sent via email: Melissa.Niederreiter@arb.ca.gov
Aman Bains, California Air Resources Board, sent via email: Aman.Bains@arb.ca.gov

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			

Table 10: CBSAs with Minimum Ozone Monitoring Requirements

Metropolitan Statistical Area	2010 Census Population (2020 Population Estimate*)	2018-2020 Design Value (% of NAAQS) *DV Site*	Required # of Sites	SLAMS Sites Operating in 2020 (District where site is located) ***Highest Concentration Sites Denoted by Bold Text***
Bakersfield	839,361 (901,362)	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	220,000 (212,744)	0.073 ppm (104%) *Paradise*	1	Chico-East Avenue (Butte County) **Paradise-4405 Airport Road (Butte County)**
El Centro	174,528 (180,267)	0.078 ppm (111%) *Calexico*	1	**Calexico-Ethel Street (Imperial)** **El Centro-9th Street (Imperial)** Niland-English Road (Imperial) Westmorland (Imperial)
Los Angeles-Long Beach-Anaheim	12,828,837 (13,109,903)	0.107 ppm (153%) *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	823,318 (841,387)	0.077 ppm (110%) *Simi Valley*	3	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	177,223 (179,027)	0.068 ppm (97%) *Anderson/ Shasta*	1	Anderson-North Street (Shasta County) **Redding-Health Dept Roof (Shasta County)** Shasta Lake-13791 Lake Blvd (Shasta County)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

User ID: RXD

MAXIMUM VALUES REPORT

Report Request ID: 2090288 Report Code: AMP440 Mar. 28, 2023

GEOGRAPHIC SELECTIONS

Tribal Code	State	County	Site	Parameter	POC	City	AQCR	UAR	CBSA	CSA	EPA Region
	06	089									

PROTOCOL SELECTIONS

Parameter Classification	Parameter	Method	Duration
CRITERIA	44201		

SELECTED OPTIONS

Option Type	Option Value
EVENTS PROCESSING	REPORT ALL EVENT RECORDS
MERGE PDF FILES	YES
AGENCY ROLE	PQAO

SORT ORDER

Order	Column
1	PARAMETER_CODE
2	STATE_CODE
3	DURATION_CODE
4	DATES
5	COUNTY_CODE
6	SITE_ID
7	POC
8	EDT_ID

DATE CRITERIA

Start Date	End Date
2018	2022

APPLICABLE STANDARDS

Standard Description
Ozone 8-hour 2015

EXCEPTIONAL DATA TYPES

EDT	DESCRIPTION
0	NO EVENTS
1	EVENTS EXCLUDED
2	EVENTS INCLUDED
5	EVENTS WITH CONCURRENCE EXCLUDED

UNITED STATES ENVIRONMENTAL PROCTECTION AGENCY
AIR QUALITY SUBSYSTEM
MAXIMUM VALUES REPORT

Mar. 28, 2023

Ozone (44201)

State: California
Duration: 8-HR RUN AVG BEGIN HOUR
Year: 2018

Primary: .07
Secondary: .07
Unit: Parts per million

Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-0004	1	Shasta	087		.076	.064	.061	.060	.060	5757	1	0
		Redding			08/10:09	08/25:10	08/14:10	06/27:11	08/20:10			
					.059	.058	.057	.057	.056			
					06/26:12	09/07:10	07/29:10	08/26:09	04/26:11			

Ozone (44201)

State: California
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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-0007	1	Shasta	087		.081	.080	.078	.076	.073	4959	9	0
		Anderson			08/10:09	08/01:11	08/02:10	08/08:10	07/29:11			
					.073	.071	.071	.071	.069			
					08/25:10	07/31:11	08/03:13	08/09:10	07/26:11			

Ozone (44201)

State: California
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Secondary: .07
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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-0009	1	Shasta	087		.088	.081	.079	.079	.079	5933	11	0
		Shasta Lake			08/10:10	08/01:11	08/02:10	08/08:09	08/09:10			
					.078	.076	.072	.072	.071			
					08/25:10	08/14:09	08/16:09	08/26:09	06/27:10			

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Mar. 28, 2023

Ozone (44201)

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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max	2nd Max	3rd Max	4th Max	5th Max	Num Obs	Num Exc	EDT ID
					6th Max	7th Max	8th Max	9th Max	10th Max			
06-089-3003	1	Shasta	047		.083	.081	.077	.077	.074	6000	13	0
		Not in a city			08/01:10	07/31:11	08/09:10	08/10:11	08/25:10			
					.073	.073	.073	.073	.072			
					07/28:10	07/29:10	07/30:11	08/08:10	08/02:09			

Ozone (44201)

State: California
Duration: 8-HR RUN AVG BEGIN HOUR
Year: 2019

Primary: .07
Secondary: .07
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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max	2nd Max	3rd Max	4th Max	5th Max	Num Obs	Num Exc	EDT ID
					6th Max	7th Max	8th Max	9th Max	10th Max			
06-089-0004	1	Shasta	087		.070	.064	.063	.062	.061	5400	0	0
		Redding			09/03:09	07/26:09	07/31:10	08/01:10	06/16:10			
					.061	.061	.058	.057	.057			
					08/07:10	08/27:09	08/28:11	06/03:09	06/14:10			

Ozone (44201)

State: California
Duration: 8-HR RUN AVG BEGIN HOUR
Year: 2019

Primary: .07
Secondary: .07
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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max	2nd Max	3rd Max	4th Max	5th Max	Num Obs	Num Exc	EDT ID
					6th Max	7th Max	8th Max	9th Max	10th Max			
06-089-0007	1	Shasta	087		.065	.064	.064	.063	.063	4865	0	0
		Anderson			08/07:11	08/01:10	08/27:10	06/03:13	07/26:09			
					.062	.061	.061	.060	.059			
					07/31:10	06/16:10	08/17:12	05/11:10	05/04:10			

UNITED STATES ENVIRONMENTAL PROCTECTION AGENCY
AIR QUALITY SUBSYSTEM
MAXIMUM VALUES REPORT

Mar. 28, 2023

Ozone (44201)

State: California
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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max	2nd Max	3rd Max	4th Max	5th Max	Num Obs	Num Exc	EDT ID
					6th Max	7th Max	8th Max	9th Max	10th Max			
06-089-0009	1	Shasta	087		.067	.066	.064	.061	.060	5780	0	0
		Shasta Lake			08/01:10	08/07:10	07/26:11	07/31:10	05/11:10			
					.059	.059	.059	.059	.059			
					05/04:10	07/30:10	08/17:11	08/20:09	08/28:10			

Ozone (44201)

State: California
Duration: 8-HR RUN AVG BEGIN HOUR
Year: 2019

Primary: .07
Secondary: .07
Unit: Parts per million

Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max	2nd Max	3rd Max	4th Max	5th Max	Num Obs	Num Exc	EDT ID
					6th Max	7th Max	8th Max	9th Max	10th Max			
06-089-3003	1	Shasta	047		.061	.060	.059	.059	.057	5652	0	0
		Not in a city			06/12:09	10/16:07	08/01:11	09/15:08	07/31:11			
					.057	.056	.056	.056	.056			
					08/17:11	06/30:10	07/26:11	07/30:10	08/06:10			

Ozone (44201)

State: California
Duration: 8-HR RUN AVG BEGIN HOUR
Year: 2020

Primary: .07
Secondary: .07
Unit: Parts per million

Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max	2nd Max	3rd Max	4th Max	5th Max	Num Obs	Num Exc	EDT ID
					6th Max	7th Max	8th Max	9th Max	10th Max			
06-089-0004	1	Shasta	087		.069	.062	.062	.060	.059	5467	0	0
		Redding			09/03:08	07/16:09	08/23:09	07/31:09	07/28:10			
					.058	.057	.057	.056	.056			
					07/18:10	07/20:11	07/30:09	07/21:10	08/01:10			

UNITED STATES ENVIRONMENTAL PROCTECTION AGENCY
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Mar. 28, 2023

Ozone (44201)

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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-0007	1	Shasta	087		.073	.069	.067	.066	.063	5904	1	0
		Anderson			09/03:10	09/14:10	09/02:11	09/15:10	08/28:13			
					.063	.062	.062	.062	.061			
					08/29:11	05/09:11	07/19:11	09/30:10	08/25:10			

Ozone (44201)

State: California
Duration: 8-HR RUN AVG BEGIN HOUR
Year: 2020

Primary: .07
Secondary: .07
Unit: Parts per million

Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-0009	1	Shasta	087		.078	.066	.065	.064	.063	5948	1	0
		Shasta Lake			09/03:10	09/14:10	08/29:10	08/23:09	07/20:10			
					.063	.062	.061	.060	.059			
					09/15:10	09/02:10	09/13:10	09/16:09	07/21:09			

Ozone (44201)

State: California
Duration: 8-HR RUN AVG BEGIN HOUR
Year: 2020

Primary: .07
Secondary: .07
Unit: Parts per million

Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-3003	1	Shasta	047		.079	.075	.069	.069	.068	6066	2	0
		Not in a city			09/15:09	08/22:11	09/12:09	09/14:07	09/04:09			
					.068	.066	.066	.065	.065			
					09/16:09	05/10:08	08/25:11	08/21:10	08/23:10			

UNITED STATES ENVIRONMENTAL PROCTECTION AGENCY
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Mar. 28, 2023

Ozone (44201)

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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-0004	1	Shasta	087		.067	.066	.066	.065	.064	5928	0	0
		Redding			08/24:10	07/05:08	08/15:11	08/23:10	05/13:11			
					.063	.063	.062	.061	.061			
					08/25:10	09/15:10	08/29:11	05/14:10	07/09:10			

Ozone (44201)

State: California
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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-0007	1	Shasta	087		.067	.065	.063	.063	.062	6105	0	0
		Anderson			05/13:12	08/24:11	08/23:11	08/25:11	08/14:11			
					.062	.061	.061	.061	.060			
					09/08:10	07/09:11	07/22:11	08/31:12	05/14:10			

Ozone (44201)

State: California
Duration: 8-HR RUN AVG BEGIN HOUR
Year: 2021

Primary: .07
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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-0009	1	Shasta	087		.073	.070	.069	.068	.066	5887	1	0
		Shasta Lake			08/24:10	07/22:11	08/23:10	08/25:10	09/15:10			
					.065	.064	.064	.064	.063			
					08/30:10	07/05:09	07/09:11	07/14:11	06/02:09			

UNITED STATES ENVIRONMENTAL PROCTECTION AGENCY
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MAXIMUM VALUES REPORT

Mar. 28, 2023

Ozone (44201)

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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max	2nd Max	3rd Max	4th Max	5th Max	Num Obs	Num Exc	EDT ID
					6th Max	7th Max	8th Max	9th Max	10th Max			
06-089-3003	1	Shasta	047		.077	.076	.076	.075	.075	5899	9	0
		Not in a city			08/07:11	07/23:12	08/16:10	08/23:12	08/29:11			
					.073	.073	.072	.072	.070			
					08/24:09	08/25:09	07/22:09	08/15:12	08/08:09			

Ozone (44201)

State: California
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Primary: .07
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Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max	2nd Max	3rd Max	4th Max	5th Max	Num Obs	Num Exc	EDT ID
					6th Max	7th Max	8th Max	9th Max	10th Max			
06-089-0004	1	Shasta	087		.076	.075	.073	.071	.070	5773	4	0
		Redding			07/28:10	07/29:11	08/17:10	07/27:10	07/25:11			
					.068	.067	.066	.065	.064			
					07/26:09	09/07:10	06/22:12	07/14:09	07/12:10			

Ozone (44201)

State: California
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Year: 2022

Primary: .07
Secondary: .07
Unit: Parts per million

Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max	2nd Max	3rd Max	4th Max	5th Max	Num Obs	Num Exc	EDT ID
					6th Max	7th Max	8th Max	9th Max	10th Max			
06-089-0007	1	Shasta	087		.069	.069	.069	.066	.066	5015	0	0
		Anderson			07/28:11	07/29:11	09/07:08	07/25:11	07/27:10			
					.062	.061	.061	.061	.060			
					10/04:11	08/29:10	08/31:10	09/01:10	07/21:09			

UNITED STATES ENVIRONMENTAL PROCTECTION AGENCY
AIR QUALITY SUBSYSTEM
MAXIMUM VALUES REPORT

Mar. 28, 2023

Ozone (44201)

State: California
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Primary: .07
Secondary: .07
Unit: Parts per million

Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-0009	1	Shasta	087		.071	.071	.070	.065	.065	5985	2	0
		Shasta Lake			07/27:09	07/29:10	08/17:10	07/14:10	07/26:10			
					.064	.064	.061	.061	.061			
					07/25:11	10/03:09	07/20:09	07/28:12	08/29:08			

Ozone (44201)

State: California
Duration: 8-HR RUN AVG BEGIN HOUR
Year: 2022

Primary: .07
Secondary: .07
Unit: Parts per million

Maximum Values

Site ID	POC	County Name / City Name		Methods	1st Max / 6th Max	2nd Max / 7th Max	3rd Max / 8th Max	4th Max / 9th Max	5th Max / 10th Max	Num Obs	Num Exc	EDT ID
06-089-3003	1	Shasta	047		.065	.064	.062	.061	.061	5823	0	0
		Not in a city			09/07:11	09/10:09	09/02:13	06/22:12	06/29:12			
					.059	.058	.058	.058	.058			
					06/07:11	04/03:09	04/26:09	06/16:14	06/23:10			

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

User ID: RXD

DESIGN VALUE REPORT

Report Request ID: 2090290 Report Code: AMP480 Mar. 28, 2023

GEOGRAPHIC SELECTIONS

Tribal Code	State	County	Site	Parameter	POC	City	AQCR	UAR	CBSA	CSA	EPA Region
	06	089									

PROTOCOL SELECTIONS

Parameter Classification	Parameter	Method	Duration
DESIGN VALUE	44201		

SELECTED OPTIONS

Option Type	Option Value
SINGLE EVENT PROCESSING	EXCLUDE REGIONALLY CONCURRED EVENTS
MERGE PDF FILES	YES
AGENCY ROLE	PQAO
USER SITE METADATA	STREET ADDRESS
QUARTERLY DATA IN WORKFILE	NO
WORKFILE DELIMITER	,
USE LINKED SITES	YES

DATE CRITERIA

Start Date	End Date
2018	2022

APPLICABLE STANDARDS

Standard Description
Ozone 8-hour 2015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
PRELIMINARY DESIGN VALUE REPORT

Report Date: Mar. 28, 2023

Pollutant: Ozone(44201)
Standard Units: Parts per million(007)
NAAQS Standard: Ozone 8-hour 2015
Statistic: Annual 4th Maximum **Level:** .07

Design Value Year: 2018
REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.
State: California

Site ID	Poc	STREET ADDRESS	2018 Valid Days	2018 Percent Complete	2018 4th Max	2018 Cert& Eval	2017 Valid Days	2017 Percent Complete	2017 4th Max	2017 Cert& Eval	2016 Valid Days	2016 Percent Complete	2016 4th Max	2016 Cert& Eval	3 - Year Percent Complete	3 - Year Design Value	D. V. Validity
06-089-0004		HLTH CTR-2630 BRESLAUER WAY, REDDING	334	92	.060	Y	353	97	.069	Y	361	99	.072	Y	96	.067	Y
06-089-0007		2220 NORTH STREET, ANDERSON, CA 96007	291	80	.076	M	295	81	.061	N	358	98	.067	Y	86	.068	N
06-089-0009		13791 Lake Blvd, Shasta Lake, CA	346	95	.079	Y	364	100	.075	Y	359	98	.076	Y	98	.076	Y
06-089-3003		MANZANITA LAKE RS, LASSEN VOLCANIC NP	348	95	.077	Y	353	97	.064	S	338	92	.064	Y	95	.068	Y

Notes: 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).
2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.
3. Annual Values not meeting completeness criteria are marked with an asterisk ('*').

Pollutant: Ozone(44201)
Standard Units: Parts per million(007)
NAAQS Standard: Ozone 8-hour 2015
Statistic: Annual 4th Maximum **Level:** .07

Design Value Year: 2019

REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.

State: California

Site ID	Poc	STREET ADDRESS	2019 Valid Days	2019 Percent Complete	2019 4th Max	2019 Cert& Eval	2018 Valid Days	2018 Percent Complete	2018 4th Max	2018 Cert& Eval	2017 Valid Days	2017 Percent Complete	2017 4th Max	2017 Cert& Eval	3 - Year Percent Complete	3 - Year Design Value	D. V. Validity
06-089-0004		HLTH CTR-2630 BRESLAUER WAY, REDDING	315	86	.062	Y	334	92	.060	Y	353	97	.069	Y	92	.063	Y
06-089-0007		2220 NORTH STREET, ANDERSON, CA 96007	287	79	.063	Y	291	80	.076	M	295	81	.061	N	80	.066	N
06-089-0009		13791 Lake Blvd, Shasta Lake, CA	331	91	.061	Y	346	95	.079	Y	364	100	.075	Y	95	.071	Y
06-089-3003		MANZANITA LAKE RS, LASSEN VOLCANIC NP	322	88	.059	S	348	95	.077	Y	353	97	.064	S	93	.066	Y

Notes: 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).
2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.
3. Annual Values not meeting completeness criteria are marked with an asterisk ('*').

Pollutant: Ozone(44201)
Standard Units: Parts per million(007)
NAAQS Standard: Ozone 8-hour 2015
Statistic: Annual 4th Maximum **Level:** .07

Design Value Year: 2020

REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.

State: California

			2020				2019				2018				3 - Year		
Site ID	Poc	STREET ADDRESS	Valid Days	Percent Complete	4th Max	Cert& Eval	Valid Days	Percent Complete	4th Max	Cert& Eval	Valid Days	Percent Complete	4th Max	Cert& Eval	Percent Complete	Design Value	D. V. Validity
06-089-0004		HLTH CTR-2630 BRESLAUER WAY, REDDING	311	85	.060	Y	315	86	.062	Y	334	92	.060	Y	88	.060	N
06-089-0007		2220 NORTH STREET, ANDERSON, CA 96007	346	95	.066	Y	287	79	.063	Y	291	80	.076	M	85	.068	N
06-089-0009		13791 Lake Blvd, Shasta Lake, CA	340	93	.064	Y	331	91	.061	Y	346	95	.079	Y	93	.068	Y
06-089-3003		MANZANITA LAKE RS, LASSEN VOLCANIC NP	352	96	.069	S	322	88	.059	S	348	95	.077	Y	93	.068	Y

Notes: 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).
2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.
3. Annual Values not meeting completeness criteria are marked with an asterisk ('*').

Pollutant: Ozone(44201)
Standard Units: Parts per million(007)
NAAQS Standard: Ozone 8-hour 2015
Statistic: Annual 4th Maximum **Level:** .07

Design Value Year: 2021

REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.

State: California

			2021				2020				2019				3 - Year		
Site ID	Poc	STREET ADDRESS	Valid Days	Percent Complete	4th Max	Cert& Eval	Valid Days	Percent Complete	4th Max	Cert& Eval	Valid Days	Percent Complete	4th Max	Cert& Eval	Percent Complete	Design Value	D. V. Validity
06-089-0004		HLTH CTR-2630 BRESLAUER WAY, REDDING	340	93	.065	Y	311	85	.060	Y	315	86	.062	Y	88	.062	N
06-089-0007		2220 NORTH STREET, ANDERSON, CA 96007	356	98	.063	Y	346	95	.066	Y	287	79	.063	Y	91	.064	Y
06-089-0009		13791 Lake Blvd, Shasta Lake, CA	334	92	.068	Y	340	93	.064	Y	331	91	.061	Y	92	.064	Y
06-089-3003		MANZANITA LAKE RS, LASSEN VOLCANIC NP	339	93	.075	S	352	96	.069	S	322	88	.059	S	92	.067	Y

Notes: 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).
2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.
3. Annual Values not meeting completeness criteria are marked with an asterisk ('*').

Pollutant: Ozone(44201)
Standard Units: Parts per million(007)
NAAQS Standard: Ozone 8-hour 2015
Statistic: Annual 4th Maximum **Level:** .07

Design Value Year: 2022

REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.

State: California

Site ID	Poc	STREET ADDRESS	2022 Valid Days	2022 Percent Complete	2022 4th Max	2022 Cert& Eval	2021 Valid Days	2021 Percent Complete	2021 4th Max	2021 Cert& Eval	2020 Valid Days	2020 Percent Complete	2020 4th Max	2020 Cert& Eval	3 - Year Percent Complete	3 - Year Design Value	D. V. Validity
06-089-0004		HLTH CTR-2630 BRESLAUER WAY, REDDING	327	90	.071	Y	340	93	.065	Y	311	85	.060	Y	89	.065	N
06-089-0007		2220 NORTH STREET, ANDERSON, CA 96007	290	79	.066	Y	356	98	.063	Y	346	95	.066	Y	91	.065	Y
06-089-0009		13791 Lake Blvd, Shasta Lake, CA	337	92	.065	Y	334	92	.068	Y	340	93	.064	Y	92	.065	Y
06-089-3003		MANZANITA LAKE RS, LASSEN VOLCANIC NP	337	92	.061		339	93	.075	S	352	96	.069	S	94	.068	Y

Notes: 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).
2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.
3. Annual Values not meeting completeness criteria are marked with an asterisk ('*').

CERTIFICATION EVALUATION AND CONCURRENCE FLAG MEANINGS

FLAG	MEANING
M	The monitoring organization has revised data from this monitor since the most recent certification letter received from the state.
N	The certifying agency has submitted the certification letter and required summary reports, but the certifying agency and/or EPA has determined that issues regarding the quality of the ambient concentration data cannot be resolved due to data completeness, the lack of performed quality assurance checks or the results of uncertainty statistics shown in the AMP255 report or the certification and quality assurance report.
S	The certifying agency has submitted the certification letter and required summary reports. A value of "S" conveys no Regional assessment regarding data quality per se. This flag will remain until the Region provides an "N" or "Y" concurrence flag.
U	Uncertified. The certifying agency did not submit a required certification letter and summary reports for this monitor even though the due date has passed, or the state's certification letter specifically did not apply the certification to this monitor.
X	Certification is not required by 40 CFR 58.15 and no conditions apply to be the basis for assigning another flag value
Y	The certifying agency has submitted a certification letter, and EPA has no unresolved reservations about data quality (after reviewing the letter, the attached summary reports, the amount of quality assurance data submitted to AQS, the quality statistics, and the highest reported concentrations).

Notes: 1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).
2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.
3. Annual Values not meeting completeness criteria are marked with an asterisk ('*').

CALIFORNIA
AIR RESOURCES BOARD

Gavin Newsom, Governor
Yana Garcia, CalEPA Secretary
Liane M. Randolph, Chair

March 7, 2023

Ms. Dena Vallano, Supervisor

Monitoring and Analysis Section

U.S. Environmental Protection Agency, Region 9, Air Division

75 Hawthorne Street

San Francisco, California 94105

Vallano.Dena@epa.gov

Dear Ms. Vallano,

The California Air Resources Board (CARB) is submitting to the U.S. Environmental Protection Agency (U.S. EPA), a request for approval to relocate the Visalia-North Church Street air monitoring station (Station) (AQS # 061072002). Justification for relocation is based on 40CFR, §58.14(c)(6): *A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.*

CARB was notified in June 2019 of the intention of the Church Street building owner to expand into CARB's leased space by June 2021. In consultation with CARB's Air Quality Planning and Science Division (AQPSD), an inquiry into viable replacement site locations was started with the intention of maintaining relative comparability to the existing site. Between February 2020 and June 2021, the California Department of General Services (DGS) provided CARB with approximately seven potential relocation sites that fulfilled both siting and facility requirements in areas that had been approved by AQPSD. Over the course of this time, complications arose with each lessor over up-front financial wherewithal for site improvements, ADA-compliance, or availability of a location within CARB's time frame for relocation. In March of 2021, CARB was granted a final extension at the Church Street site for tenancy until December 31, 2021. In November 2021, DGS secured an agreement for a site on behalf of CARB at 2005 West Ashland Avenue, Suite G (Ashland) (AQS # 061072003). This location was then again vetted by AQPSD. A lease agreement and improvements were expedited to minimize any potential for data loss and maintain data completeness for the subsequent monitoring year.

The original purpose of the Church Street site was to monitor representative concentrations of ozone, PM10, and PM2.5 from upwind and nearby urban areas. We intend to continue this monitoring objective by having selected this representative location, an area similar to the

Church Street site of mixed residential and commercial use in the vicinity. The Ashland location is approximately 3,363 meters (2.09 miles) Southwest from the North Church Street station (Figure 1), 65 meters from South Mooney Boulevard/Highway 63 (Figure 3), and similar in scale and representation (Traffic Volume approximately 26,000) (Figures 4 and 5) to the previous Church Street location. The distance from the Ashland station to Highway 198 increased from 607 meters to 2090 meters (Church vs. Ashland, respectively). Minimum distance (30-40 meters) from roadway is within specifications for ozone and PM, the probe height and inlets are consistent (urban setting, second story building), are approximately 65 meters from the nearest lane of traffic with 270 degrees of clearance and maintain all proper siting protocols as outlined in *Performance Audit Procedures for Conducting a Site Survey, QMB SOP Appendix AE Revision 4 (2020).* EPA's Technical Systems Audit (TSA) on-site visit in July 2022 and CARB's Quality Assurance performance evaluation in November 2022 both concurred with siting compliance with respect to the surrounding vegetation. Approximately 35 meters to the Northwest of the probe, is a cluster of Giant Sequoia trees (ranging from 27m to 41m tall) which was evaluated and determined unlikely to affect ozone or PM concentrations (Prevailing winds are predominately Northwest and Southeast, similar to Church Street (see figures 6 and 7).

Design value analysis suggests continued, current attainment designations for Ozone, PM2.5, and PM10 to carry over at the Ashland site. All monitoring parameters will remain unchanged from the Church Street station (Attachments 1 and 2). While the Church Street site met shutdown criteria for NO2, the parameter will continue to be monitored at Ashland Avenue under 'maintenance' conditions for NAAQS-comparison purposes. Ashland Avenue NO2 concentrations track similarly to Church Street from the years 2019 to 2021 (Figure 2, Attachment 4). Ozone has shown attainment over the last five years for 1-hour maximum concentrations (8-hour max not included) but does not meet the <10% probability of exceeding 80% of NAAQS for both the 1-hour and 8-hour max requirements. Visalia- Church Street max 8-hour ozone design value, with exceptional event impacts removed, is the second highest for the Valley with the fifth highest population count for 2021. San Joaquin Valley is designated nonattainment for PM2.5 and continues its 2007 PM10 attainment status, per 2021 San Joaquin Valley Air Pollution Control District (SJVAPCD) Annual Network Plan (ANP). In 2021, PM10 24-hour highest metropolitan statistical area (MSA) concentrations were the fifth highest (299ug/m3) among other sites in the Valley and third highest for PM2.5 (66ug/m3). See attachment 3 for system modification analyses.

With respect to Visalia's attainment status for the above pollutants and verification that 40CFR, Part 58, Appendix D requirements continue to be satisfied with this relocation, CARB staff compared daily average concentration values between the Church Street and Ashland Avenue sites annually, over three consecutive calendar years (2019 – 2021 for Church) and available site data since relocation (2022 for Ashland only). Attachment 4 below represents recorded daily concentration averages as reported from EPA's Air Quality System (AQS) and AirNow data for the monitored O3, NO2, PM2.5, and PM10 parameters at Church Street and Ashland Avenue sites. The graphs depicted in attachment 4 demonstrate that concentration

trends recorded at Ashland Avenue in 2022 align with historical trends recorded at Church Street in the years 2019 through 2021. With respect to PM2.5 trends in 2020 and 2021, concentrations at Church Street in the Fall and Winter months are noticeably higher than those of the same time period at the Ashland station likely due to an unusually active fire season originating from mainly northern counties such as Butte, Plumas, Shasta, Lassen, Siskiyou, Trinity, and Tehama counties (figures 8 and 9). In 2020, over 3.5 million acres were burned between August and October alone, and 2.6 million total acres burned in 2021, with approximately 1100 acres burned in January (https://www.fire.ca.gov/incidents/). CARB and AQPSD staff anticipate future data trends to remain consistent with historical trends based on proximity and similar topography between Church Street and Ashland Avenue.

CARB will continue to work with local air districts to ensure data is reported both accurately and in a timely fashion to best serve the community and data clients. No further actions are being taken to relocate the Ashland station.

If you need any additional information, please contact Mr. Adolfo Garcia, Manager, Air Quality Surveillance Branch, at 626.575.6701 or Adolfo.Garcia@arb.ca.gov.

Sincerely,

Kathy Gill, Chief, Air Quality Surveillance Branch

Attachment(s): 4

Figure(s): 9

CC: See next page

CC:

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Reggie Smith, Manager, Operation and Data Support Section

Alicia Adams, Supervisor, Air Quality Planning and Science Division

Jin Xiu, Supervisor, Air Quality Planning and Science Division

Kyle Ochoa, Air Pollution Specialist, Air Monitoring South Section

Attachment 1
Visalia- North Church Street

Station Details

Local Site Name	Visalia – Church St				
AQS ID	06-107-2002				
GPS Coordinates	36.3325 N, -119.2909 W				
Street Address	310 N. Church St., Visalia CA 93291				
County	Tulare				
Distance to roadways (meters)	25 m (west)				
Traffic Count (AADT,year)	10,000/2017(Traffic count for nearest roads: N Court St and W School Ave, Source: Caltrans AADT 2017)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Visalia–Porterville				
Pollutant, POC	Ozone	NO2	PM10	PM2.5	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	
Parameter Code	44201	42602	81102	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	General/Background	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	None	None	None	None	
Instrument manufacturer and model	Teledyne API T400	Thermo 42 IQ	Met One 1020	Met One 1020	
Method code	87	74	122	731	
FRM/FEM/ARM/Other	FEM	FRM	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	1/1/1979	1/1/1979	8/1/2015	12/1/2020*	
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)	6.8	6.8	6.3	6.5	
Distance from supporting structure (meters)	2.8	2.8	2.3	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)	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	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.62	10.01	N/A	NA	
Will there be changes within the next 18 months?	Yes	Yes	Yes	Yes	
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	Bi-Monthly	Bi-Monthly	
Frequency of one-point QC check for gaseous instruments	5 Days/Week	5 Days/Week	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/5/2021	10/5/2021	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	4/13/2021 10/5/2021	4/13/2021 10/5/2021	
		*FRM converted to continuous as of 12/20			

Attachment 2
Visalia- West Ashland Avenue

Station Details

Local Site Name	Visalia – West Ashland Avenue				
AQS ID	06-107-2003				
GPS Coordinates	36.308150N, -119.312900W				
Street Address	2005 W. Ashland Ave., suite G, Visalia CA 93277				
County	Tulare				
Distance to roadways (meters)	65 m (west)				
Traffic Count (AADT,year)	26,000				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Visalia–Porterville				
Pollutant, POC	Ozone	NO2	PM10	PM2.5	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	
Parameter Code	44201	42602	81102	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	General/Background	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	None	None	None	None	
Instrument manufacturer and model	Teledyne API T400	Thermo 42 IQ	Met One 1020	Met One 1020	
Method code	87	74	122	731	
FRM/FEM/ARM/Other	FEM	FRM	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	01/13/2022	02/04/2022	02/15/2022	01/13/2022	
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)	11.3	11.3	6.3	6.5	
Distance from supporting structure (meters)	2.1	2.1	2.3	2.1	
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	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	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.1	10.01	N/A	NA	
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	Bi-Monthly	Bi-Monthly	
Frequency of one-point QC check for gaseous instruments	5 Days/Week	5 Days/Week	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	11/3/2022	11/3/2022	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	5/17/2022 11/3/2022	5/17/2022 11/3/2022	

Attachment 3
Visalia- North Church Street

System Modification Analysis

Site: **Visalia - Church (AQS: 061072002)**
Pollutant: **Ozone**

2017 - 2021 8-Hour Ozone NAAQS

0.070	**ppm**	**<-- Ozone 4th Maximum 8-Hour NAAQS**

2017 Design Value (ppm)	2018 Design Value (ppm)	2019 Design Value (ppm)	2020 Design Value (ppm)	2021[1] Design Value (ppm)	Average Design Value (X) (ppm)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ppm)	80% of NAAQS (ppm)	< 10% Probability of exceeding 80% of NAAQS?
0.083	0.085	0.084	0.083	0.084	0.084	0.00	2.13	5	0.08	0.06	FAIL

1. Church Street monitoring operations discontinued in December 2021.

Site: **Visalia - Church (AQS: 061072002)**
Pollutant: **PM 2.5**

2017 - 2021 24-Hour NAAQS

35	**ug/m³**	**<-- PM2.5 98th Percentile 24-Hour NAAQS**

2017 Design Value (ug/m3)	2018 Design Value (ug/m3)	2019 Design Value (ug/m3)	2020 Design Value (ug/m3)	2021[1] Design Value (ug/m3)	Average Design Value (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
54.0	60.0	61.0	64.0	66.0	61.0	4.58	2.13	5	65	28	FAIL

1. Church Street monitoring operations discontinued in December 2021.

2017 - 2021 Annual Arithmetic Mean NAAQS

12	**ug/m³**	**<-- PM2.5 Annual Arithmetic Mean NAAQS**

2017 Design Value (ug/m3)	2018 Design Value (ug/m3)	2019 Design Value (ug/m3)	2020 Design Value (ug/m3)	2021[1] Design Value (ug/m3)	Average Design Value (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
15.7	16.1	15.5	16.6	17.8	16.3	0.92	2.13	5	17	10	FAIL

1. Church Street monitoring operations discontinued in December 2021.

Site: **Visalia - Church (AQS: 061072002)**
Pollutant: **PM 10**

2017 - 2021 NAAQS 24-Hour Maximum Concentration

150	ug/m³	<-- PM10 24-Hour NAAQS

2017 Maximum Conc. (ug/m3)	2018 Maximum Conc. (ug/m3)	2019 Maximum Conc. (ug/m3)	2020 Maximum Conc. (ug/m3)	2021[1] Maximum Conc. (ug/m3)	Average Maximum Conc. (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
144.0	153.0	410.0	316.0	299.0	264.4	114.0	2.13	5	373	120	FAIL

1. Church Street monitoring operations discontinued in December 2021.

2017 - 2021 NAAQS 24-Hour Design Concentration

150	ug/m³	<-- PM10 24-Hour NAAQS

2017 Design Conc. (ug/m3)	2018 Design Conc. (ug/m3)	2019 Design Conc. (ug/m3)	2020 Design Conc. (ug/m3)	2021[1] Design Conc. (ug/m3)	Average Design Conc. (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
131.0	121.3	166.3	203.7	211.0	166.7	40.8	2.13	5	206	120	FAIL

1. Church Street monitoring operations discontinued in December 2021.

Site: **Visalia - Church (AQS: 061072002)**
Pollutant: **Nitrogen Dioxide**

2017 - 2021 1-Hour Nitrogen Dioxide NAAQS

100	ppb	<-- Nitrogen Dioxide 98th percentile of 1-Hour NAAQS

2017 Design Value (ppm)	2018 Design Value (ppm)	2019 Design Value (ppm)	2020 Design Value (ppm)	2021 Design Value (ppm)	Average Design Value (X) (ppm)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ppm)	80% of NAAQS (ppm)	< 10% Probability of exceeding 80% of NAAQS?
49.0	51.0	55.0	52.0	48.0	51.0	2.739	2.13	5	54	80	PASS

2017 - 2021 Annual Mean Nitrogen Dioxide NAAQS

53	ppb	<-- Nitrogen Dioxide Annual Mean NAAQS

2017 Design Value (ppm)	2018 Design Value (ppm)	2019 Design Value (ppm)	2020 Design Value (ppm)	2021 Design Value (ppm)	Average Design Value (X) (ppm)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ppm)	80% of NAAQS (ppm)	< 10% Probability of exceeding 80% of NAAQS?
9.8	10.2	10.4	9.9	9.2	9.9	0.423	2.13	5	10	42	PASS

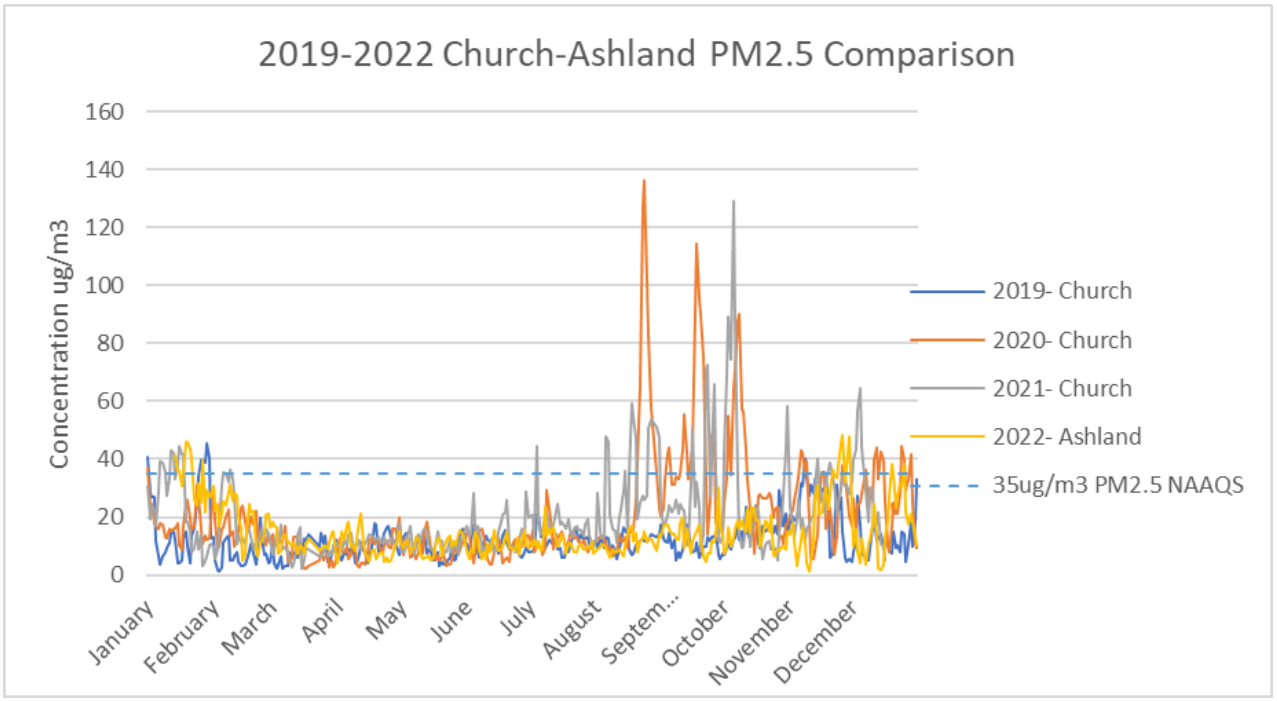
System Modification Analysis 40 CFR 58.14

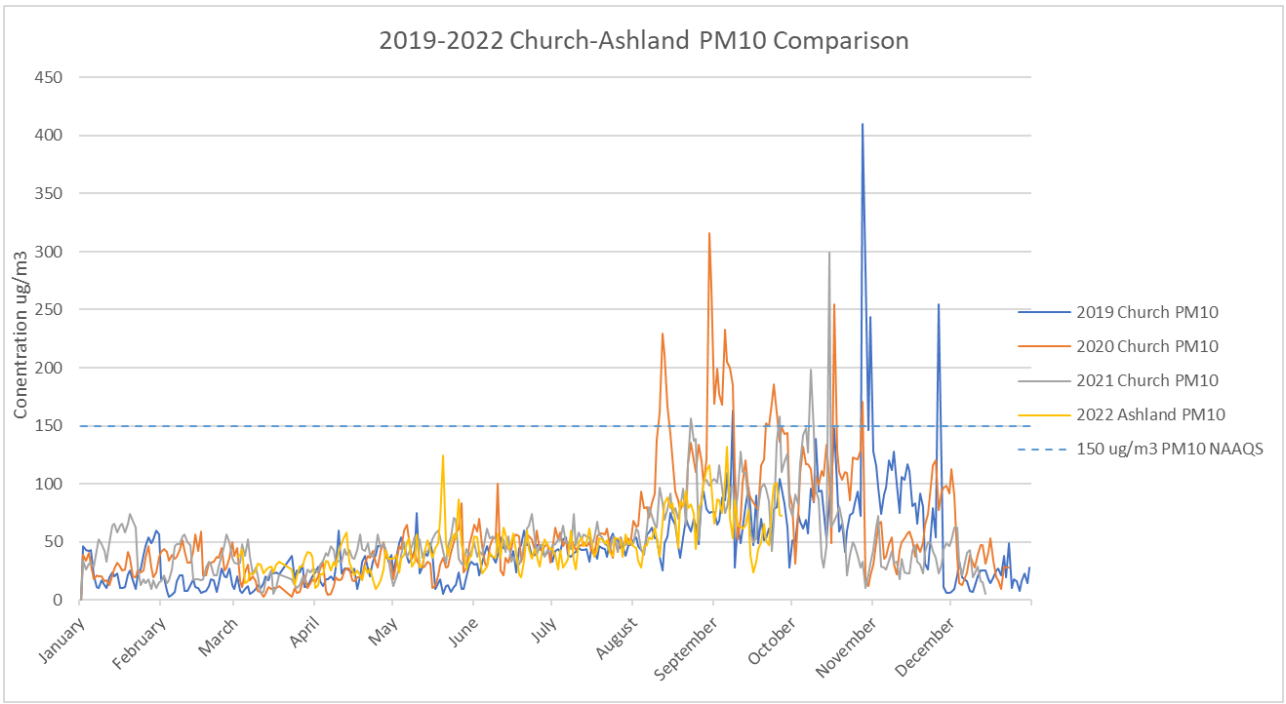
Source: EPA Ambient Air Monitoring Network Assessment Guidance; (EPA-454/D-07-001 February 2007), revised December 2015
Source: EPA-AQS AMP450 and AMP480 Reports

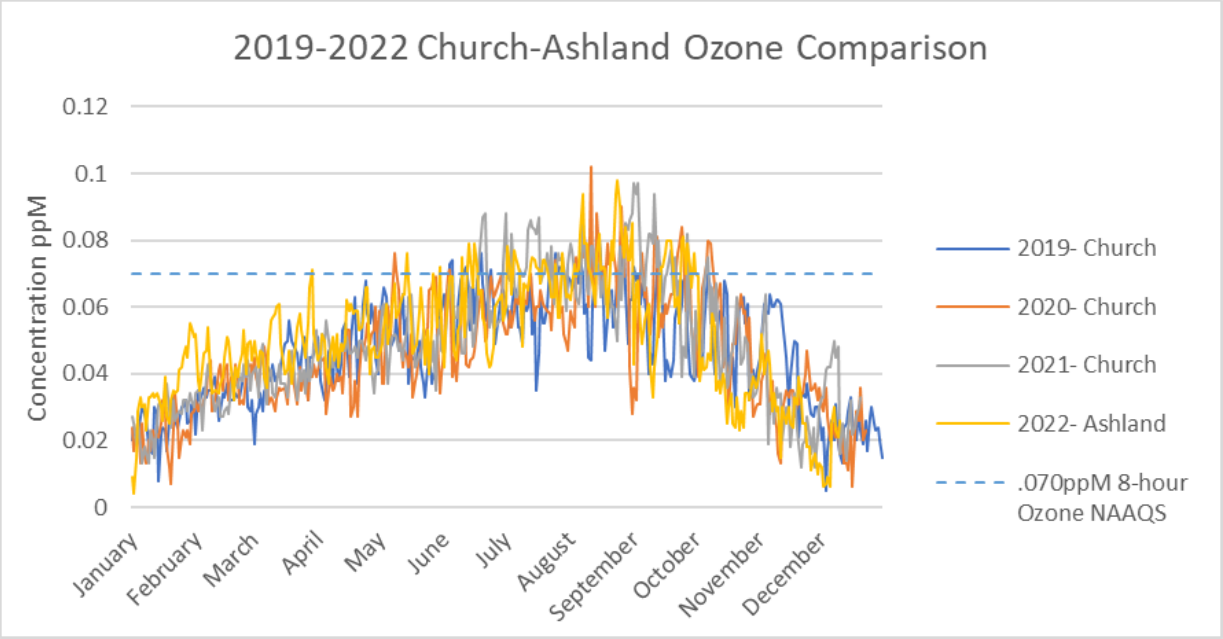
Equation from Section 4.1 of the Ambient Air Monitoring Network Assessment Guidance

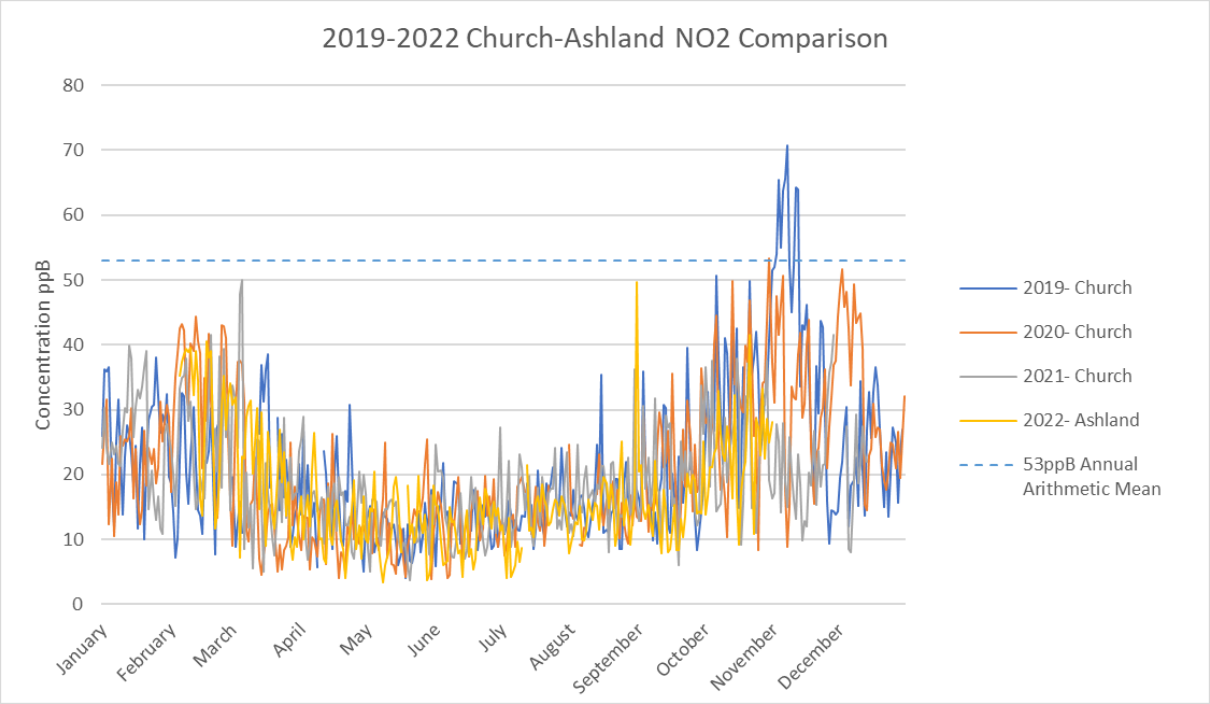
$$\overline{X} + \frac{t * s}{\sqrt{n}} < 0.8 * NAAQS$$

Attachment 4
North Church Street/ West Ashland Avenue Comparative Data Analysis*



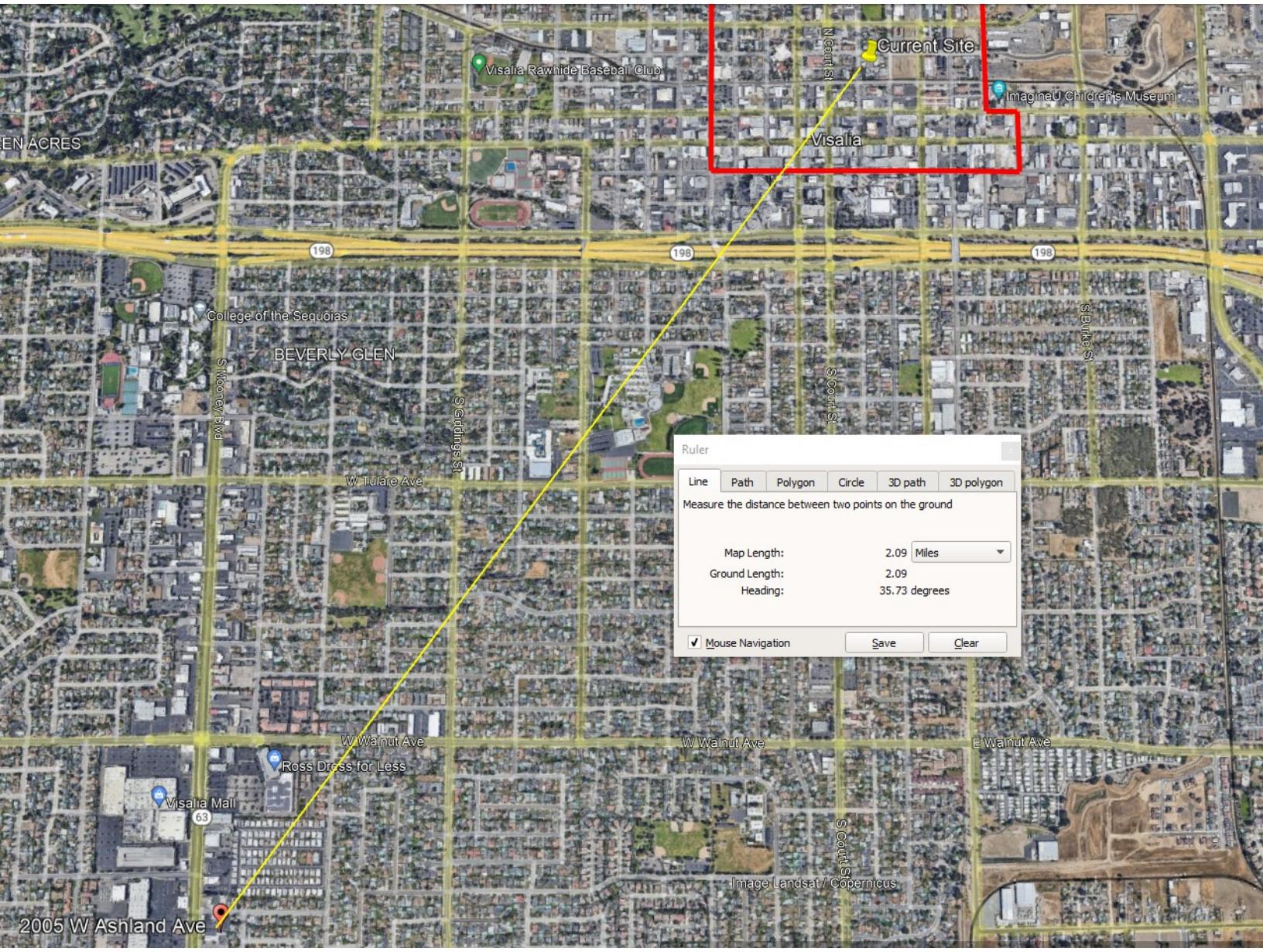






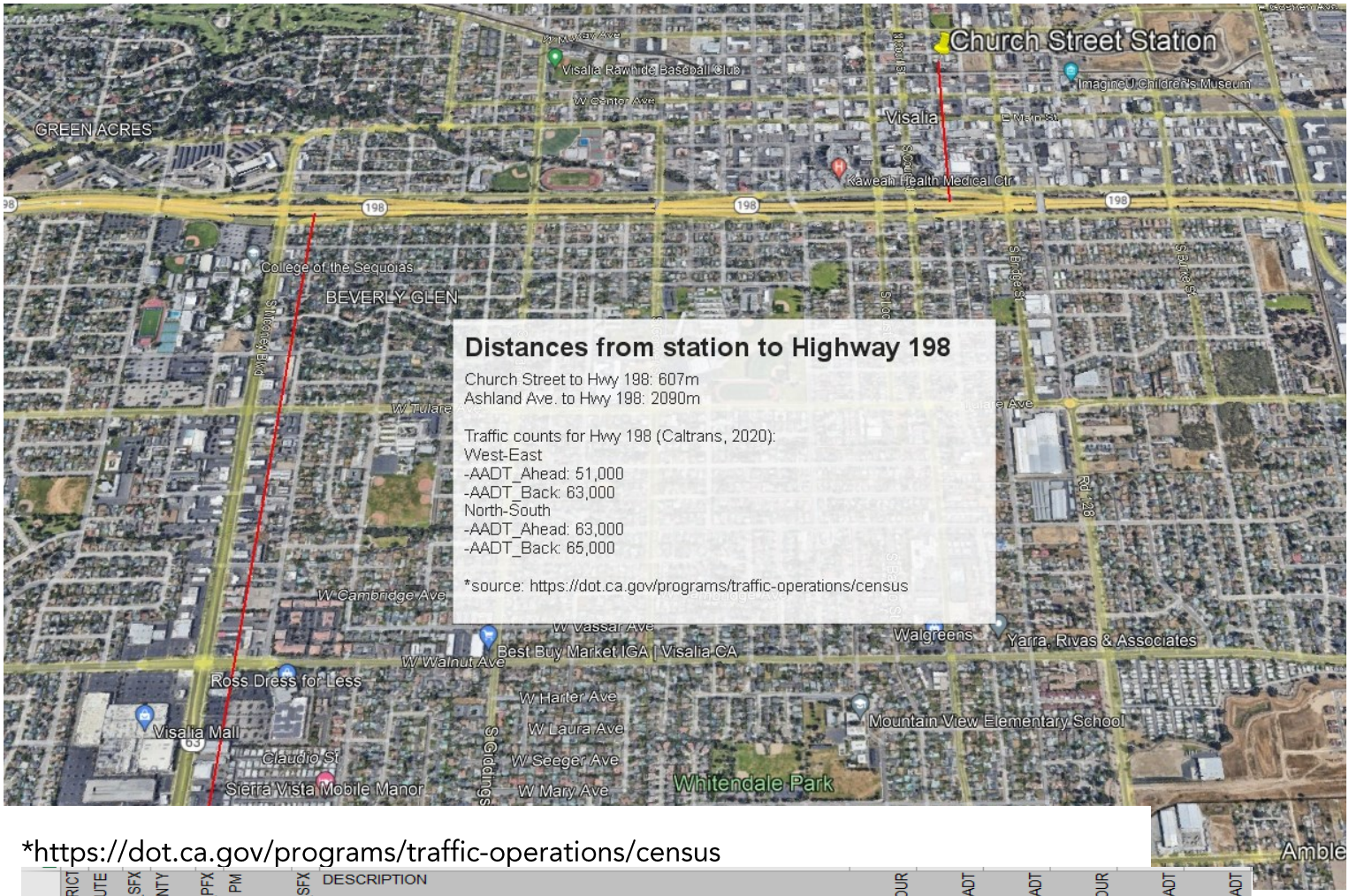
*Source: *https://www.epa.gov/outdoor-air-quality-data/download-daily-data*, updated 02/09/2023

Figure 1



Distance from 310 North Church Street to proposed relocation site at 2005 West Ashland Avenue (approximately 3,363 meters/ 2.09 miles).

Figure 2



*https://dot.ca.gov/programs/traffic-operations/census

	DISTRICT	ROUTE	RTE_SFX	COUNTY	PM_PFX	PM	PM_SFX	DESCRIPTION	BACK_PEAK_HOUR	BACK_PEAK_MADT	BACK_AADT	AHEAD_PEAK_HOUR	AHEAD_PEAK_MADT	AHEAD_AADT
2770	06	063		TUL		6.010		CALDWELL AVE (AVE 280)	1950	20500	19400	2700	28500	27000
2773	06	063		TUL	L	7.970		VISALIA, NOBLE AVE/MINERAL KING BLVD. W JCT. RTE. 198	2700	29000	27500	1150	12200	11600
2774	06	063		TUL	L	8.916	L	MINERAL KING @ WILLIS				1150	13700	11700
2775	06	063		TUL	L	9.226	L	MINERAL KING @ COURT	1150	13700	11700			
2777	06	063		TUL		7.980	R	VISALIA, EAST JCT. RTE. 198	1200	13500	12800	1150	14200	11700
2785	06	063		TUL		8.681	L	VISALIA, LOCUST/PINE STS	990	9900	8400	900	9000	7700
2821	06	065		TUL		39.577		JCT. RTE. 198	1100	9300	8600			
3902	06	099		TUL		30.578		PROSPERITY AVE	5400	65000	59000	5000	62000	55000
3906	06	099		TUL		36.411		CALDWELL AVE (AVE 280)	5800	68000	64000	6000	73000	64000
3909	06	099		TUL	R	38.714		VISALIA, JCT RTE 198	6000	73000	64000	5700	69000	61000
3910	06	099		TUL	R	38.750		JCT. RTE. 198 EAST	5700	69000	61000	5000	62000	54000
3911	06	099		TUL	R	38.980		JCT. RTE. 198 W	5000	62000	54000	4750	58000	51000
5959	06	198		TUL	R	8.753		VISALIA, JCT. RTE. 63 SOUTH	7000	76000	65000	6300	73000	63000
5960	06	198		TUL	R	9.967		VISALIA, JCT. RTE. 63 NORTH	6300	73000	63000	5100	62000	51000
5999	06	201		TUL	L	13.980		JCT. RTE. 63	210	1250	1150	600	5600	5400
6181	06	216		TUL	R	0.000		VISALIA, JCT. RTE. 198				1950	19700	18100
6183	06	216		TUL	R	0.488		VISALIA, GOSHEN AVE	1550	16300	14000	1400	14800	12700
6193	06	216		TUL		19.245		JCT. RTE. 198	160	1550	1200			
6321	06	245		TUL		0.000		JCT. RTE. 198				380	4100	3400

Figure 3

Approximate distances from roadways, vegetation in relation to Ashland Avenue monitoring station

Figure 4

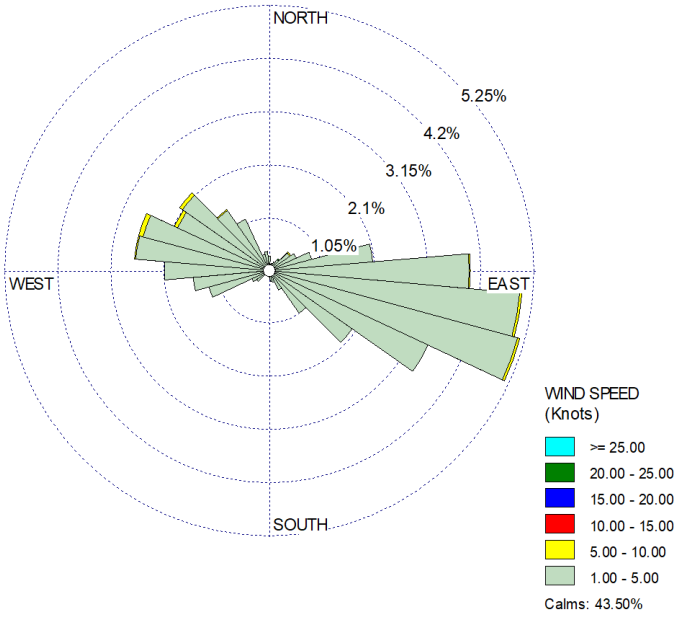
Dist	Rte	Rte Suffix	CO	Post Mile Prefix	Post Mile	Post Mile Suffix	Description	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
06	063		TUL		5.011		PARK AVENUE (AVENUE 272)	2200	24100	22900	2150	23800	22600
06	063		TUL		6.010		CALDWELL AVENUE (AVENUE 280)	2150	23800	22600	3000	33000	31500
06	063		TUL		6.990		VISALIA, WALNUT AVENUE (AVENUE 288)	2750	30500	29000	2450	27500	26000
06	063		TUL		7.490		VISALIA, TULARE AVENUE (AVENUE 292)	2450	27500	26000	2950	34000	33000

Figure 5

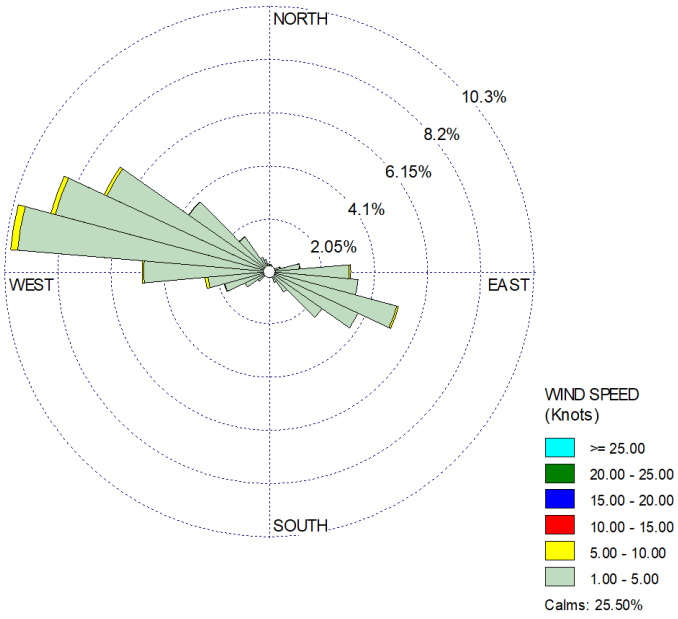
Roadway ave. daily traffic vehicles per day	O_3 and Oxides of N Neighborhood & Urban [1]	O_3 and Oxides of N Neighborhood. & Urban [1& 2]	CO Neighborhood
≤ 1,000	10	10	
10,000	10	20	
≤ 10,000			10
15,000	20	30	25
20,000	30	40	45
30,000			80
40,000	50	60	115
50,000			135
≥ 60,000			150
70,000	100	100	
≥110,000	250	250	

[1] Distance from the edge of the nearest traffic lane. The distance for intermediate traffic counts should be interpolated from the table values based on the actual traffic count.
[2] Applicable for ozone monitors whose placement has not already been approved as of December 18, 2006.

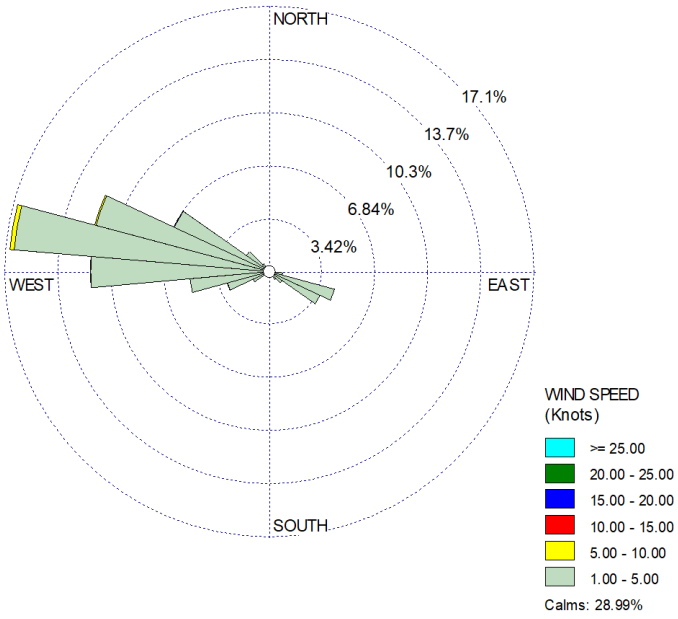
Figure 6- Wind Roses Based on Measurements at Visalia – N Church Street Monitoring Site during 2020-2021. Data available through December 15, 2021 with site relocated in January 2022.



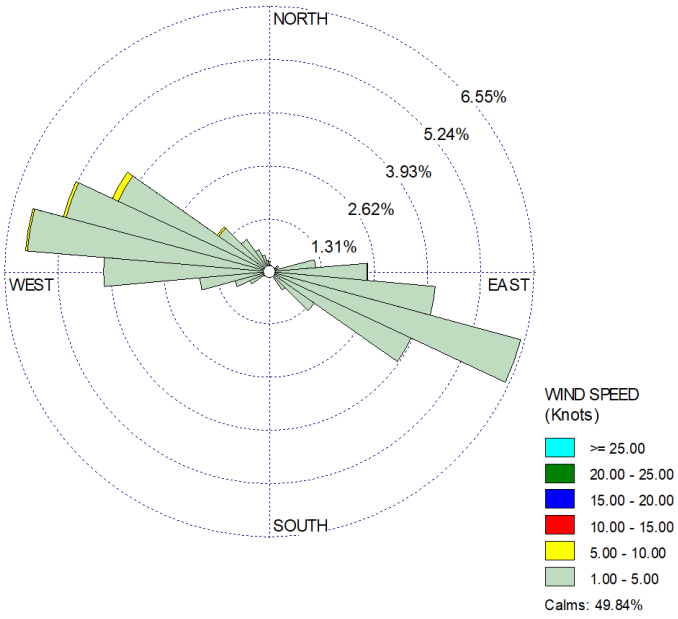
January, February, December during 2020-2021



March – May during 2020-2021

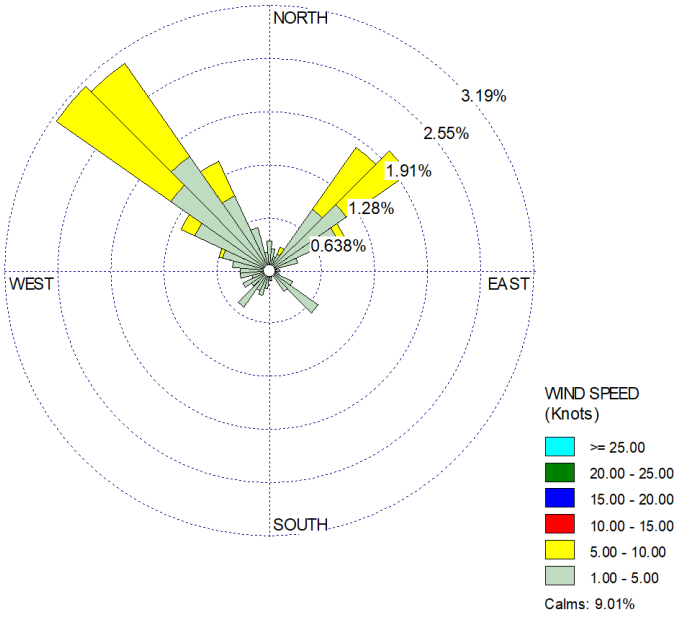


June – August during 2020-2021

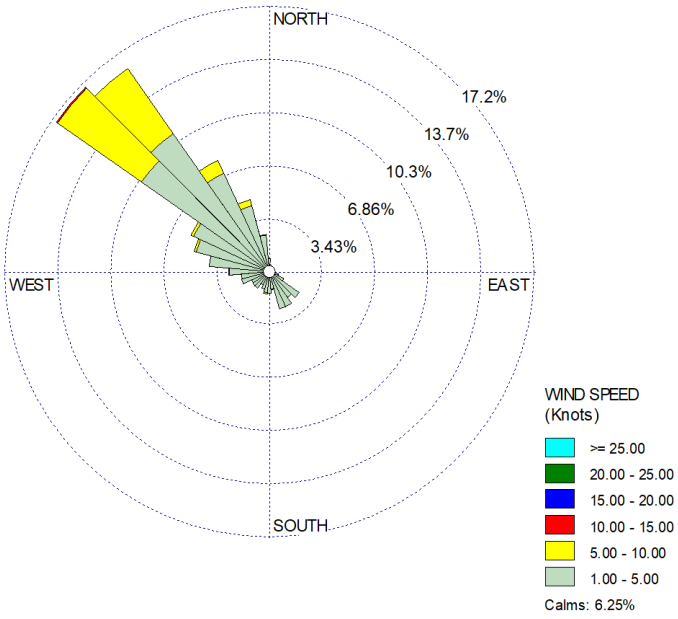


September – November during 2020-2021

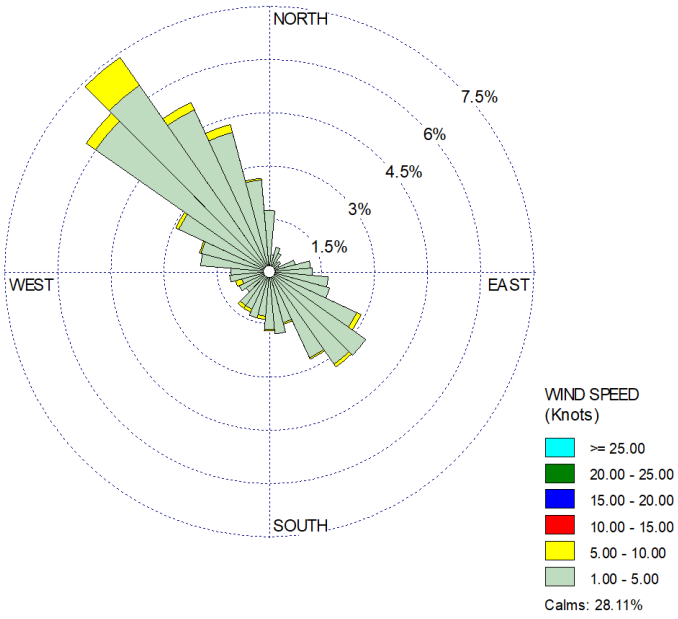
Figure 7- Wind Roses Based on Measurements at Visalia – W Ashland Avenue Monitoring Site during 2022. Data was available from May 3, 2022 through December 13, 2022.



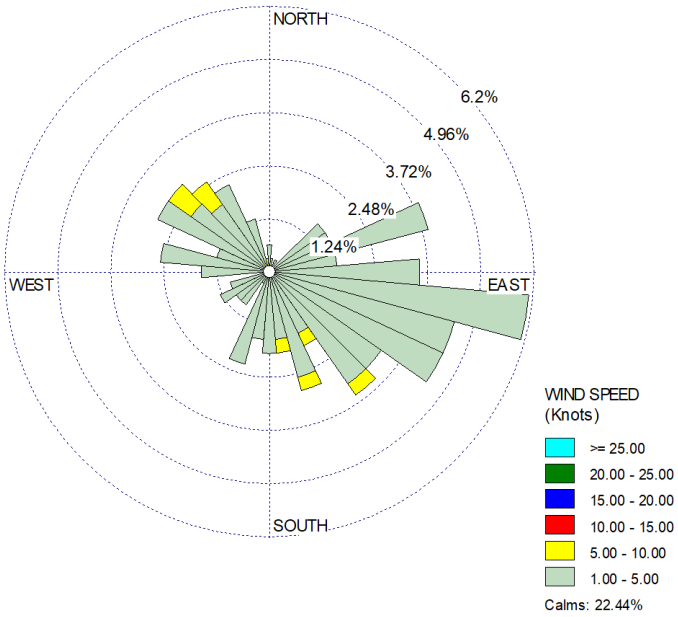
May 3-31, 2022



June – August during 2022



September – November during 2022



December 1-13, 2022

Figure 8

2020 Fire Map

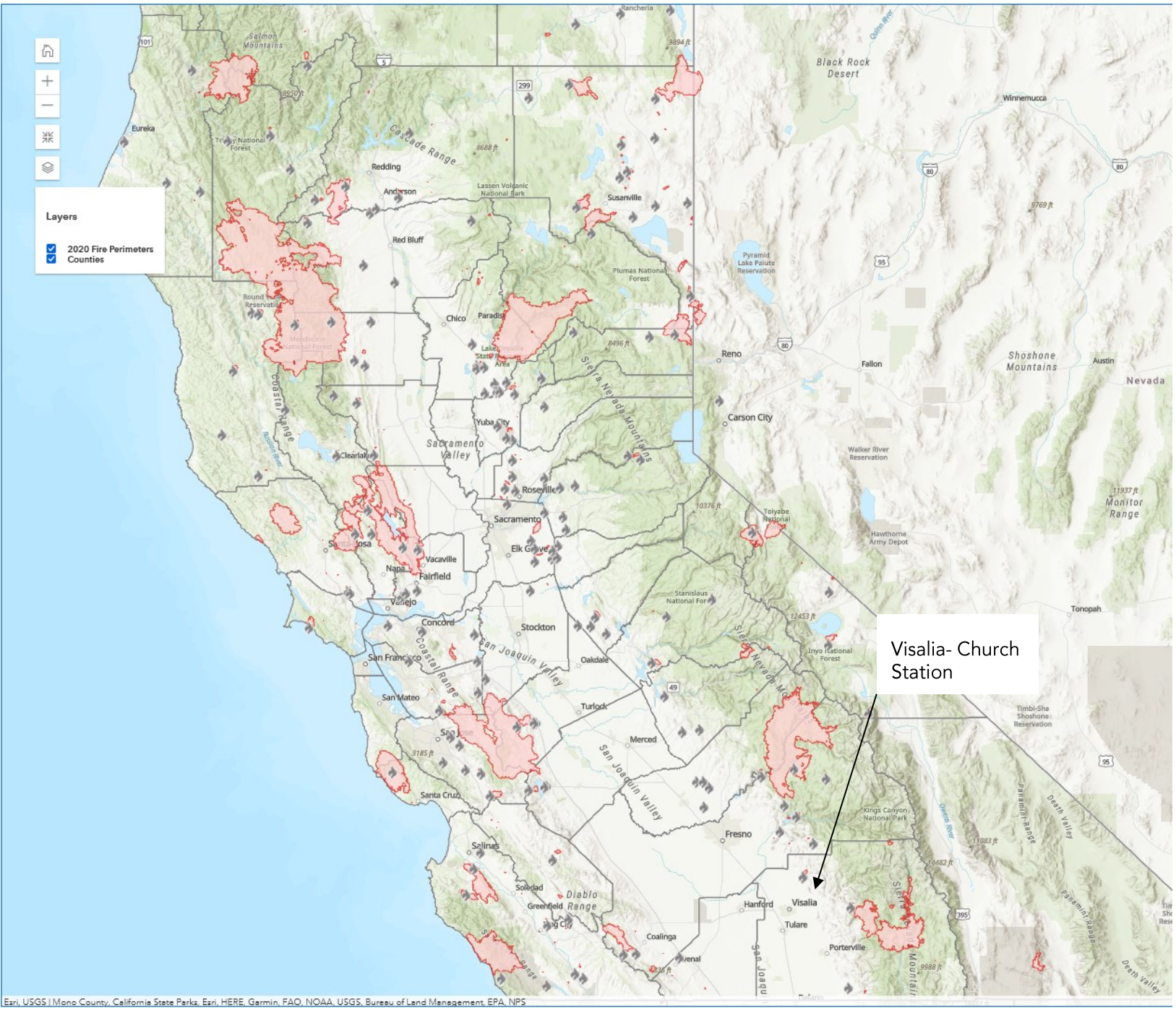


Figure 9

2021 Fire Map

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

April 11, 2023

Kathleen Gill
Chief, Air Quality Surveillance Branch
California Air Resources Board
4001 Iowa Avenue
P.O. Box 550099
Riverside, California 92507

Dear Kathleen Gill:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board (CARB) relocation of the O_3, $PM_{2.5}$, PM_{10}, and NO_2 State/Local Air Monitoring Station (SLAMS) monitors from the Visalia – Church St site (Air Quality System (AQS) Site ID: 06-107-2002) to the Visalia – West Ashland Avenue site (AQS ID: 06-107-2003). On March 7, 2023, CARB sent a letter to the EPA with a request for EPA approval of this network change. In this letter, CARB explained the need to relocate the Visalia – Church St monitoring site due to logistics beyond CARB's control (i.e., the building owner intends to expand into the leased space). Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors.

The Visalia – Church St NO_2 monitor relocation was reviewed under 40 CFR 58.14(b). Generally, relocations may be appropriate for approval if the new site is at a nearby location with the same scale of representation and similar sources (as discussed below), and if the relocation does not compromise data needed for implementation of the National Ambient Air Quality Standards (NAAQS) or if one of the criteria for monitor discontinuation under 40 CFR 58.14(c)(1) through (c)(5) are satisfied. EPA reviewed the NO_2 data against criteria in 40 CFR 58.14(c)(1). According to certified data from calendar years 2017-2021 in AQS, EPA determined that this monitor meets the requirements for discontinuation under 40 CFR 58.14(c)(1) and there is a less than 10 percent probability of exceeding 80 percent of the applicable NAAQS during the next three years at the site. Preliminary NO_2 data available from calendar year 2022 were consistent with the historical trend and continued to show low concentrations. This monitor is not required to meet 40 CFR part 58 Appendix D area-wide minimum monitoring or near-road monitoring requirements.

The Visalia – Church St O_3, $PM_{2.5}$, PM_{10} monitors were not eligible for removal under 40 CFR 58.14(c)(1) - (c)(5). These monitor relocations were 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."

The original Visalia – Church St site was located at 310 N Church St, Visalia, CA 93291. The relocation site, Visalia – West Ashland Avenue, is located at 2005 W Ashland Ave, Suite G, Visalia, CA 93277, approximately 3.4 kilometers southwest of the original site location. Both sites have a neighborhood scale of representation, meaning they are expected to have relatively uniform land use in the 0.5 to 4.0 kilometers spatial range. Both sites are in an area characterized by residential and commercial land use. The original and proposed relocation site are expected to measure similar O_3, $PM_{2.5}$, PM_{10}, concentrations from similar sources due to the consistency in land use and proximity to sources. This relocation will not prevent CARB from meeting 40 CFR part 58, Appendix D requirements.

In addition, CARB provided data for O_3, $PM_{2.5}$, PM_{10} and NO_2 at Visalia – Church St from January 1, 2019 through mid-December, 2021 and at Visalia – West Ashland Avenue from 2022. The results of this monitoring were consistent with the expectation of similar concentrations from similar sources. CARB also provided wind roses of data collected at Visalia – Church St from January 2020 through December 15, 2021 and Visalia – West Ashland Avenue from May 3, 2022 through December 13, 2022, showing similar wind speeds and direction between the two sites. The primary wind direction at Visalia - Church St was west during spring, summer, and fall and east during winter. The primary wind direction at Visalia – West Ashland Avenue was northwest during spring, summer and fall and southeast during winter.

Based on the assessment of the scale of representation and monitoring data at both locations, EPA has determined that CARB'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 Visalia – Church St O_3, $PM_{2.5}$, PM_{10}, and NO_2 SLAMS monitors to the proposed site, Visalia – West Ashland Avenue. 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 your next Annual Monitoring Network Plan.

If you have any questions, please feel free to contact me at (415) 972-3134 or Julia Carlstad at (415) 947-4107.

Sincerely,

Dena Vallano
Manager, Monitoring and Analysis Section
Air and Radiation Division

cc (via email): Jon Klassen, San Joaquin Valley Air Pollution Control District
Chay Thao, San Joaquin Valley Air Pollution Control District

Manisha Singh, CARB
Melissa Neiderreiter, CARB
Sylvia Vanderspek, CARB
Adolfo Garcia, CARB
Reggie Smith, CARB
Alicia Adams, CARB
Jin Xu, CARB
Kyle Ochoa, CARB

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

December 19, 2022

Bret Banks
Executive Director
Antelope Valley Air Quality Management District
2551 West Avenue H
Lancaster, California 93536

Dear Director Banks:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the Antelope Valley Air Quality Management District's (AVAQMD) relocation of the O_3, $PM_{2.5}$, PM_{10}, and NO_2 State/Local Air Monitoring Station (SLAMS) monitors at the Lancaster-Division Street (Air Quality System (AQS) ID: 06-037-9033) site. On November 16, 2022, AVAQMD emailed a letter dated November 14, 2022 and a supporting document to EPA with a request for EPA approval of this network change. In this letter, AVAQMD explained the need to relocate the Lancaster-Division Street monitoring site due to logistics beyond AVAQMD's control (i.e., the lease would not be renewed by the property manager and AVAQMD must vacate the property no later than December 2022). AVAQMD notes that they chose a relocation site that would ensure AVAQMD control and access over the property to avoid future moves (the relocation site is located at AVAQMD's headquarters). Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors. The Lancaster-Division Street O_3, $PM_{2.5}$, PM_{10}, and NO_2 monitors were not eligible for removal under 40 CFR 58.14(c)(1) - (c)(5). These monitor relocations were 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."

The original Lancaster-Division Street site was located at 43301 Division St, Lancaster, CA 93535. The relocation site, Lancaster Fairgrounds, is located at 2551 W. Avenue H, Lancaster, CA 93536, approximately eight kilometers northwest of the original site location. As described by AVAQMD, both the original and proposed sites scale of representativeness are defined as neighborhood scale for O_3, $PM_{2.5}$, PM_{10}, and NO_2, meaning pollutant concentrations are expected to be reasonably similar within some extended area of the city that has relatively uniform land use in the 0.5 to 4.0 kilometers spatial range. While the proposed site is further than four kilometers from the original site, both sites are in an area characterized by residential and commercial land use as well as undeveloped land. The sources that influence O_3, $PM_{2.5}$, PM_{10}, and NO_2 concentrations at the Lancaster-Division Street site are anticipated to be similar to the sources that would influence the concentrations at the Lancaster Fairgrounds site.

In addition, AVAQMD conducted a parallel monitoring study for O_3, $PM_{2.5}$, and PM_{10}. The O_3 study period occurred between January 1, 2022, and June 15, 2022, and the $PM_{2.5}$ and PM_{10} study period occurred between January 1, 2022 and September 16, 2022. However, the $PM_{2.5}$ and PM_{10} data collected

between January 1, 2022 and June 30, 2022 were not evaluated due to instrumentation issues, therefore only the data collected between June 30, 2022 and September 16, 2022 were considered. A parallel monitoring study for NO_2 was not conducted. The results of the parallel monitoring were consistent with the expectation of similar concentrations from similar sources. AVAQMD also provided wind roses of data collected between January 1, 2022 and August 2, 2022 at both sites. The wind direction was similar at both sites with a primary wind direction of west to southwest.

Based on the assessment of proximity, scale of representation, anticipated concentrations and parallel monitoring data, EPA has determined that AVAQMD's request meets the requirement that the replacement site is at a nearby location with the same scale of representation and approves AVAQMD's relocation of the Lancaster-Division Street site O_3, $PM_{2.5}$, PM_{10}, and NO_2 SLAMS monitors to the proposed site, Lancaster Fairgrounds. 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 include your request, this letter, and the relevant monitor and site information in the next California Air Resources Board (CARB) Annual Monitoring Network Plan.

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,

Gwen Yoshimura
Manager, Air Quality Analysis Office

cc (via email): Joel Craig, Consultant to AVAQMD
Manisha Singh, CARB
Melissa Niederreiter, CARB
Greg Gilani, CARB
Kathleen Gill, CARB
Sylvia Vanderspek, CARB
Jin Xu, CARB
Adolfo Garcia, CARB

CALIFORNIA
AIR RESOURCES BOARD

Gavin Newsom, Governor
Jared Blumenfeld, CalEPA Secretary
Liane M. Randolph, Chair

February 28, 2022

Ms. Gwen Yoshimura
U.S. Environmental Protection Agency, Region 9
Air Quality Analysis Office (AIR-4-2)
75 Hawthorne Street
San Francisco, California 94105
Yoshimura.Gwen@epa.gov

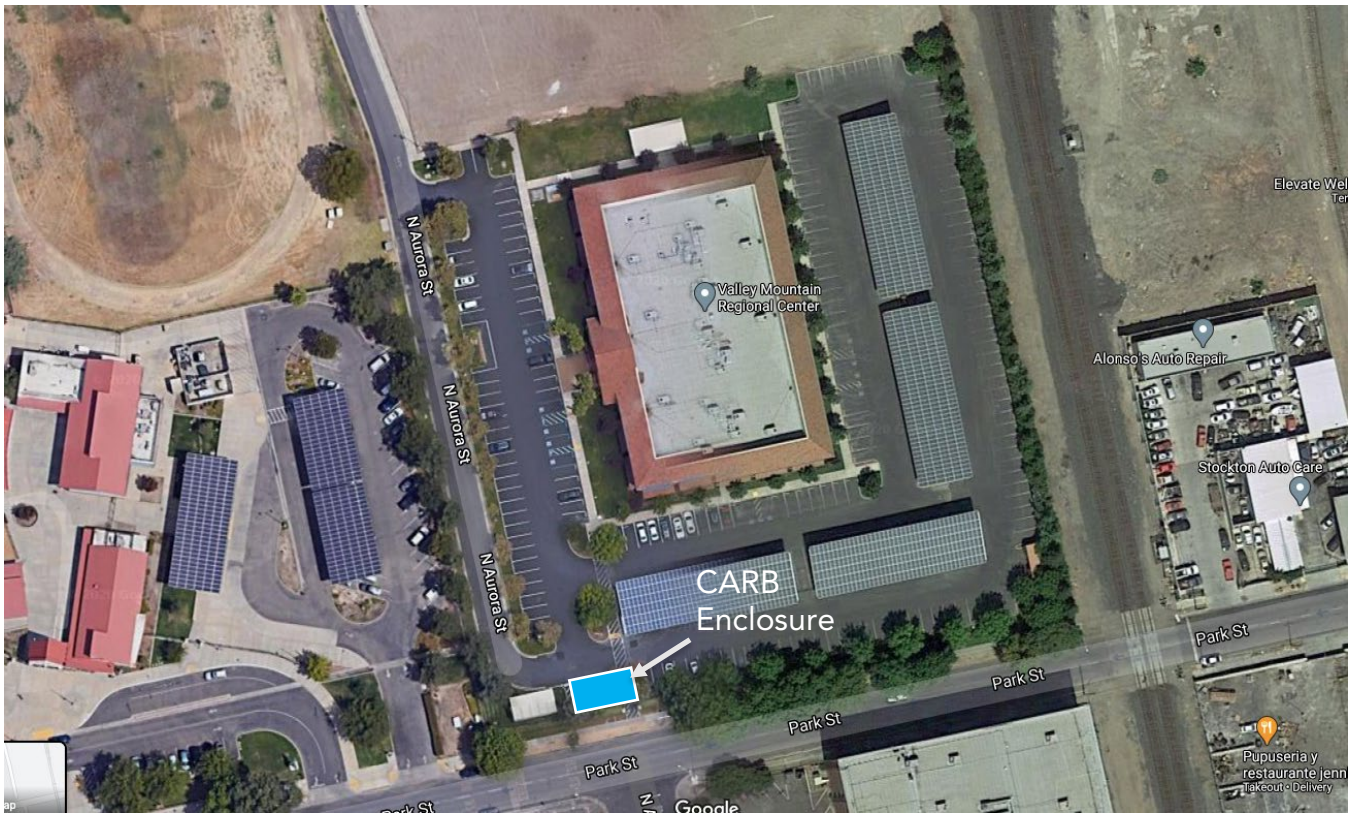
Dear Ms. Yoshimura:

The California Air Resources Board (CARB) is requesting approval from U.S. EPA to close down the ambient air monitoring station at Stockton - Hazelton (AQS # ***060771002)*** and relocate to Stockton - University Park (AQS # ***060771003)*** based on 40CFR Part 58.14 (6): *A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.*

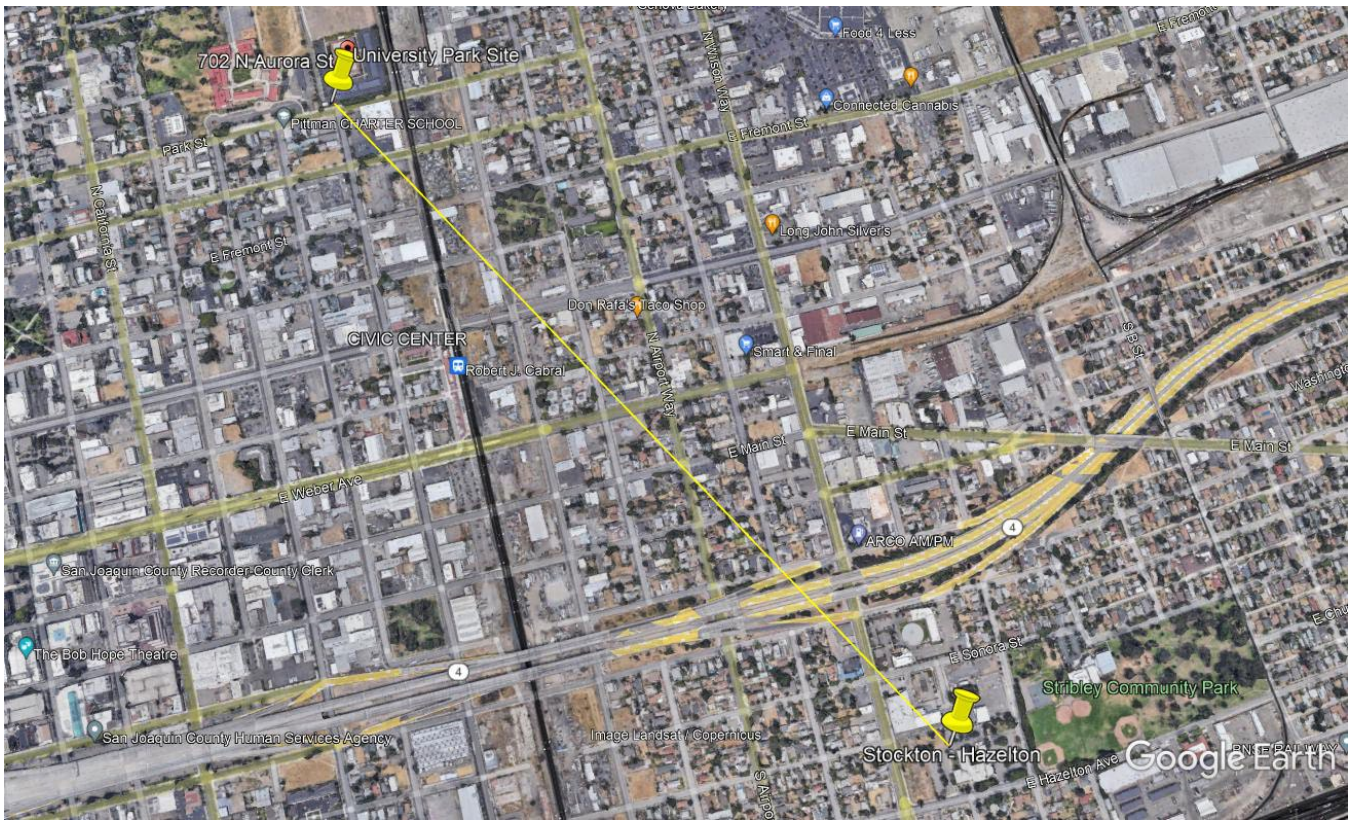
CARB's Monitoring and Laboratory Division (MLD) was notified early January 2019, that the property where the Stockton - Hazelton station resided (1593 E Hazelton Street) was scheduled for demolition/reconstruction by early August 2020. The Hazelton site property managers were unable to provide an alternative location elsewhere on the property. MLD staff reached out to CARB's Air Quality Planning and Science Division (AQPSD) for suitable alternative monitoring areas to establish a new monitoring station. AQPSD generated a map with five (5) potential areas based on historical data - each area identified as priority one (1) through five (5). MLD thoroughly investigated the entire area surrounding the Hazelton monitoring station (more than 12 square miles of buildings and open land) with added focus to the five priority areas supplied by AQPSD. CARB also met with local community groups/members for input on site relocation. Following multiple, extensive on-site searches, including evaluation of 30 sites recommended by community members, MLD located a suitable site within AQPSD's priority area #2, one mile northwest of the Hazelton monitoring station: University Park at 702 N Aurora Street. The University Park location met siting criteria and Park property management were willing to negotiate a long-term lease with the State of California. In the meantime, Hazelton demolition was delayed until November 2021. Per Hazelton property management mandate, the Hazelton monitoring station was closed down and all equipment removed by first week of November 2021.

The priority map that AQPSD generated is displayed below. The five (5) circles represent priority areas for the new monitoring station; labeled 1 - 5. The small yellow pin directly to the southeast of circle #2 indicates the location of the previous Stockton - Hazelton monitoring station.

After finalizing the Stockton - University Park lease negotiation and completing required site Improvements (i.e. enclosure installation, power installation, pad preparation, staircase/platform installation, fencing, monitoring equipment installation, etc.), the Stockton - University Park monitoring station was configured and online beginning the first week of November 2021. A Google earth map below displays the location of the new Stockton - University Park 702 N. Aurora Street location; south of North Aurora Street, directly north of Park Street. This site is contained within the University Park property, just to the east of the Pittman Elementary School (red roof buildings and solar parking area on the left side of the picture).



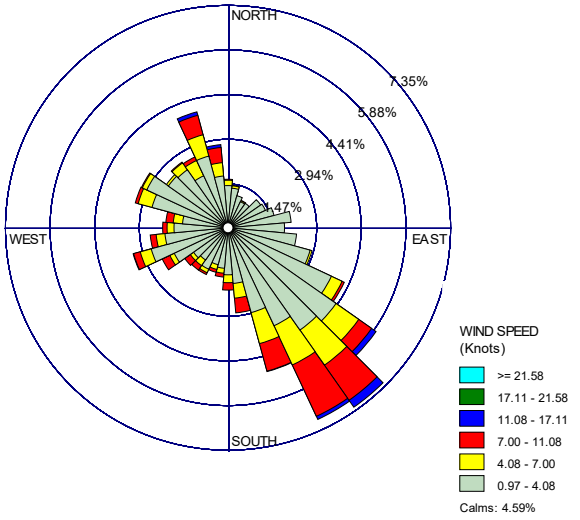
The map below displays the relationship of the Stockton - Hazelton site (lower right yellow pin) to the new Stockton - University Park site (upper left yellow pin). The map's yellow line connecting both pins represents a 1.0 mile distance.



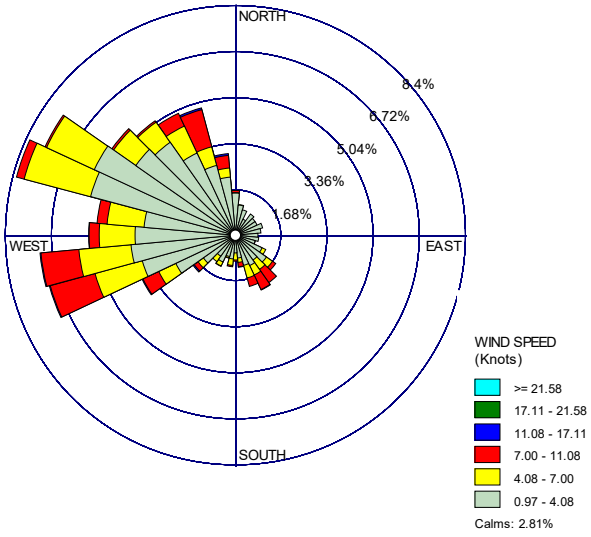
Seasonal wind speeds and direction are expected to remain similarly consistent at both sites. All parameters (and methods) previously monitored at the Hazelton site are being monitored at the University Park site. Due to mandated Hazelton closure and University startup timelines, no parallel monitoring was possible. In addition, as the Hazelton site was surrounded by multiple months of demolition and construction activities, data comparisons between Hazelton and University Park sites would most likely have been heavily impacted by the activities directly surrounding the Hazelton station.

The following two pages display Stockton - Hazelton wind roses for the 2017 - 2019 time period. These roses are believed representative to the new University Park monitoring station as well:

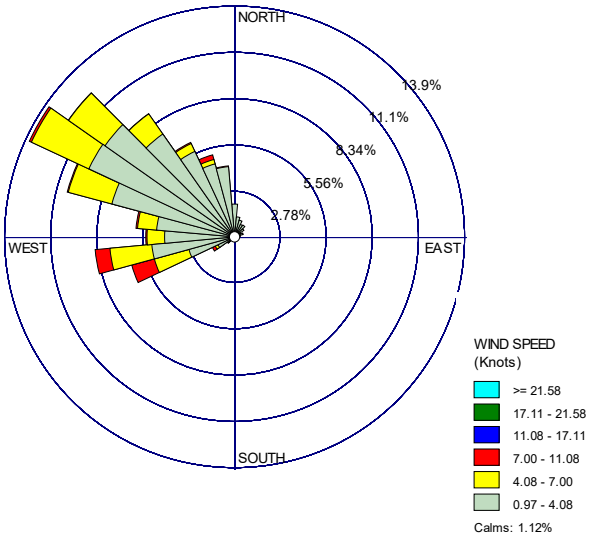
Wind Roses Based on Measurements at Stockton – Hazelton Monitoring Site during 2017-2019



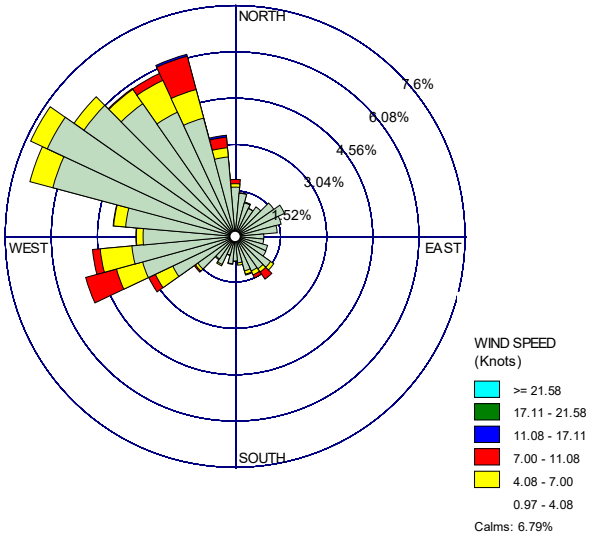
January, February, December, 2017-2019



March – May, 2017-2019



June – August, 2017-2019



The Stockton - University Park site is representative of the exposure of sensitive groups, meets the siting criteria for the air monitoring network (SLAMS and Toxics), and has similar spatial and land-use patterns as the previous Stockton - Hazelton site. As the new University Park site is located 1.0 mile to the northwest of the previous Hazelton site, the University Park site is expected to measure the impact of similar sources and maintain a historical trend without introducing significant bias.

If you have any questions or require additional information, please contact Mr. Mac McDougall at (916)327-4720 or via email at mac.mcdougall@arb.ca.gov.

Sincerely,

Kathleen Gill, Chief
Air Quality Surveillance Branch
Monitoring and Laboratory Division

cc: See next page

cc:

Randall Chang, U.S. EPA, Region 9, Air and Radiation Division

Jon Klassen, Director, San Joaquin Unified Air Pollution Control District

Sylvia Vanderspek, Chief, Air Quality Planning Branch, CARB

Manisha Singh, Chief, Quality Management Branch, CARB

Jin Xu, Air Resources Supervisor, AQPB, CARB

Mac McDougall, Air Resources Supervisor, AQSB, CARB

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

July 20, 2022

Kathleen Gill
Chief, Air Quality Surveillance Branch
Monitoring and Laboratory Division
California Air Resources Board
1927 13th Street
Sacramento, California 95811

Dear Kathleen Gill:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board's (CARB) relocation of the $PM_{2.5}$, PM_{10}, O_3, NO_2, and CO State/Local Air Monitoring Station (SLAMS) monitors from the Stockton - Hazelton site (Air Quality System (AQS) Site ID: 06-077-1002) to the Stockton – University Park site (AQS ID: 06-077-1003). On February 28, 2022, CARB sent a letter to EPA with a request for EPA approval of this network change. In this letter, CARB explained the need to relocate the Stockton – Hazelton monitoring site due to logistics beyond CARB's control (i.e., the property where the site was located was scheduled for demolition/reconstruction, and the property owners were unable to provide an alternate location) and noted that they solicited input from local community groups/members for this proposed relocation site selection. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors.

The Stockton NO_2 and CO monitor relocations were reviewed under 40 CFR 58.14(b). Generally, relocations may be appropriate for approval if the new site is at a nearby location with the same scale of representation and similar sources (as discussed below), and if the relocation does not compromise data needed for implementation of the National Ambient Air Quality Standards (NAAQS) or if one of the criteria for monitor discontinuation under 40 CFR 58.14(c)(1) through (c)(5) are satisfied. EPA reviewed the NO_2 and CO data against criteria in 40 CFR 58(c)(1). As the site stopped collecting data in early November 2021, EPA reviewed the most recently available complete calendar years of data. According to certified data from 2016-2020 in AQS, EPA determined that these monitors meet the requirements for discontinuation under 40 CFR 58.14(c)(1) and there is a less than 10 percent probability of exceeding 80 percent of the applicable NAAQS during the next three years at the site. NO_2 and CO data available from calendar year 2021 were consistent with the historical trend and continued to show low concentrations.

The Stockton $PM_{2.5}$, PM_{10}, and O_3 monitors were not eligible for removal under 40 CFR 58.14(c)(1) - (c)(5). These monitor relocations were 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."

The original Stockton – Hazelton site was located at 1593 East Hazelton Street, Stockton, CA 95490. The relocation site, Stockton – University Park, is located at 702 North Aurora, Stockton, CA 95490, approximately one mile northwest of the original site location. As described in CARB's 2022 Annual Network Plan[1], both sites have a neighborhood scale of representation, meaning they are expected to have relatively uniform land use in the 0.5 to 4.0 kilometers spatial range. Both sites are in an area characterized by residential and commercial land use. The original and proposed relocation site are expected to measure similar $PM_{2.5}$, PM_{10}, O_3, NO_2, and CO concentrations from similar sources due to the consistency in land use and proximity to sources, similar wind speeds and direction. This relocation will not prevent CARB 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 CARB'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 Stockton - Hazelton $PM_{2.5}$, PM_{10}, O_3, NO_2, and CO SLAMS monitors to the proposed site, Stockton – University Park. 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 your next 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
Melissa Niederreiter, CARB
Sylvia Vanderspek, CARB
Jin Xu, CARB
Eric McDougall, CARB
Jon Klassen, San Joaquin Valley Air Pollution Control District
Chay Thao, San Joaquin Valley Air Pollution Control District

[1] Available at https://ww2.arb.ca.gov/our-work/programs/ambient-air-monitoring-regulatory/annual-monitoring-network-report

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

February 3, 2023

Cody Gibbons
Air Quality Specialist
San Luis Obispo County Air Pollution Control District
3433 Roberto Court
San Luis Obispo, California 93401

Dear Air Quality Specialist Gibbons:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the San Luis Obispo County Air Pollution Control District (SLOCAPCD) relocation of the O_3 State/Local Air Monitoring Station (SLAMS) monitor from the Morro Bay site (Air Quality System (AQS) Site ID: 06-079-3001) to the Morro Bay – Kings Ave site (AQS ID: 06-079-3002). On January 4, 2023, SLOCAPCD sent a letter to EPA with a request for EPA approval of this network change. In this letter, SLOCAPCD explained the need to relocate the Morro Bay monitoring site due to logistics beyond SLOCAPCD's control (i.e., the property where the site was located was scheduled for expansion/reconstruction, and the property owners were unable to provide an alternate location). Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors.

The Morro Bay O_3 monitor relocation was reviewed under 40 CFR 58.14(b). Generally, relocations may be appropriate for approval if the new site is at a nearby location with the same scale of representation and similar sources (as discussed below), and if the relocation does not compromise data needed for implementation of the National Ambient Air Quality Standards (NAAQS) or if one of the criteria for monitor discontinuation under 40 CFR 58.14(c)(1) through (c)(5) are satisfied.

EPA reviewed the O_3 data against criteria in 40 CFR 58(c)(1). According to certified data from 2017-2021 in AQS, EPA determined that this monitor meets the requirements for discontinuation under 40 CFR 58.14(c)(1) and there is a less than 10 percent probability of exceeding 80 percent of the applicable NAAQS during the next three years at the site. Preliminary O_3 data available from calendar year 2022 were consistent with the historical trend and continued to show low concentrations.

The original Morro Bay site was located at 899 Morro Bay Blvd., Morro Bay, CA 93442. The relocation site, Morro Bay – Kings Ave, is located at 492 Kings Ave., Morro Bay, CA 93442 (35.361589, -120.836819), approximately one mile northwest of the original site location. As described in SLOCAPCD's letter, both sites have a regional scale of representation, meaning they are expected to have relatively uniform land use in the tens to hundreds of kilometers of spatial range. Both sites are in

an area characterized by predominantly residential land use. The original and proposed relocation site are expected to measure similar O_3, concentrations from similar sources due to the consistency in land use and proximity to sources, similar wind speeds, and similar wind direction. This relocation will not prevent SLOCAPCD from meeting 40 CFR part 58, Appendix D requirements.

Based on consideration of this information, EPA approves relocation of the Morro Bay site O_3 SLAMS monitor to the proposed site, Morro Bay – Kings Ave. 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 your next Annual Monitoring Network Plan.

If you have any questions, please feel free to contact me at (415) 947-4134 or Julia Carlstad of my staff at (415) 947-4107.

Sincerely,

Gwen Yoshimura
Manager, Air Quality Analysis Office

cc (via email): Kyle Vagadori, CARB

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

December 20, 2022

Ms. Gwen Yoshimura
Air Quality Analysis Office
Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

Subject: Request Approval of the removal of speciated VOC measurements and reactive oxides of nitrogen from Folsom-Natoma Street (AQS ID: 06-067-0012) Ambient Air Monitoring Site and speciated VOC measurements from Elk Grove-Bruceville (AQS ID: 06-067-011) Ambient Air Monitoring Site

Dear Ms. Yoshimura:

On October 1, 2015 U.S EPA substantially revised the PAMS requirement in 40CFR 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 population of 1,000,000 or more. 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.

As part of CARB's 2020 5-year Network Assessment Plan, (5-year Plan) Appendix A-1 of the EMP for ozone outlined Sacramento's future PAMs network. This included adding hourly VOC measurements to the NCore site (Del Paso Manor 06-067-006), adding a ceilometer at the Elk Grove site (06-067-011)[1] and discontinuing speciated VOC measurement at Elk Grove site and the Folsom site (06-067-012). In addition, discontinuing reactive oxides of nitrogen (NOY) at Folsom site. All other PAMS parameters will continue to be monitored.

The District is currently working to expand the Del Paso Manor building to accommodate these new requirements and is in the construction development phase to renovate the Del Paso Manor site structure. Due to the timing of the construction and existing problems with VOC Xontech 910A sampler, VOC measurements has temporarily ceased collection

[1] Waiver obtained from U.S EPA - 20171030_SacMetro_2017ANP_letterAndEnclosure.pdf

starting in summer 2021, but will restart when the station construction is complete, which is expected by summer 2023. The Folsom and Bruceville sites have also stopped collecting speciated VOCs since it is no longer required under the new PAMS monitoring requirements effective July 1, 2021.

This letter is to document and formally request approval from the United States Environmental Protection Agency (EPA) to:

- Shut down the speciated VOC monitoring (Xontech 910A/912) and reactive oxides of nitrogen (NOY) monitoring (TEI 42I-Y) from Folsom-Natoma Street ambient air monitoring site.

- Shut down speciated VOC monitoring (Xontech 910A/912) from Elk Grove-Bruceville ambient air monitoring site.

This request follows the requirements under Title 40 of the Code of Federal Regulations (CFR) Part 58 Ambient Air Quality Surveillance, Subpart B and follows CARB's submittal of the PAMS EMP. Discontinuation of these monitor will free up resources and allow SMAQMD to focus on more critical monitoring activities.

Sincerely,

Mark S. Loutzenhiser

Mark Loutzenhiser
Division Manager
Program Coordination Division

CC:

Shaye Hong, USEPA
Kyle Vagadori, CARB
Peishi (Bob) Gu, CARB Planning
Janice Lam Snyder, SMAQMD
David Yang, SMAQMD
Levi Ford, SMAQMD

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street

March 20, 2023

Mark Loutzenhiser
Division Manager, Program Coordination Division
Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor
Sacramento, California 95814-1908

Dear Manager Loutzenhiser,

This letter transmits the U.S Environmental Protection Agency's (EPA's) formal approval of Sacramento Metropolitan Air Quality Management District's (SMAQMD's) December 20, 2022 letter requesting changes to its Photochemical Assessment Monitoring Stations (PAMS) network. Specifically, the EPA approves the discontinuation of PAMS speciated volatile organic compound (VOC) parameters at the Folsom Natoma (Air Quality System (AQS) ID: 06-067-0012) and Elk Grove Bruceville (AQS ID: 06-067-0011) monitoring sites, as well as reactive oxides of nitrogen (NO_y) parameters at the Folsom Natoma monitoring site. As part of the California Air Resources Board's (CARB's) 2020 5-year Network Assessment Plan, Appendix A-1 of the Enhanced Monitoring Plan, CARB supported discontinuation of VOC and NO_y monitoring at the Folsom Natoma and Elk Grove Bruceville sites to offset the demands at the Del Paso Manor (AQS ID: 06-067-0006) NCore site and save staff time and resources. EPA acknowledges that the PAMS requirements were revised when EPA promulgated the 2015 8-hour Ozone National Ambient Air Quality Standards on October 1, 2015, and we support SMAQMD's efforts to assess which PAMS measurements are currently necessary and appropriate.

SMAQMD stated in their letter that they are currently working to expand the Del Paso Manor building to accommodate the new PAMS requirements and is in the development phase to renovate the Del Paso Manor site structure. The Del Paso Manor site will satisfy NCore and PAMS requirements specified in 40 CFR 58 Appendix D. Since NO_y monitoring is required for all NCore sites, EPA encourages SMAQMD to continue NO_y operation at the Folsom Natoma monitoring site until Del Paso Manor NO_y is fully operational to maintain a continuous data record.

If you have any questions, please feel free to contact me at (415) 972-3134 or Shaye Hong at (415) 947-4104.

Sincerely,

Dena Vallano
Manager, Monitoring and Analysis Section

cc (via email): Kyle Vagadori, CARB
Peishi (Bob) Gu, CARB
Janice Lam Snyder, SMAQMD
David Yang, SMAQMD
Levi Ford, SMAQMD

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

June 16, 2022

Molly Pearson
Planning Division Manager
Santa Barbara County Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, California 93110

Dear Manager Pearson:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the Santa Barbara County Air Pollution Control District's (SBCAPCD) new State/Local Air Monitoring Station (SLAMS) monitors at the new Santa Maria Lakeview site (Air Quality System (AQS) Site ID: 06-083-1009). A request for EPA approval of this network change was submitted to EPA on March 1, 2022. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for modification to their monitoring network. SLAMS monitors must meet all applicable 40 CFR 58 requirements, including the quality assurance requirements, network design criteria, and siting requirements specified in appendices A, C, D, and E. EPA reviewed SBCAPCD's request and concluded that the applicable criteria contained in 40 CFR 58 are met; EPA therefore approves the new O_3, $PM_{2.5}$, and PM_{10} SLAMS monitors at the Santa Maria Lakeview site. Please include this letter and the relevant monitor and site information in the next SBCAPCD annual monitoring network plan.

If you have any questions, please feel free to contact me at (415) 947-4134 or Sheila Tsai of my staff at (415) 972-3328.

Sincerely,

Gwen Yoshimura
Manager, Air Quality Analysis Office

cc (via email): Manisha Singh, California Air Resources Board (CARB)
Andrea McStocker, CARB
Melissa Niederreiter, CARB
Kathleen Gill, CARB
Adolfo Garcia, CARB
Sylvia Vanderspek, CARB
Jin Xu, CARB

CALIFORNIA
AIR RESOURCES BOARD

Gavin Newsom, Governor
Yana Garcia, CalEPA Secretary
Liane M. Randolph, Chair

September 9, 2022

Ms. Gwen Yoshimura
U.S. Environmental Protection Agency, Region 9
Air Quality Analysis Office (AIR-4-2)
75 Hawthorne Street
San Francisco, California 94105
Yoshimura.Gwen@epa.gov

Dear Ms. Yoshimura:

The California Air Resources Board (CARB) is requesting approval from U.S. EPA to discontinue Trace Carbon Monoxide (Trace CO) monitoring at four (4) California Air Resources Board (CARB) locations: Chico – East (AQS# 060070008), Stockton – University Park (AQS# 060771003), Modesto – 14th Street (AQS# 060990005) and Calexico - Ethel (AQS# 060250005).

As stated in CARB's 2022 Annual Network Plan (ANP), Section 5C: Carbon Monoxide (CO), "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*."

In the 2022 CARB ANP, Section 5C: "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."

2022 CARB Annual Network Plan Table 14

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)

"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)."

The CO National and California Ambient Air Quality Standards are:

	1-Hr Average	8-Hr Average
National Ambient Air Quality Standard	35 ppm	9 ppm
California Ambient Air Quality Standard	20 ppm	9.0 ppm

CARB's Trace CO monitors are spanned at 4 ppm, less than half the value of the 9 ppm 8-hour Standard. Due to the Trace CO range and calibration concentrations, if any reported value were to equal or exceed the 9 ppm 8-hour average, this value would exceed the instrument's range and therefore would be unusable for regulatory purposes.

In addition, Trace CO monitoring requires utilization of expensive, high maintenance equipment. When CARB's existing network Trace CO monitors reached end-of-life, replacement Trace CO monitors were purchased and installed at monitoring stations. These replacements have shown that they cannot maintain zero drift criteria and as such, are unsuitable for deployment. Almost two years after receiving replacement monitors and working with the manufacturer, no short- or long-term solution is in sight.

Based on the 2022 CARB ANP statement to work with US EPA to close CO monitoring at the four (4) sites and the current unavailability of replacement Trace CO monitors, CARB is requesting US EPA's approval to discontinue Trace CO monitoring at Chico, Stockton, Modesto, and Calexico.

If you have any questions or require additional information, please contact Mr. Mac McDougall at (916)327-4720 or via email at *mac.mcdougall@arb.ca.gov*.

Sincerely,

Kathleen Gill
Chief, Air Quality Surveillance Branch
Monitoring and Laboratory Division

cc: See next page

cc:

Mike Miguel, Acting Chief, Monitoring and Laboratory Division
Michael T. Benjamin, Chief, Air Quality Planning and Science Division
Sylvia Vanderspek, Chief, Air Quality Planning Branch
Mac McDougall, Manager, Air Monitoring North Section
Adolfo Garcia, Manager, Air Monitoring South Section

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

January 12, 2021

Kathleen Gill
Chief, Air Quality Surveillance Branch
Monitoring and Laboratory Division
California Air Resources Board
1927 13th Street
Sacramento, CA 95811

Gary Willey
Air Pollution Control Officer
San Luis Obispo County Air Pollution Control District
3433 Roberto Court
San Luis Obispo, CA 93401

Dear Chief Gill and Air Pollution Control Officer Willey:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board's (CARB's) discontinuation of the O_3, $PM_{2.5}$, and PM_{10} State/Local Air Monitoring Station (SLAMS) monitors at the San Luis Obispo-Higuera Street site (Air Quality System (AQS) Site ID: 06-079-2006), as well as the approval of San Luis Obispo County Air Pollution Control District's (SLOCAPCD's) proposed $PM_{2.5}$ and PM_{10} SLAMS monitors at the new San Luis Obispo site (AQS ID: 06-079-2020) at 3433 Roberto Court, San Luis Obispo, CA 93401. On October 15, 2020, SLOCAPCD sent a letter to EPA describing the proposal to establish $PM_{2.5}$ and PM_{10} monitoring at the new San Luis Obispo site. On December 30, 2020, CARB sent a letter to EPA describing the proposal to discontinue O_3, $PM_{2.5}$, and PM_{10} monitoring at the San Luis Obispo-Higuera St. site. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors and approval of new SLAMS monitors.

Discontinuation of the O_3, $PM_{2.5}$ and PM_{10} SLAMS CARB-operated monitors was reviewed by EPA against criteria contained in 40 CFR 58.14(c), which states that requests for discontinuation "may also be approved on a case-by-case basis if discontinuance does not compromise data collection needed for

implementation of a NAAQS and if the requirements of appendix D to this part, if any, continue to be met."

According to certified data submitted to EPA's AQS, the O_3 monitor was in attainment of the 2008 and 2015 8-hour O_3 National Ambient Air Quality Standards (NAAQS) from 2015-2019. During 2015-2019, the 4th maximum daily 8-hour O_3 concentrations were generally at least 10 parts per billion (ppb) below the 2015 NAAQS. Preliminary 2020 data are consistent with the historical trends and continue to show attainment of the NAAQS. This O_3 SLAMs monitor is not specifically required by an attainment or maintenance plan and is not the maximum O_3 concentration site in the San Luis Obispo-Paso Robles Metropolitan Statistical Area (MSA). CARB and SLOCAPCD will continue to operate seven SLAMS O_3 monitors in the MSA, including the SLOCAPCD-operated Morro Bay O_3 monitor that records similar concentrations to and is located ~12 miles away from the San Luis Obispo-Higuera St. site. Furthermore, discontinuance of this monitor does not compromise data collection needed for implementation of the NAAQS and will not prevent SLOCAPCD from meeting 40 CFR 58 Appendix D requirements.

According to certified data submitted to EPA's AQS, the San Luis Obispo-Higuera St. site was in attainment of the 2012 annual $PM_{2.5}$ NAAQS, 2006 24-hour $PM_{2.5}$ NAAQS and 1987 24-hour PM_{10} NAAQS from 2017-2019; 2015-2016 design values were invalid due to a siting issue and subsequent suspension of sampling operations during those years. Preliminary 2020 data are consistent with the historical trends and continue to show attainment of all relevant NAAQS. As demonstrated in CARB's letter and supporting documentation, the San Luis-Obispo-Higuera St. site is not and is unlikely to become the maximum $PM_{2.5}$ concentration site for the county, and all annual $PM_{2.5}$ averages, annual $PM_{2.5}$ 98th percentile values, and valid and invalid $PM_{2.5}$ design values for the site between 2015 and 2019 are below the corresponding NAAQS. No 24-hr PM_{10} exceedances were recorded in the last five years at San Luis-Obispo-Higuera St. site. Furthermore, discontinuance of these monitors does not compromise data collection needed for implementation of the $PM_{2.5}$ and PM_{10} NAAQS and will not prevent SLOCAPCD from meeting 40 CER 58 Appendix D requirements. As mentioned above and elaborated upon below, SLOCAPCD will continue $PM_{2.5}$ and PM_{10} SLAMS monitoring at a new San Luis Obispo site in the area.

Discontinuation of monitoring at San Luis Obispo-Higuera St. will allow SLOCAPCD to use CARB-donated equipment to begin monitoring at the new San Luis Obispo site. EPA reviewed the proposal for $PM_{2.5}$ and PM_{10} SLAMS monitoring at the new San Luis Obispo site. This site will have similar monitoring objectives and spatial scales as the current San Luis Obispo-Higuera St. site and will be located at the SLOCAPCD's headquarters office in downtown San Luis Obispo with a targeted monitoring start date of January 1, 2021.

Based on these analyses, EPA approves CARB's discontinuation of the San Luis Obispo-Higuera St. O_3, $PM_{2.5}$, and PM_{10} SLAMs monitors, and also approves SLOCAPCD's proposal for $PM_{2.5}$ and PM_{10} SLAMS monitoring at the new San Luis Obispo site. The approval of the new SLAMS monitors assumes that the new site will meet all 40 CFR 58 requirements, including the siting requirements specified in Appendix E. Please work with EPA to ensure that the new site meets all relevant requirements. Please include this letter and the relevant monitor and site information in both upcoming SLOCAPCD and CARB annual monitoring network plans.

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
Greg Gilani, CARB
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Andrew Mutziger, SLOCAPCD
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Appendix D

Summary of Public Comments and CARB Responses

The Annual Network Plan was made available for a 30-day public review from May 26 to June 26, 2023, and no comment was received.