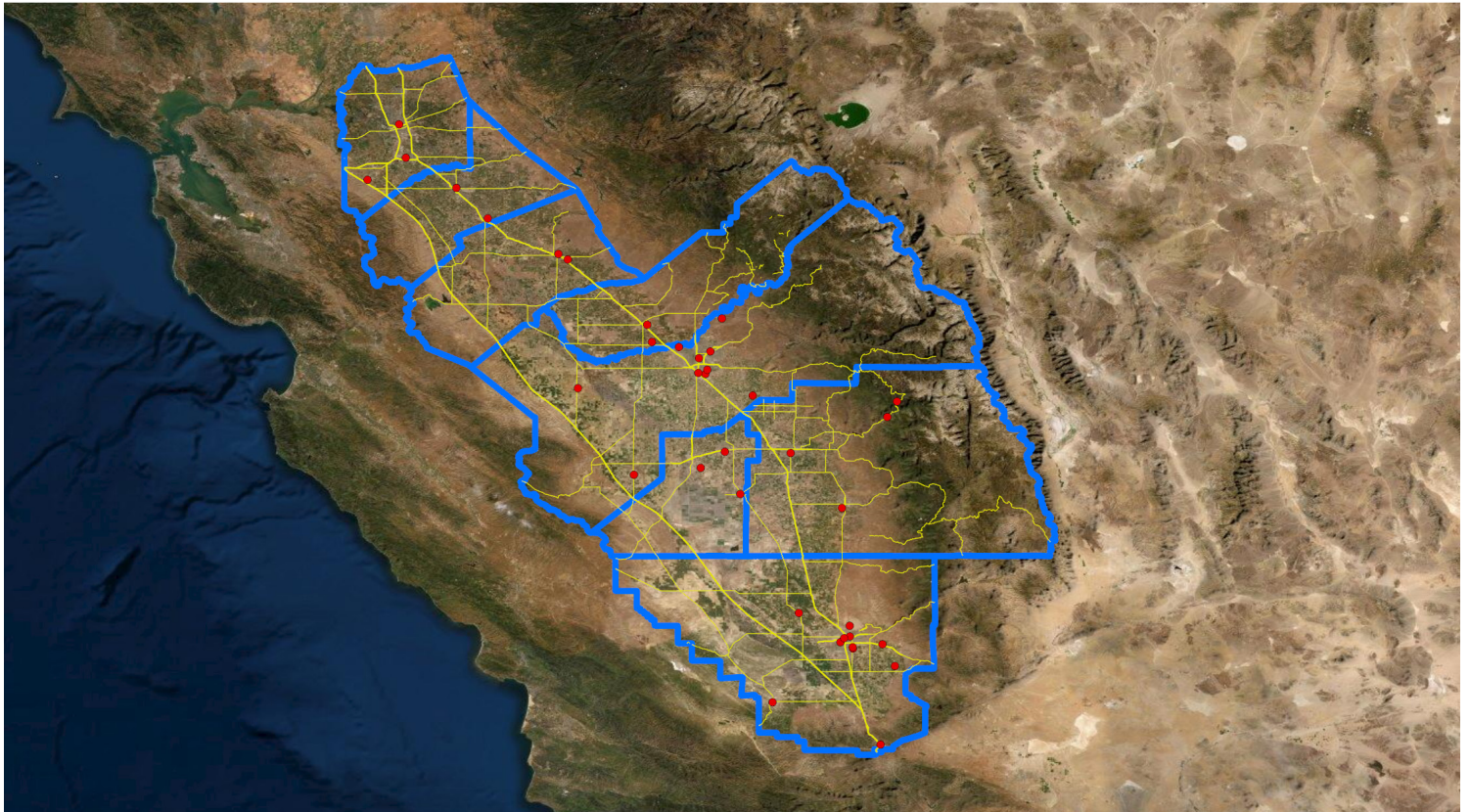




San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

2023 Air Monitoring Network Plan



San Joaquin Valley Air Pollution Control District

2023 Air Monitoring Network Plan

July 3, 2023

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TABLE OF CONTENTS

The District's Core Values Exhibited in the Air Monitoring Network	vi
EXECUTIVE SUMMARY	1
AIR MONITORING NETWORK PLAN REQUIREMENTS	3
Monitoring Objectives, Site Types, and Spatial Scales	7
Meteorology	8
State of the Air Monitoring Network.....	8
POLLUTANT MONITORING REQUIREMENTS	11
Ozone	11
Photochemical Assessment Monitoring Stations	12
Nitrogen Dioxide.....	14
Carbon Monoxide.....	15
Sulfur Dioxide.....	16
Reactive Nitrogen Compounds (NO _y).....	17
Toxics.....	17
Detailed Site Information – Gaseous Monitors.....	17
Particulate Matter (PM)	20
Detailed Site Information – PM Monitors.....	21
PM Collocation Requirements.....	21
Public Review of Changes to the PM _{2.5} Monitoring Network	21
PM ₁₀ Monitoring Requirements.....	22
PM _{2.5} Chemical Speciation Site Requirements.....	26
NCore.....	30
Non-EPA Federal Monitors	30
IMPROVEMENTS AND PLANNED CHANGES TO THE DISTRICT'S AIR MONITORING NETWORK	37
DATA SUBMISSION REQUIREMENTS.....	40
ACRONYMS AND ABBREVIATIONS	41

APPENDICES

Appendix A: Monitoring Site Descriptions

Appendix B: Detailed Site Information

Appendix C: EPA Approval Letter for the Relocation of the Stockton-Hazelton Site to the Stockton-University Park Site (July 20, 2022)

Appendix D: EPA Approval Letter for the Relocation of the Visalia-Church St Site to the Visalia-West Ashland Avenue Site (April 11, 2023)

Appendix E: Notice of Public Comment Period

Appendix F: Comments and Responses

LIST OF FIGURES

Figure 1	Map of Air Monitoring Sites in the San Joaquin Valley	2
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LIST OF TABLES

Table 1 – Types of Air Monitoring Stations, Monitors, and Networks	3
Table 2 – San Joaquin Valley Areas of Representation	5
Table 3 – Site Identification	5
Table 4 – San Joaquin Valley 2022 Population*	7
Table 5 – Pollutant Parameters Monitored in the San Joaquin Valley	9
Table 6 – Meteorological Parameters Monitored in the San Joaquin Valley	10
Table 7 – SLAMS Minimum Ozone Monitoring Requirements	11
Table 8 – Ozone Monitoring Requirements for the Valley*	12
Table 9 – San Joaquin Valley PAMS Network	13
Table 10 – San Joaquin Valley SO ₂ PWEI Values for 2022	16
Table 11 – Gaseous Monitors	18
Table 12 – Gaseous Monitors Monitor Type	19
Table 13 – PM ₁₀ Minimum Monitoring Requirements (# of Stations per MSA)	22
Table 14 – PM ₁₀ Monitoring Requirements for the Valley*	23
Table 15 – 24-Hour PM ₁₀ highest concentrations by site*	24
Table 16 – Minimum PM _{2.5} Monitoring Requirements	25
Table 17 – PM _{2.5} Monitoring Requirements for the Valley*	25
Table 18 – 24-Hour and Annual PM _{2.5} Maximum Design Values*	26
Table 19 – PM _{2.5} Speciation Monitors	27
Table 20 – PM Monitors*	28
Table 21 – PM Monitors Monitor Type*	29
Table 22 – QA Collocated Monitors	29
Table 23 – Fresno-Garland NCore Site	30
Table 24 – Non-EPA Federal Monitors	31
Table 25 – SLAMS Site Type*	32
Table 26 – SLAMS Spatial Scale	33
Table 27 – SLAMS Basic Monitoring Objective	34
Table 28 – SLAMS Sampling Frequency	35
Table 29 – SPM / Other (PM _{2.5} Continuous)	36
Table 30 – Summary of Proposed Changes to the Air Monitoring Network	39

The District's Core Values Exhibited in the Air Monitoring Network

*** Protection of Public Health ***

The District uses data collected from the air monitoring network to provide real-time air quality data to the public through the Real-Time Air Advisory Network (RAAN), generate daily air quality forecasts, and when needed, issue health advisories. The District also uses data collected from the Valley's air monitoring network as the basis for long-term attainment strategies and to track progress towards meeting federal health-based air quality standards.

*** Active and effective air pollution control efforts with minimal disruption to the Valley's economic prosperity ***

The District uses air monitoring data to help establish strategies for reaching attainment of federal health-based air quality standards.

*** Outstanding Customer Service ***

*** Accountability to the public ***

The District's website provides easy public access to data from the Valley's real-time air monitors, and through the RAAN system, provides notifications to the public when air quality reaches unhealthy levels. The public can also access historical air quality information through the District's website.

*** Open and transparent public processes ***

In addition to making air quality data available in real-time, the District uses air quality data in a variety of publicly available documents and reports. The District also conducts a public review period for annual monitoring network plans.

*** Respect for the opinions and interest of all Valley residents ***

The District has actively made daily air quality information available to Valley residents in a variety of formats, including the District website, the RAAN system, the daily air quality forecast, and the media. The District considers public interests in establishing new air monitoring stations.

*** Ingenuity and innovation ***

The District strives to use new and improved air monitoring techniques and equipment as approved by the EPA. The District uses the latest science when considering locations for air monitoring stations, and in turn, the data collected from the air monitoring network contributes to ongoing scientific evaluations.

*** Continuous improvement ***

Through the annual air monitoring network plan, the District evaluates the air monitoring network for opportunities for better data collection and greater efficiency. Throughout the year, the District continually seeks out opportunities to improve the air monitoring network and its service to the public while meeting federal requirements.

*** Recognition of the uniqueness of the San Joaquin Valley ***

The San Joaquin Valley is an expansive and diverse area. The District strives to site its air monitoring stations in locations that represent each region of the Valley.

*** Effective and efficient use of public funds ***

The District makes the most of limited resources by structuring the air monitoring network in a way that optimizes personnel time and funding for instruments. The result is a robust air monitoring network that helps the Valley reach its air quality goals without unnecessary expenditures.

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EXECUTIVE SUMMARY

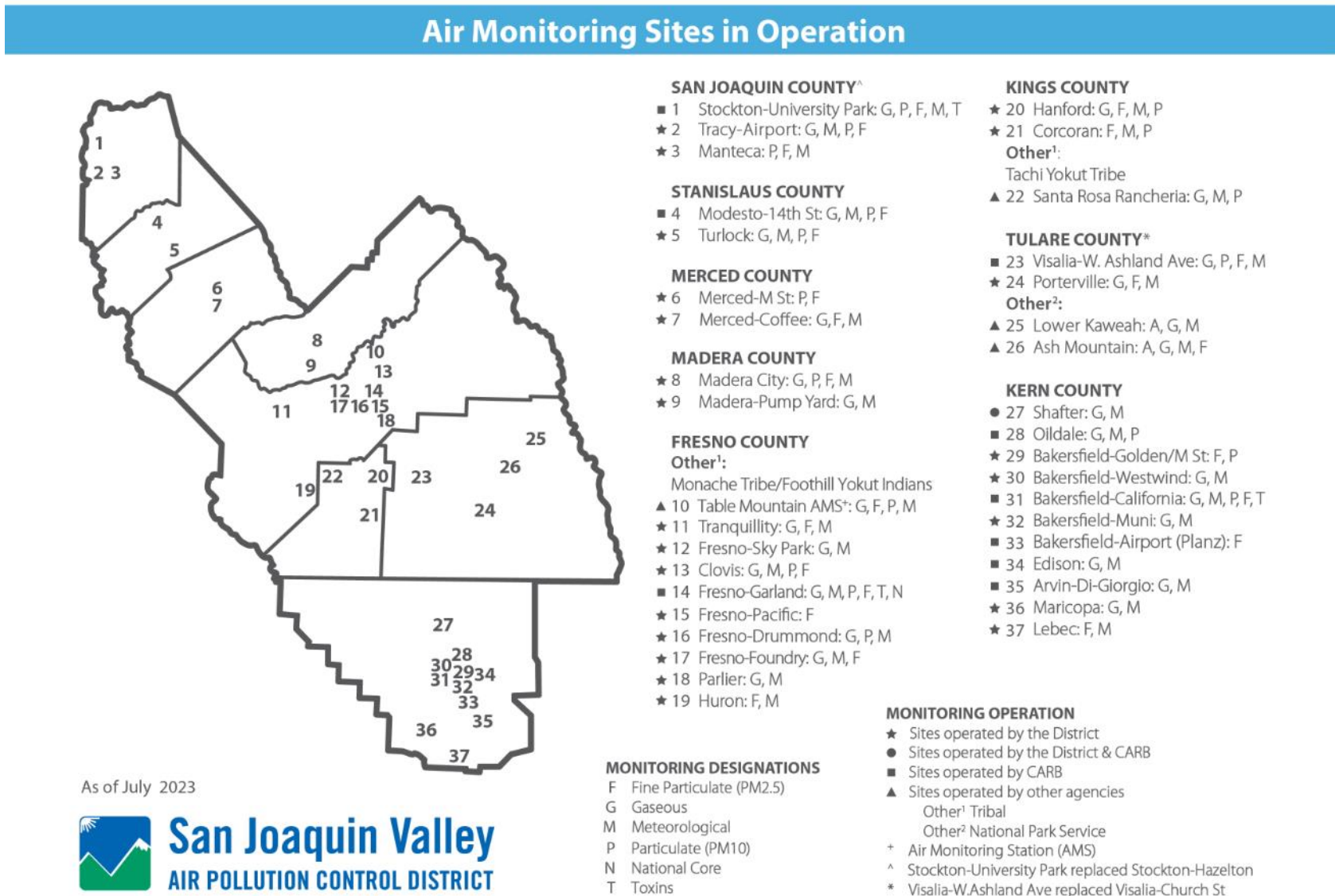
The San Joaquin Valley Air Pollution Control District (SJVAPCD or District) operates an extensive network of air pollution monitors throughout the San Joaquin Valley (Valley) to support its mission of improving and protecting public health. District staff use hourly readings from real-time monitors to communicate the state of the air quality to Valley residents. Through programs such as the Real-time Air Advisory Network (RAAN), the District's Valley Air mobile app, AirNow.gov website and mobile app, the daily air quality forecast, the District and California Air Resources Board (CARB) websites, and Valley media, residents are able to obtain air quality information that can help them with their activity planning. The District also uses real-time air quality data to make decisions for its smoke management program which manages prescribed burning, hazard reduction burning, agricultural burning, and residential wood burning to ensure these activities do not result in adverse air quality and public health impacts.

As part of the District's long-term efforts to improve public health, air monitors collect data that is rigorously analyzed by laboratory technicians and District staff. This monitoring data reflects the status of the Valley's air quality and is fundamental to efforts to improve air quality and achieve attainment of the United States Environmental Protection Agency's (EPA's) health-based ambient air quality standards as quickly as possible.

The Valley covers an area of 23,490 square miles, and is prone to one of the most challenging air quality problems in the nation. The Valley is home to over 4,000,000 residents and includes several major metropolitan areas, vast expanses of agricultural land, industrial sources, highways, and schools. The Valley is designated as an attainment area for the federal Lead (Pb), Nitrogen Dioxide (NO₂), Sulfur Dioxide (SO₂), and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS or standards). In addition, EPA has found that the Valley has attained the 1997 24-hour PM_{2.5} NAAQS, and the federal 1-hour ozone standard. The Valley is also designated as an attainment/maintenance area for the PM₁₀ NAAQS. The Valley is designated as a nonattainment area for the remaining federal PM_{2.5} standards including the 1997 annual NAAQS, the 2006 24-hour NAAQS, and the 2012 annual NAAQS as well as the federal 8-hour ozone (O₃) standards. To address the air quality needs of this expansive and diverse region, the air monitoring program is designed to meet federal requirements and provide needed information to the public.

The air monitoring network in the Valley includes air monitoring stations that are managed and operated by the District, CARB, and the National Park Service (NPS). Additionally, there are two tribal air monitoring stations operating in the Valley: the Tachi Yokut Tribe operates the Santa Rosa Rancheria air monitoring station located in Kings County, and the Monache Tribe and Foothill Yokut Indians operate the air monitoring station located at Table Mountain Rancheria in Fresno County. Since the tribal monitors are operated under the Tribal Authority Rule and are not part of the District's jurisdiction, detailed site information for tribal monitors is not provided in this air monitoring network plan. A map of air monitoring sites in the Valley is provided in Figure 1 on the following page.

Figure 1 – Map of Air Monitoring Sites in the San Joaquin Valley



AIR MONITORING NETWORK PLAN REQUIREMENTS

As specified in section 58.10 of title 40 in the Code of Federal Regulations (CFR), and as a requirement of the District's EPA section 105 grant, this air monitoring network plan describes the current state of the District's air monitoring network and any planned changes to the network.

Each year, the District updates the air monitoring network plan and posts it for public comment for at least 30 days prior to submitting it to the EPA Regional Administrator. Air monitoring network plans provide information on the establishment and maintenance of air monitoring networks that may include the types of stations and monitors listed in Table 1.

Table 1 – Types of Air Monitoring Stations, Monitors, and Networks

Abbreviation	Full Name	Description
FRM	Federal Reference Method	EPA defines how these monitors are to work, how they are to be engineered, and how they are to measure pollutants. These monitors are used to determine compliance with EPA's health-based air quality standards.
FEM	Federal Equivalent Method	These monitors are considered to be equivalent to FRM monitors for the purpose of determining compliance with EPA's health-based air quality standards.
NCore	National Core	Multipollutant monitoring stations; in California, these are operated by CARB.
PAMS	Photochemical Assessment Monitoring Station	VOC (volatile organic compounds) speciation sites used in serious, severe, or extreme ozone nonattainment areas for precursor evaluation.
SLAMS	State and Local Air Monitoring Station	Monitoring sites that are used for determinations of compliance with federal air quality standards, though they may be used for other purposes as well.
SPM	Special Purpose Monitor	Not included when showing compliance with the minimum air monitoring requirements; an example might include a temporary monitoring station set up in an area to measure short term air quality impacts of a source. Data collected from an SPM can be used for Regulatory purposes if the monitor has been operational for two years and if the monitor is an FEM, or FRM.
STN	Speciated Trends Network	PM _{2.5} speciation stations that provide chemical speciation data of particulate matter (PM).

The air monitoring network plan should include a statement of purpose for each monitor and evidence that siting and operation of each monitor meets the requirements of Appendices A, C, D, and E of 40 CFR part 58. The plan must contain the following information for each existing and proposed site (40 CFR §58.10 (b)):

- The MSA, CBSA, CSA, or other area represented by the monitor. MSA, CBSA, and CSA are statistical-based definitions for metropolitan areas provided by the Office of Management and Budget and the Census Bureau (see Table 2):
 - MSA: Metropolitan statistical area
 - CBSA: Core-based statistical area
 - CSA: Combined statistical area
- Air Quality System (AQS) site identification number (see Table 3).
- Population estimate (see Table 4).
- Location: Street address and geographical coordinates (see Appendix B).
- Sampling and analysis methods for each measured parameter (see Appendix B).
- Operating schedules for each monitor (see Appendix B).
- Monitoring objective and spatial scale of representativeness for each monitor (as defined in Appendix D to 40 CFR Part 58) (see Appendix B).
- Any proposals to remove or move a monitoring station within 18 months of a plan submittal. Any proposed additions and discontinuations of SLAMS monitors are subject to approval according to 40 CFR §58.14 (see *Improvements and Planned Changes* section of this document).

There are several network plan requirements that pertain specifically to PM_{2.5} monitoring:

- The air monitoring network plan must identify which sites are suitable and which are not suitable for comparison against the annual PM_{2.5} NAAQS as described in 40 CFR Section 58.30 (see *PM_{2.5} Monitors* section of this document).
- The plan must also document how the District provides for public review of changes to the PM_{2.5} monitoring network when the change impacts the location of a violating PM_{2.5} monitor, or the creation/change to a community monitoring zone.
- The District should submit any public comments received on PM_{2.5} monitoring changes in the submittal of the air monitoring network plan.
- On March 18, 2013, EPA finalized the rule to revoke the term “population-oriented.” The final rule states that PM_{2.5} monitors at neighborhood scale or larger, or smaller scales that represent many locations in the same CBSA, are the only monitor’s representative of “area-wide” air quality that can be compared to the PM_{2.5} NAAQS.

Table 2 – San Joaquin Valley Areas of Representation

TITLE	CODE
Combined Statistical Area (CSA)	Combined Statistical Area (CSA) Code
Fresno-Madera	260
Metropolitan Statistical Area (MSA)	Core-Based Statistical Area (CBSA) Code
Stockton-Lodi	44700
Modesto	33700
Merced	32900
Madera	31460
Fresno	23420
Hanford-Corcoran	25260
Visalia-Porterville	47300
Bakersfield*	12540

* Monitors from both the District and the Eastern Kern County Air Pollution Control District can be counted when determining compliance with minimum monitoring requirements for the Bakersfield CBSA. However, only monitors located within the District's boundaries are included in this network plan.

Table 3 – Site Identification

MSA/CBSA: Stockton-Lodi		
County: San Joaquin		
Site Name	AQS ID	Operating Agency
Stockton-University Park	06-077-1003	CARB
Tracy-Airport	06-077-3005	SJVAPCD
Manteca	06-077-2010	SJVAPCD
MSA/CBSA: Modesto		
County: Stanislaus		
Site Name	AQS ID	Operating Agency
Modesto-14th St	06-099-0005	CARB
Turlock	06-099-0006	SJVAPCD
MSA/CBSA: Merced		
County: Merced		
Site Name	AQS ID	Operating Agency
Merced-M St	06-047-2510	SJVAPCD
Merced-Coffee	06-047-0003	SJVAPCD
MSA/CBSA: Madera		
County: Madera		
Site Name	AQS ID	Operating Agency
Madera-City	06-039-2010	SJVAPCD
Madera-Pump Yard	06-039-0004	SJVAPCD

Table 3 – Site Identification (continued)

MSA/CBSA: Fresno		
County: Fresno		
Site Name	AQS ID	Operating Agency
Tranquillity	06-019-2009	SJVAPCD
Fresno-Sky Park	06-019-0242	SJVAPCD
Clovis-Villa	06-019-5001	SJVAPCD
Fresno-Garland	06-019-0011	CARB
Fresno-Pacific	06-019-5025	SJVAPCD
Fresno-Drummond	06-019-0007	SJVAPCD
Fresno-Foundry	06-019-2016	SJVAPCD
Parlier	06-019-4001	SJVAPCD
Huron	06-019-2008	SJVAPCD
MSA/CBSA: Hanford-Corcoran		
County: Kings		
Site Name	AQS ID	Operating Agency
Hanford-Irwin	06-031-1004	SJVAPCD
Corcoran-Patterson	06-031-0004	SJVAPCD
MSA/CBSA: Visalia-Porterville		
County: Tulare		
Site Name	AQS ID	Operating Agency
Visalia-W. Ashland Avenue	06-107-2003	CARB
Porterville	06-107-2010	SJVAPCD
Sequoia-Ash Mountain	06-107-0009	NPS
Sequoia-Lower Kaweah	06-107-0006	NPS
MSA/CBSA: Bakersfield		
County: Kern (Valley Portion)		
Site Name	AQS ID	Operating Agency
Shafter	06-029-6001	CARB and SJVAPCD
Oildale	06-029-0232	CARB
Bakersfield-Golden / M St	06-029-0010	SJVAPCD
Bakersfield-Westwind	06-029-2019	SJVAPCD
Bakersfield-California	06-029-0014	CARB
Bakersfield-Muni	06-029-2012	SJVAPCD
Bakersfield-Airport (Planz)	06-029-0016	CARB
Edison	06-029-0007	CARB
Arvin-Di Giorgio	06-029-5002	CARB
Maricopa	06-029-0008	SJVAPCD
Lebec	06-029-2009	SJVAPCD

Table 4 – San Joaquin Valley 2022 Population*

County		Total County Population	Major Urban Area Pop > 100,000	Urban Area Pop < 100,000 and > 50,000
San Joaquin		784,298	Stockton	Lodi, Manteca, Tracy
Stanislaus		549,466	Modesto	Turlock
Merced		284,338	—	Merced
Madera		157,396	—	Madera
Fresno		1,011,273	Fresno, Clovis	—
Kings		152,023	—	Hanford
Tulare		475,014	Visalia	Porterville, Tulare
Kern	Valley Portion**	773,341	Bakersfield	Delano
	Entire County	909,813		
San Joaquin Valley Total***		4,187,149		

* Data from California Department of Finance E-1 Population Estimates for Cities, Counties and the State, January 1, 2022, Released May 2, 2022.

** Population estimate for Kern County (Valley Portion) was calculated using census tract data for the population living within the District's boundaries.

*** The "San Joaquin Valley Total" population includes the "Kern (Valley Portion)" population only.

Monitoring Objectives, Site Types, and Spatial Scales

Three **basic monitoring objectives** that define the purpose of each analyzer are identified in 40 CFR Part 58 Appendix D:

- Provide air pollution data to the general public in a timely manner (**timely/public**).
- Support compliance with ambient air quality standards and emissions strategy development (**NAAQS comparison**).
- Support for air pollution research studies (**research support**).

Site types meet the objectives that define what the monitor is measuring. Some of the general monitoring site types identified in 40 CFR Part 58, Appendix D include:

- Sites located to determine the **highest concentrations** in the area covered by the network.
- **Population exposure** sites to measure typical concentrations in areas of high population density.
- **Source oriented** sites to determine the impact of significant sources or source categories on air quality.
- **General Background** sites determine background concentration levels.
- **Regional transport** sites located to determine the extent of regional pollutant transport among populated areas and in support of secondary standards
- Sites located to measure air pollution impacts on visibility, vegetation damage, or other welfare-related impacts.

Scales of spatial representativeness are described in terms of physical dimensions of the air parcel or zone where air quality is expected to be reasonably consistent around the monitor. The monitor thus represents that area, not just the location of the monitor. The following **spatial scales** are identified in 40 CFR Part 58, Appendix D:

- **Microscale:** An area ranging from several meters up to about 100 meters.
- **Middle scale:** An area covering between about 100 meters to 0.5 kilometers.
- **Neighborhood scale:** Covering an area between 0.5 and 4.0 kilometers in range.
- **Urban scale:** Covering an area of city-like dimensions, from about 4 to 50 kilometers.
- **Regional scale:** Covering a rural area of reasonably homogeneous geography without large sources, extending from tens to hundreds of kilometers.

New monitoring stations and new monitors that are intended to be compared to the NAAQS must meet EPA siting criteria. Some sites may be appropriate for monitoring all air pollutants, while other sites may be appropriate for a particular pollutant. The District balances a wide range of pollutant siting criteria, spatial scales, monitoring objectives, and practical concerns as it plans and operates its monitoring network. Table 5 summarizes the parameters measured at each air monitoring site in the San Joaquin Valley.

Meteorology

A variety of meteorological parameters are measured for various District programs and efforts that are affected by weather. Such activities include air quality forecasting, PAMS, exceptional events, long-term planning, and pollutant trend assessment. These activities help protect public health, and have increased the public's and media's awareness of air quality and what can be done to reduce air pollution. See Table 6 for the meteorological parameters measured in the Valley.

State of the Air Monitoring Network

This air monitoring network plan summarizes the state of the District's air monitoring network during 2022. Additionally, changes that the District may initiate through December 2023 are described in the *Improvements and Planned Changes* section later in this document.

Table 5 – Pollutant Parameters Monitored in the San Joaquin Valley

Site Name	Ozone	PM2.5	PM10	PM10-2.5	NO2	CO	SO2	NMH	Speciated VOC	NOy	PM2.5 Speciation	Toxics
Stockton-University Park	✓	✓	✓		✓	✓						✓
Tracy-Airport	✓	✓	✓		✓							
Manteca		✓	✓									
Modesto-14th St	✓	✓	✓			✓					✓	
Turlock	✓	✓	✓		✓							
Merced-M St		✓	✓									
Merced-Coffee	✓	✓			✓							
Madera-City	✓	✓	✓									
Madera-Pump Yard	✓				✓			✓	✓			
Tranquillity	✓	✓										
Fresno-Sky Park	✓				✓							
Clovis-Villa	✓	✓	✓		✓	✓		✓	✓			
Fresno-Garland	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
Fresno-Pacific		✓										
Fresno-Drummond	✓		✓		✓							
Fresno-Foundry		✓			✓	✓						
Parlier	✓				✓			✓	✓			
Huron		✓										
Hanford-Irwin	✓	✓	✓		✓							
Corcoran-Patterson		✓	✓									
Visalia-W. Ashland Avenue	✓	✓	✓		✓						✓	
Porterville	✓	✓										
Sequoia-Ash Mountain	✓	✓										
Sequoia-Lower Kaweah	✓											
Shafter	✓				✓			✓	✓			
Oildale	✓		✓									
Bakersfield-Golden / M St		✓	✓									
Bakersfield-Westwind					✓							
Bakersfield-California	✓	✓	✓		✓						✓	✓
Bakersfield-Muni	✓				✓	✓		✓	✓			
Bakersfield-Airport (Planz)		✓										
Edison	✓				✓							
Arvin-Di Giorgio	✓											
Maricopa	✓											
Lebec		✓										

Table 6 – Meteorological Parameters Monitored in the San Joaquin Valley

Site Name	Wind Speed	Wind Direction	Outdoor Temperature	Relative Humidity	Barometric Pressure	Solar Radiation
Stockton-University Park	✓	✓	✓	✓		
Tracy-Airport	✓	✓	✓		✓	
Manteca	✓	✓	✓		✓	
Modesto-14th St	✓	✓	✓	✓		
Turlock	✓	✓	✓		✓	
Merced-Coffee	✓	✓	✓			
Madera-City	✓	✓	✓	✓	✓	✓
Madera-Pump Yard	✓	✓	✓	✓	✓	✓
Tranquillity	✓	✓	✓		✓	
Fresno-Sky Park	✓	✓	✓			
Clovis-Villa	✓	✓	✓	✓	✓	✓
Fresno-Garland	✓	✓	✓	✓	✓	
Fresno-Drummond	✓	✓	✓		✓	
Fresno-Foundry	✓	✓	✓		✓	
Parlier	✓	✓	✓	✓	✓	✓
Huron					✓	
Hanford-Irwin	✓	✓	✓		✓	
Corcoran-Patterson	✓	✓	✓			
Visalia-W. Ashland Avenue	✓	✓	✓	✓		
Porterville	✓	✓	✓		✓	
Sequoia-Ash Mountain	✓	✓	✓	✓		✓
Sequoia-Lower Kaweah	✓	✓	✓	✓		✓
Shafter	✓	✓	✓	✓	✓	✓
Oildale	✓	✓	✓	✓		
Bakersfield-Westwind	✓	✓	✓	✓	✓	
Bakersfield-California	✓	✓	✓	✓		
Bakersfield-Muni	✓	✓	✓	✓	✓	✓
Edison	✓	✓	✓	✓		
Arvin-Di Giorgio	✓	✓	✓	✓		
Maricopa	✓	✓	✓		✓	
Lebec	✓	✓	✓			

POLLUTANT MONITORING REQUIREMENTS

Ozone

In 2015, EPA revised the 8-hour average ozone NAAQS by lowering it to 0.070 parts per million (ppm), or 70 parts per billion (ppb). Ozone is formed when its precursors, oxides of nitrogen (NO_x) and volatile organic compounds (VOC), chemically react in the presence of heat and sunlight. The Valley's topography, high temperatures, subsidence inversions, and light winds make the area conducive to the formation of elevated ozone levels. Furthermore, winds at ground level or at higher altitudes transport pollutants from other air basins into the Valley, from within the Valley to areas downwind, and from the Valley into other regions.

As specified in 40 CFR part 58, appendix D, table D-2, ozone monitoring site requirements are based on MSA population and design values (see Table 7 below). Table 8 shows that the Valley's ozone monitoring network meets these requirements. Sites are intended to represent population exposures and maximum concentrations, so most ozone monitors are representative of neighborhood and regional scales. All of the SLAMS ozone analyzers in the District's network operate in compliance with 40 CFR part 58 appendix A and appendix E and measure hourly ozone concentrations. The hourly ozone data is also used in the District's Real-time Air Advisory Network (RAAN), as well as EPA's AirNow.gov website and mobile app to inform the public of hourly ozone values in near real-time. As such, these analyzers are comparable to the ozone NAAQS and also meet the "Timely/Public" monitor objective.

Table 7 – SLAMS Minimum Ozone Monitoring Requirements

MSA population, based on latest available census figures	Number of monitors required if:	
	Most recent 3-year design value concentrations \geq 85% of any Ozone NAAQS*	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

* 2015 8-hour ozone NAAQS (70 ppb) is the most stringent for comparison. 85% of 70 ppb is 60 ppb.

Table 8 – Ozone Monitoring Requirements for the Valley*

County	2022 Population	Exceptional Event Impacts Included		Exceptional Event Impacts Removed		Number of SLAMS required	SLAMS in MSA
		Max 2022 8-hour Ozone Design Value	≥85% of any Ozone NAAQS	Max 2022 8-hour Ozone Design Value	≥85% of any ozone NAAQS		
Stockton-Lodi MSA							
San Joaquin	784,298	66	Yes	63	Yes	2	2
Modesto MSA							
Stanislaus	549,466	79	Yes	77	Yes	2	2
Merced MSA							
Merced	284,338	77	Yes	75	Yes	1	1
Madera MSA							
Madera	157,396	83	Yes	69	Yes	1	2
Fresno MSA							
Fresno	1,011,273	84	Yes	82	Yes	2	6
Hanford-Corcoran MSA							
Kings	152,023	78	Yes	77	Yes	1	1
Visalia-Porterville MSA							
Tulare	475,014	89	Yes	82	Yes	2	2
Bakersfield MSA							
Kern**	773,341	94	Yes	83	Yes	2	7

* Values shown for each MSA both including and excluding air quality data that was impacted by wildfire exceptional events. Values with exceptional event impacts removed are considered representative of ambient air quality conditions in the Valley.

** Bakersfield MSA population represents the population within the Valley Air Basin portion of Kern County and is based on census tract data.

Photochemical Assessment Monitoring Stations

The monitoring objective of Photochemical Assessment Monitoring Stations (PAMS) is “research support”. Clean Air Act Section 182 and 40 CFR 58 requires serious, severe, and extreme ozone nonattainment areas to have PAMS sites measure speciated ozone precursors in order to better understand the effect of precursors and photochemistry as well as control strategies on ozone formation. PAMS sites measure ozone, carbon monoxide (CO), nitrogen oxide (NO), nitrogen dioxide (NO₂), oxides of nitrogen (NO_x), and non-methane hydrocarbon (NMH) as well as meteorology. Although the Valley does not exceed federal or state standards for NO₂, NO_x reductions contribute to air quality improvement for both ozone and particulate matter (PM).

There are four classifications of PAMS sites:

- Type 1: **Background sites** upwind of urban areas, where ozone concentrations are presumed not to be influenced by nearby urban emissions.
- Type 2: **Maximum ozone precursor emissions sites**, typically located in an urban center, where emissions strengths are the greatest.
- Type 3: **Maximum ozone concentration sites**, intended to show the highest ozone concentrations.

- **Type 4: Downwind ozone monitoring sites**, intended to capture concentrations of transported ozone and precursor pollutants, and determine possible areas from which most of the transport may originate. Type 4 sites are currently not required for the San Joaquin Valley.

As shown in Table 9, the District has a total of six PAMS sites configured as two networks, one for the Fresno MSA and one for the Bakersfield MSA. In May 2016, the EPA approved the relocation of the ozone SLAMS monitor formerly at Arvin-Bear Mountain to the Arvin-Di Giorgio location in Kern County. Additionally, CARB has begun the process of building a permanent shelter that should have enough space to accommodate all of the PAMS equipment intended for the site. In lieu of changes to PAMS program requirements, plans to continue PAMS monitoring at Arvin are pending (see *Planned Changes/Improvements* section of this document).

Each year, the PAMS program operates from June 1 through August 31 on a 1-in-3 day sampling schedule. At least four, 3-hour integrated samples are collected each sampling day, which is referred to as a “Trend Day.” However, additional samples are collected on “Episode Days,” days that are forecast to have high ozone concentrations. The goal is to sample on three to five multi-day episodes in an ozone season. Other PAMS equipment (e.g., ozone, NO₂, and non-methane hydrocarbon analyzers) operates on an hourly basis year round.

Table 9 – San Joaquin Valley PAMS Network

MSA	Site	Site Type
Fresno	Madera-Pump Yard	Type 1: Upwind/Background site
	Clovis-Villa	Type 2: Maximum precursor emissions
	Parlier	Type 3: Maximum ozone concentrations
Bakersfield	Shafter	Type 1: Upwind/Background site
	Bakersfield-Muni	Type 2: Maximum precursor emissions
	Arvin-Di Giorgio*	Type 3: Maximum ozone concentrations

*PAMS equipment will be installed for the Type 3 site at the Arvin-Di Giorgio when space becomes available.

As a part of the October 1, 2015, revisions to the PAMS requirements in 40 CFR part 58, Appendix D, areas that are classified as Moderate nonattainment or above for 8-hour ozone must develop and implement an Enhanced Monitoring Plan (EMP), explaining how continued measurements of ozone and ozone precursors will assist in understanding the formation of ozone in the area. CARB is responsible for submitting the EMP for the state of California. The California 2019 Enhanced Monitoring Plan satisfied the requirements of paragraph 5(h) of Appendix D to 40 CFR part 58. Reassessment of the EMP is expected to be included in the next 5-year network assessment required under 40 CFR 58.10(d).

Nitrogen Dioxide

As stated in 40 CFR Part 50, the annual average NO₂ standard is 53 ppb, and the 1-hour NO₂ standard is 100 ppb. Within the NO₂ network, one microscale, near-road NO₂ monitoring station is required in CBSAs with populations of 1,000,000 or more in order to meet the NAAQS. Thus a Three-Tier Network design for representing NO₂ concentrations near freeways, urban areas, and locations aimed at protecting susceptible and vulnerable communities is outlined in 40 CFR Part 58. The Three-Tier Network design is comprised of:

(1) Near-road NO₂ Monitoring Requirement

Per Section 4 of Appendix D in 40 CFR Part 58, one microscale, near-road NO₂ monitor is required in each CBSA with a population of 1,000,000 or more and must be located near a major road segment with a high annual average daily truck traffic (AADTT) count. Another near-road monitor is required in CBSAs with populations of 2,500,000 or more; or in CBSAs with populations of 1,000,000 or more that have one or more road segments with 250,000 or more AADTT counts. Additionally, for CBSAs with populations of 1,000,000 or more, EPA requires that one PM_{2.5} monitor and one CO monitor be collocated at a near-road NO₂ site.

In order to meet this requirement, the District proactively established two near-road NO₂ monitoring stations in the air monitoring network. One of near-road stations is located in the Fresno CBSA, which reached a population of 1,000,000 in 2019. The near-road air monitoring station in Fresno became operational in January 2016. When the Fresno CBSA population reached 1,000,000, the District installed a CO analyzer and a PM_{2.5} analyzer to meet EPA requirements for near-road air monitoring. Both analyzers became operational in December 2019.

The District's other near-road NO₂ monitoring station is located in the Bakersfield CBSA, which is nearing a population of 1,000,000. The Bakersfield near-road air monitoring station became operational in January 2019. When the area's population reaches 1,000,000, the District will install CO and PM_{2.5} analyzers to meet EPA requirements.

(2) Area-wide NO₂ Monitoring Requirement

Even though the District is not required to have an area-wide NO₂ monitor, the District and CARB operate an extensive NO₂ monitoring network consisting of 18 monitors, including one near-road NO₂ monitor in Fresno and a second near-road NO₂ monitor in Bakersfield. The District locates NO₂ analyzers as required at PAMS sites and generally collocates NO₂ analyzers wherever an ozone monitor is required. Currently, all of the Valley's NO₂ monitors are in compliance with the federal NO₂ standards, including the Fresno and Bakersfield near-road NO₂ monitoring stations, which are focused on capturing peak NO₂ concentrations from heavily trafficked roadways.

(3) Regional Administrator Required Monitoring

In addition to the minimum NO₂ monitoring requirements, at least 40 additional NO₂ monitors must be placed across the nation as determined and required by the Regional Administrators in collaboration with States. The primary focus is to place the additional NO₂ monitors in locations to protect susceptible and vulnerable populations. The Regional Administrators may require monitor placement in locations inside or outside of CBSAs where:

- Existing near-road NO₂ monitoring are representative of areas where NO₂ concentrations may be nearing or exceeding the NAAQS
- NO₂ monitoring is not required but NO₂ concentrations may be nearing or exceeding the NAAQS
- Area-wide NO₂ monitoring objectives are not being met due to insufficiency of the minimum monitoring requirements for area-wide NO₂ monitors

Currently, the Parlier site in the Fresno CBSA, and the Bakersfield-Muni site in the Bakersfield CBSA are the sites within the District's network that are designated to meet this requirement. These sites are located in towns with susceptible and vulnerable populations downwind from urban areas.

Carbon Monoxide

On August 12, 2011, EPA issued the decision to retain the existing NAAQS for CO. The primary standards are 9 ppm over an 8-hour average, and 35 ppm measured over a 1-hour average. Monitoring requirements for CO are specified in 40 CFR Part 58 as follows:

- CO monitors are required at all NCore sites. At least one NCore site is required in every state.
- CO must be monitored at PAMS Type 2 sites with a trace-level CO monitor.
- One CO monitor is required to operate collocated with one near-road NO₂ monitor in a CBSA with population of 1,000,000 or more.
- EPA is providing authority to EPA Regional Administrators to require additional monitoring in case-by-case circumstances, such as areas impacted by major stationary CO sources, in urban downtown areas, in urban street canyons, or in areas adversely impacted by meteorological and/or topographical influences.

The District and CARB continue CO monitoring to meet the requirement at the PAMS Type 2 sites (Clovis-Villa and Bakersfield-Muni), and the NCore site (Fresno-Garland) and to supplement related meteorological and criteria pollutant data. Additionally, the District monitors CO at the Fresno-Foundry near-road site since Fresno is the only CBSA within the District with a population greater than 1,000,000 people.

Sulfur Dioxide

In 2010, EPA revised the NAAQS and monitoring requirements for SO₂ which are outlined in 40 CFR Part 58 Appendix D Section 4.4. As such, a new primary 1-hour standard of 75 ppb was established, and the previous 24-hour and annual primary standards were revoked. Under the revised SO₂ NAAQS, the monitoring requirements are determined by a Population Weighted Emissions Index (PWEI) value in units of million persons-tons per year. The PWEI is calculated using each CBSA's updated census data and a combined total of the latest available county level SO₂ emissions data in the National Emissions Inventory for the counties in each CBSA. The population of a CBSA is multiplied by the total amount of SO₂ emitted within a CBSA in tons per year, and the resulting product is then divided by one million to produce the PWEI value.

Per Appendix D to Part 58 – Network Design Criteria of Ambient Air Quality Monitoring, Section 4.4, at least three SO₂ monitors are required in CBSAs with a PWEI value equal to or greater than 1,000,000. CBSAs with a PWEI value equal to or greater than 100,000 but less than 1,000,000, are required to have at least two SO₂ monitors. A minimum of one SO₂ monitor is required in CBSAs with a PWEI value equal to or greater than 5,000, but less than 100,000. The Valley's PWEI values are shown in Table 10.

Table 10 – San Joaquin Valley SO₂ PWEI Values for 2022

County	County 2022 Population	SO ₂ Tons per Year*	PWEI
San Joaquin	784,298	630	494
Stanislaus	549,466	372	204
Merced	284,338	156	44
Madera	157,396	412	65
Fresno	1,011,273	1,220	1,234
Kings	152,023	111	17
Tulare	475,014	4,311	2,048
Kern (whole county)**	909,813	1,318	1,199

* Source: EPA National Emissions Inventory (2017 National Emissions Inventory: January 2022 Updated Release) <https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data>

** The National Emissions Inventory contains emissions data at the county level; therefore, the entire Kern County population was used for the PWEI and represents a higher, more conservative PWEI value.

The highest PWEI value is 2,048 for Tulare County, which is far below the minimum PWEI value of 5,000 that would require one monitor. As a result, there are no SO₂ monitors required for any CBSA in the District. Regardless, there is one SO₂ monitor operating within the District's network at the Fresno-Garland site to meet requirements for the NCore Network.

Reactive Nitrogen Compounds (NOy)

Reactive Nitrogen Compounds (NOy) are among the precursors to ozone and PM_{2.5}, and measuring NOy is important for understanding ozone photochemistry. Additionally, NO/NOy measurements also produce conservative estimates of NO₂ and can help with tracking continued compliance with the NO₂ NAAQS. As part of the National Ambient Air Monitoring Strategy (NAAMS), EPA requires NOy monitoring at 75 locations across the United States in support of a number of objectives. As such, NOy monitoring is conducted at NCore sites and in the PAMS program. NOy is currently monitored at the NCore site at Fresno-Garland within the District's network to meet this requirement.

Toxics

Ambient toxics measurements are collected at Stockton-University Park, Fresno-Garland, and Bakersfield-California. Periodic, 24-hour samples are analyzed for the following gases: benzene, carbon tetrachloride, chloroform, ethylene dibromide, ethylene dichloride, methyl chloroform, methylene chloride, perchloroethylene, toluene, trichloroethylene, and m-, p-, and o-xylene. The samples are also analyzed for 20 particulate metals including: arsenic, lead, nickel, cadmium, and hexavalent chromium.

Detailed Site Information – Gaseous Monitors

Criteria such as monitoring methods, monitor types, spatial scales, site types, basic monitoring objectives, current sampling frequencies, and other requirements being met by the District's gaseous pollutants monitoring network are shown in Tables 11, 12, 22 through 27, and Appendix B.

Table 11 – Gaseous Monitors

Site Name	FRM/FEM/Other				
	Ozone	NO2	CO	NMH	Speciated VOC
Stockton-University Park	FEM	FRM	FEM		
Tracy-Airport	FEM	FEM			
Modesto-14th St	FEM		FEM		
Turlock	FEM	FEM			
Merced-Coffee	FEM	FEM			
Madera-City	FRM				
Madera-Pump Yard	FRM	FEM		Other	Other
Tranquillity	FEM				
Fresno-Sky Park	FRM	FEM			
Clovis-Villa	FRM	FEM	FEM	Other	Other
Fresno-Drummond	FRM	FEM			
Fresno-Foundry		FEM	FEM		
Parlier	FRM	FEM		Other	Other
Hanford-Irwin	FRM	FEM			
Visalia-W. Ashland Avenue	FEM	FRM			
Porterville	FEM				
Shafter	FEM	FRM		Other	Other
Oildale	FEM				
Bakersfield-Westwind		FEM			
Bakersfield-California	FEM	FRM			
Bakersfield-Muni	FRM	FEM	FEM	Other	Other
Edison	FEM	FRM			
Arvin-Di Giorgio	FEM				
Maricopa	FEM				

Monitoring method information for the Fresno-Garland NCore site is provided in Table 23.

Table 12 – Gaseous Monitors Monitor Type

Site Name	Monitor Type		
	Ozone	NO2	CO
Stockton-University Park	SLAMS	SLAMS	SLAMS
Tracy-Airport	SLAMS	SLAMS	
Modesto-14th St	SLAMS		SLAMS
Turlock	SLAMS	SLAMS	
Merced-Coffee	SLAMS	SLAMS	
Madera-City	SLAMS		
Madera-Pump Yard	SLAMS	SLAMS	
Tranquillity	SLAMS		
Fresno-Sky Park	SLAMS	SLAMS	
Clovis-Villa	SLAMS	SLAMS	SLAMS
Fresno-Drummond	SLAMS	SLAMS	
Fresno-Foundry		SLAMS	SLAMS
Parlier	SLAMS	SLAMS	
Hanford-Irwin	SLAMS	SLAMS	
Visalia-W. Ashland Avenue	SLAMS	SLAMS	
Porterville	SLAMS		
Shafter	SLAMS	SLAMS	
Oildale	SLAMS		
Bakersfield-Westwind		SLAMS	
Bakersfield-California	SLAMS	SLAMS	
Bakersfield-Muni	SLAMS	SLAMS	SLAMS
Edison	SLAMS	SLAMS	
Arvin-Di Giorgio	SLAMS		
Maricopa	SLAMS		

Monitor type information for the Fresno-Garland NCore site is provided in Table 23.

Particulate Matter (PM)

Particulate Matter (PM) can be emitted directly as primary PM as well as formed in the atmosphere through chemical reactions of precursors to form secondary PM. Primary PM can be emitted either naturally or as a result of human (anthropogenic) activity. The resulting ambient PM mixture includes aerosols consisting of components of nitrates, sulfates, elemental carbon, organic carbon compounds, acid aerosols, trace metals, and geological materials. Under current regulations, PM is differentiated by particle size as opposed to chemical composition. Federal air quality standards differentiate two size fractions of PM: PM that is 10 microns or less in diameter (PM₁₀) and the smaller subset that is 2.5 microns or less in diameter (PM_{2.5}).

To better understand the influence of meteorology, natural events, and sources of emissions on the Valley's PM_{2.5} concentrations, the District relies on research studies such as the California Regional Particulate Air Quality Study (CRPAQS). CRPAQS was a comprehensive particulate field study for which monitoring occurred between December 1999 and February 2001. Researchers used data from over 70 special purpose monitor (SPM) PM₁₀ sites and 50 SPM PM_{2.5} sites for database development, analysis, and modeling. In addition to CRPAQS, other Valley-specific air quality studies have assessed particulate emissions from agricultural operations, unpaved and paved road particulate emissions, and particulate formation in fog episodes. The design of the Valley's current PM network is an outgrowth of the results and analysis from CRPAQS and other research efforts.

The Valley's PM monitoring network includes federal reference method (FRM) manual filter-based monitors, federal equivalent method (FEM) monitors, and Non-FEM monitors. PM FRM monitors collected air samples on either a daily, one-in-three day, or one-in-twelve day sampling schedule. FRM monitors meet the "NAAQS Comparison" objective and the FRM filters can also be analyzed for PM speciation, which helps meet the "Research Support" objectives.

FEM monitors are often real-time monitors that have been designated by EPA as being equivalent to FRM monitors. FEMs meet the "NAAQS Comparison" objective and can also satisfy the "Research Support" objective. Beta Attenuation Monitors (BAM) are continuous, near real-time monitors that provide the hourly PM_{2.5} and PM₁₀ data used in air quality forecasting, AQI reporting, and smoke management decisions for open agricultural burning, hazard reduction burning, prescribed burning, and residential wood burning. A BAM can be designated as an FEM or as non-FEM. The hourly PM_{2.5} data is also used in the District's Real-time Air Advisory Network (RAAN), as well as EPA's AirNow.gov website and mobile app. As such, these monitors help meet the "Timely/Public" objective.

Not all real-time monitors meet the "NAAQS Comparison" objective because they do not meet the rigorous engineering design, quality assurance, and quality control standards necessary for comparison to the NAAQS. Such monitors are designated as non-FEM. The District operates four PM_{2.5} monitors as non-FEM SPM sites. These analyzers do not meet all of the certification requirements to be comparable to the PM_{2.5} NAAQS.

Specifically, EPA requires a runtime of 42 minutes per hour with an eight-minute count and these analyzers operate with a runtime of 50 minutes per hour with a four-minute count. Additionally, these instruments use a sharp cut cyclone (SCC) PM_{2.5} inlet instead of a very sharp cut cyclone (VSCC) PM_{2.5} inlet. Finally, some of these monitors do not support the approved software to operate in a manner comparable to the NAAQS. While these monitors are non-FEMs, they produce valuable data that is of sufficient quality for their intended purposes. All other required PM_{2.5} analyzers in the District's network are operated in compliance with 40 CFR Part 58 Appendix A and Appendix E and are comparable to the PM_{2.5} NAAQS.

The four non-FEM PM_{2.5} monitors operating within the District's network are located at sites that are not required by EPA. The District operates these sites for various reasons, including complying with state laws (Huron site), as a settlement to a lawsuit (Tracy-Airport site), and for the purposes of helping the District's RAAN and forecasting programs (Porterville and Lebec sites). Additionally, settlements of California Environmental Quality Act (CEQA) lawsuits between a private company and a private citizen required the company to give the District specific air monitoring equipment to be operated at specific sites. All of these sites and/or equipment are not required for NAAQS purposes.

Detailed Site Information – PM Monitors

As mentioned above, monitoring sites and monitors must meet siting and operational criteria as outlined in 40 CFR Part 58. Criteria such as monitor types, spatial scales, site types, basic monitoring objectives, current sampling frequencies, and other requirements being met by the District's PM network are shown in Tables 19 through 29 and Appendix B.

PM Collocation Requirements

Per 40 CFR 58, Appendix A, Sections 3.2.3 and 3.3.4, the District's particulate matter collocation requirements are met by the Primary Quality Assurance Organization (PQAO). CARB is the PQAO for the District. See CARB's Air Monitoring Network Plan for details on how collocation requirements are met at the PQAO-level. Table 22 shows the collocated PM monitors currently operating in the District's monitoring network.

Public Review of Changes to the PM_{2.5} Monitoring Network

Public input is required whenever the District proposes to move an existing violating PM_{2.5} monitor (40 CFR 58.10(c)). The District uses the annual Air Monitoring Network Plan (this document) to notify and seek public comment on any planned changes to the existing PM_{2.5} network. The Plan is posted on the District website, after which the public is notified of the availability of the document for the 30-day review. In the event of unanticipated changes to the PM_{2.5} network that occur outside the Air Monitoring Network Plan process, the District will post the required documentation on its website and seek public comment.

PM10 Monitoring Requirements

The San Joaquin Valley has been designated as a maintenance area for PM10, and the District's 2007 *PM10 Maintenance Plan* and ongoing PM10 monitoring ensure continued compliance with the federal 24-hour PM10 standard (150 µg/m³). All required SLAMS PM10 analyzers are operated in compliance with 40 CFR Part 58 Appendix A and Appendix E and are comparable to the PM10 NAAQS.

Table 13 below summarizes the requirements from Table D-4 of Appendix D to part 58 which specifies that the minimum number of PM10 monitoring stations required per MSA is based on population and the maximum observed 24-hour PM10 concentration. As such, Table 14 shows that the District's PM10 monitoring network meets the requirements for the San Joaquin Valley. Additionally, the 24-hour PM10 highest concentrations measured at each of the PM10 monitoring sites in the District's network during 2022 are provided in Table 15.

During 2022, the Valley was impacted by high wind and wildfire events that caused extreme increases in PM concentrations that led to exceedances of the PM10 NAAQS. Tables 14 and 15 show the highest measured 24-hour PM10 concentrations in each MSA and by site both with and without data that was impacted by exceptional events. The District will continue to revisit the number of SLAMS (Table 14) and the sampling frequency (Table 28) in each MSA each year as a part of the annual Air Monitoring Network Plan.

Table 13 – PM10 Minimum Monitoring Requirements (# of Stations per MSA)

Population category	High concentration > 180 µg/m ³	Medium concentration ≥ 120 µg/m ³	Low concentration < 120 µg/m ³
>1,000,000	6-10	4-8	2-4
500,000–1,000,000	4-8	2-4	1-2
250,000–500,000	3-4	1-2	0-1
100,000–250,000	1-2	0-1	0

Table 14 – PM10 Monitoring Requirements for the Valley*

County	2022 Population	Exceptional Event Impacts Included		Exceptional Event Impacts Removed		Number of SLAMS in MSA
		2022 Max 24-hour Concentration	Number of SLAMS required	2022 Max 24-hour Concentration	Number of SLAMS required	
Stockton-Lodi MSA						
San Joaquin	784,298	130	2-4	93	1-2	3
Modesto MSA						
Stanislaus	549,466	182	4-8	97	1-2	2
Merced						
Merced	284,338	100	0-1	99	0	1
Madera MSA						
Madera	157,396	141	0-1	141	0-1	1
Fresno MSA						
Fresno	1,011,273	175	4-8	119	2-4	3
Hanford-Corcoran MSA						
Kings	152,023	250	1-2	147	0-1	2
Visalia-Porterville MSA						
Tulare	475,014	132	1-2	116	0-1	1
Bakersfield MSA						
Kern**	773,341	168	2-4	119	1-2	3

* Values shown for each MSA both including and excluding air quality data that was impacted by exceptional events. Values with exceptional event impacts removed are considered representative of ambient air quality conditions in the Valley.

** Bakersfield MSA population represents the population within the Valley Air Basin portion of Kern County and is based on census tract data.

Table 15 – 24-Hour PM10 highest concentrations by site*

Site Name	2022 Highest Concentration	
	Exceptional Event Impacts Included	Exceptional Event Impacts Removed
Stockton-Lodi MSA		
Stockton-University Park	80	80
Tracy-Airport	75	75
Manteca	130	93
Modesto MSA		
Modesto-14th St	88	79
Turlock	182	97
Merced MSA		
Merced-M St	100	99
Madera MSA		
Madera-City	141	141
Fresno MSA		
Clovis-Villa	126	119
Fresno-Garland	115	105
Fresno-Drummond	175	119
Hanford-Corcoran MSA		
Hanford-Irwin	250	136
Corcoran-Patterson	223	147
Visalia-Porterville MSA		
Visalia-W. Ashland Ave	132	116
Bakersfield MSA		
Oildale	148	119
Bakersfield-Golden/M St	168	64
Bakersfield-California	134	107

* Values shown for each MSA both including and excluding air quality data that was impacted by exceptional events. Values with exceptional event impacts removed are considered representative of ambient air quality conditions in the Valley.

PM2.5 Monitoring Requirements

The San Joaquin Valley is designated nonattainment for certain PM2.5 NAAQS. Per 40 CFR part 58, Appendix D, table D-5, the minimum number of PM2.5 sites required per MSA is based on population and the observed PM2.5 concentration (see Table 16). Table 17 shows that the District's PM2.5 monitoring network meets the PM2.5 monitoring requirements for the San Joaquin Valley. Additionally, the 2020-2022 24-hour PM2.5 and annual design values for each site in the District's PM2.5 network are provided in Table 18.

Table 16 – Minimum PM_{2.5} Monitoring Requirements

MSA population	3-year design value % of the 24-Hour or Annual PM _{2.5} NAAQS*	
	≥85% NAAQS (24-Hour: ≥29.8 µg/m ³ Annual: ≥10.2 µg/m ³)	<85% NAAQS (24-Hour: <29.8 µg/m ³ Annual: <10.2 µg/m ³)
>1,000,000	3	2
500,000 - 1,000,000	2	1
50,000 - <500,000	1	0

* 24-hour PM_{2.5} NAAQS is 35 µg/m³. Annual PM_{2.5} NAAQS is 12 µg/m³.

Table 17 – PM_{2.5} Monitoring Requirements for the Valley*

County	2022 Population	Exceptional Event Impacts Included			Exceptional Event Impacts Removed			SLAMS in MSA	Number of Continuous PM2.5 Monitors**
		Max 2022 24-hr DV	Max 2022 Annual DV	SLAMS required	Max 2022 24-hr DV	Max 2022 Annual DV	SLAMS required		
Stockton-Lodi									
San Joaquin	784,298	54	12.3	2	34	12.3	2	2	3
Modesto									
Stanislaus	549,466	55	14.3	2	34	13.7	2	2	2
Merced									
Merced	284,338	50	12.3	1	33	11.8	1	2	2
Madera									
Madera	157,396	55	13.2	1	33	11.2	1	1	1
Fresno									
Fresno	1,011,273	61	17.5	3	40	14.4	3	5	6
Hanford-Corcoran									
Kings	152,023	62	16.6	1	41	14.4	1	2	2
Visalia- Porterville									
Tulare	475,014	65	18.4	1	38	15.5	1	1	3
Bakersfield									
Kern***	773,341	62	18.8	2	45	16.5	2	3	3

* Values shown for each MSA both including and excluding air quality data that was impacted by exceptional events. Values with exceptional event impacts removed are considered representative of ambient air quality conditions in the Valley.

** Number of continuous monitors includes regulatory and non-regulatory monitors.

*** Bakersfield MSA population represents the population within the Valley Air Basin portion of Kern County and is based on census tract data.

Table 18 – 24-Hour and Annual PM_{2.5} Maximum Design Values*

Site Name	Exceptional Events Included		Exceptional Events Excluded		Exceptional Events Included	
	2022 24-Hour DV	2022 Annual DV	2022 24-Hour DV	2022 Annual DV	Max Site in MSA	
					24-Hour	Annual
Stockton-Lodi MSA						
Stockton-University Park	52	12.3	34	12.3		✓
Manteca	54	11.8	31	11.8	✓	
Modesto MSA						
Modesto-14th St	54	14.3	34	13.7		✓
Turlock	55	13.1	33	11.5	✓	
Merced MSA						
Merced-M St	50	12.3	33	10.8	✓	✓
Merced-Coffee	49	11.9	29	11.8		
Madera MSA						
Madera-City	55	13.2	33	11.2	✓	✓
Fresno MSA						
Tranquility	49	9.1	22	9.1		
Clovis-Villa	61	14.7	29	12.1	✓	
Fresno-Garland	61	15.8	35	13.1		
Fresno-Pacific	57	15.3	40	13.6		
Fresno-Foundry	61	17.5	40	14.4		✓
Hanford-Corcoran MSA						
Hanford-Irwin	62	16.6	41	13.9	✓	✓
Corcoran-Patterson	59	16.2	40	14.4		
Visalia-Porterville MSA						
Visalia-W. Ashland Ave	65	18.4	38	15.5	✓	✓
Bakersfield MSA						
Bakersfield-Golden/M St	61	18.0	45	15.9		
Bakersfield-California	62	17.4	42	15.3	✓	
Bakersfield-Airport (Planz)	61	18.8	40	16.5		✓

* Values shown for each MSA both including and excluding air quality data that was impacted by exceptional events. Values with exceptional event impacts removed are considered representative of ambient air quality conditions in the Valley.

** Number of continuous monitors includes regulatory and non-regulatory monitors

PM_{2.5} Chemical Speciation Site Requirements

Per CFR 40 Part 58, the Chemical Speciation Network (CSN) includes Speciation Trends Network (STN) stations and supplemental speciation stations that provide chemical species data of fine particulate. Each State must conduct chemical speciation monitoring and analysis at sites that have been designated part of the STN and approved by the Administrator. Monitoring methods and sampling schedules used at the PM_{2.5} chemical speciation urban trends sites must be approved by the Administrator. Additionally, the sites must include analysis for elements, selected anions and cations, and carbon. Speciation data can be used to support a variety of efforts including:

- The development of emission control strategies and tracking progress of control programs.

- Aiding the interpretation of health studies by linking health effects to PM_{2.5} constituents.
- Trend assessments.
- Characterizing annual and seasonal spatial variation of aerosols.

In addition to the STN requirement, EPA encourages air agencies to operate additional supplemental speciation monitors to meet needs independent of the requirement such as supporting health effects related studies, and developing State Implementation Plans (SIP). There are seven PM_{2.5} speciation monitors operating in the District's network. Five of the monitors meet the STN requirement, and two are supplemental monitors. Details on these PM_{2.5} speciation monitors are shown in Table 19, and Appendix B.

Table 19 – PM_{2.5} Speciation Monitors

Site Name	Network Affiliation	Monitor Type	FRM/FEM/Other	Site Type	Spatial Scale	Basic Monitoring Objective	Sampling Frequency	QA Collocated
Modesto-14th St	CSN Supplemental	SLAMS	Other	PE	N	RS	1:3	
Fresno-Garland*	NCore, STN	SLAMS	Other	PE	N,U	RS	1:3	
	NCore, STN	SLAMS	Other	PE	N,U	RS	1:3	
	NCore, IMPROVE	SLAMS	Other	PE	N,U	RS	1:3	
Visalia-W. Ashland Ave	CSN Supplemental	SLAMS	Other	PE	N	RS	1:3	
Bakersfield-California	CSN, STN	SLAMS	Other	PE	N,U	RS	1:3	
	CSN, STN	SLAMS	Other	PE, QA	N,U	RS	1:6	✓

PE – Population Exposure N – Neighborhood U – Urban RS – Research TP – Timely/Public
 Hourly = One sample every hour 1:3 = 1 in 3 day sampling 1:6 = 1 in 6 day sampling QA = Quality Assurance
 * PM_{2.5} Speciation monitor information for the Fresno-Garland NCore site is also provided in Table 23.

Per network plan requirements described above, Tables 20 and 21 show the types of monitoring methods, collocated monitors, and monitor types operating in the District's PM monitoring network.

Table 20 – PM Monitors*

Site Name	FRM/FEM/Other						QA Collocated			
	PM10 (man.)	PM10 (cont.)	PM2.5 (man.)	PM2.5 (cont.)	Valid PM2.5 Design Value?		PM10 (man.)	PM10 (cont.)	PM2.5 (man.)	PM2.5 (cont.)
					24-Hour NAAQS	Annual NAAQS				
Stockton-University Park		FEM		FEM	Yes	Yes				
Tracy-Airport		FEM		Non-FEM	No	No				
Manteca		FEM		FEM	Yes	Yes				
Modesto-14th St		FEM		FEM	Yes	Yes				
Turlock		FEM		FEM	Yes	Yes				
Merced-M St		FEM		FEM	Yes	Yes				
Merced-Coffee				FEM	Yes	Yes				
Madera-City		FEM		FEM	Yes	Yes				
Tranquillity				FEM	Yes	Yes				
Clovis-Villa		FEM		FEM	Yes	Yes				
Fresno-Pacific				FEM	Yes	Yes				
Fresno-Drummond		FEM								
Fresno-Foundry				FEM	Yes	No				
Huron				Non-FEM	No	No				
Hanford-Irwin		FEM		FEM	Yes	Yes				
Corcoran-Patterson		FEM		FEM	Yes	Yes				
Visalia-W. Ashland Ave		FEM		FEM	Yes	Yes				
Porterville				Non-FEM	No	No				
Oildale		FEM								
Bakersfield-Golden / M St		FEM		FEM	Yes	Yes				
Bakersfield-California	FEM	FEM	FRM	Non-FEM	Yes	Yes	FEM		FRM	
Bakersfield-Airport (Planz)			FRM		Yes	Yes				
Lebec				Non-FEM	No	No				

cont. – Continuous man. – Manual QA - Quality Assurance

* Monitoring method and monitor collocation information for the Fresno-Garland NCore site is provided in Table 23.

Table 21 – PM Monitors Monitor Type*

Site Name	Monitor Type				QA Collocated**			
	PM2.5 (man.)	PM2.5 (cont.)	PM10 (man.)	PM10 (cont.)	PM2.5 (man.)	PM2.5 (cont.)	PM10 (man.)	PM10 (cont.)
Stockton-University Park		SLAMS		SLAMS				
Tracy-Airport		SPM		SLAMS				
Manteca		SLAMS		SLAMS				
Modesto-14th St		SLAMS		SLAMS				
Turlock		SLAMS		SLAMS				
Merced-M St		SLAMS		SLAMS				
Merced-Coffee		SLAMS						
Madera-City		SLAMS		SLAMS				
Tranquillity		SLAMS						
Clovis-Villa		SLAMS		SLAMS				
Fresno-Pacific		SLAMS						
Fresno-Drummond				SLAMS				
Fresno-Foundry		SLAMS						
Huron		SPM						
Hanford-Irwin		SLAMS		SLAMS				
Corcoran-Patterson		SLAMS		SLAMS				
Visalia-W. Ashland Ave		SLAMS		SLAMS				
Porterville		SPM						
Oildale				SLAMS				
Bakersfield-Golden / M St		SLAMS		SLAMS				
Bakersfield-California	SLAMS	OTHER		SLAMS	SLAMS		SLAMS	
Bakersfield-Airport (Planz)	SLAMS							
Lebec		SPM						

cont. – Continuous man. – Manual QA = Quality Assurance

* Monitor information for the Fresno-Garland NCore site is provided in Table 23.

** Monitor information for the QA Collocated sites is provided in Table 22.

Table 22 – QA Collocated Monitors

Site Name	Pollutant	Monitor Type	FRM/FEM/ Other	Site Type	Spatial Scale	Basic Monitoring Objective	Sampling Frequency
Fresno-Garland	PM2.5 (man.)	SLAMS	FRM	PE, QA	N	NC,RS	1:3
Bakersfield-California	PM2.5 (man.)	SLAMS	FRM	HC, PE, QA	N	NC, RS	1:12
	PM10 (man.)	SLAMS	FRM	PE, QA	N	NC, RS	1:6

man. – Manual PE – Population Exposure HC – Highest Concentration N – Neighborhood RS – Research

NC – NAAQS Comparison TP – Timely/Public QA – Quality Assurance Hourly = One sample every hour

1:1 = One sample per day 1:3 = 1 in 3 day sampling 1:6 = 1 in 6 day sampling 1:12 = 1 in 12 day sampling

NCore

National Core (NCore) multipollutant sites are intended to be long-term sites useful for a variety of applications including air quality trends analyses, model evaluation, and tracking metropolitan area statistics. On October 17, 2006, EPA issued final amendments to the ambient air monitoring requirements for criteria pollutants. These amendments were codified in title 40 CFR parts 53 and 58 and established a requirement for NCore multi-pollutant monitoring stations to be operational by January 1, 2011. Since CARB's Fresno-First site already met many of the NCore requirements for filter-based and continuous PM_{2.5}, speciated PM_{2.5}, ozone, and meteorological monitoring, CARB submitted an NCore monitoring plan to the EPA in November 2009. CARB's Fresno-First site was selected by EPA to be an NCore site for the Fresno, CA MSA. In December 2010, CARB installed trace level CO, trace level SO₂, trace level NO_y, and continuous PM₁₀ and 2.5 monitors at this site. A gas dilution calibrator, a zero air generator, and digital data loggers were also installed to support NCore monitoring. In January 2012, CARB relocated the Fresno-First site (site identification number 06-019-0008) two blocks north to the Fresno-Garland site (site identification number 06-019-0011). The Fresno-Garland site continues to serve as the NCore site for the Fresno, CA MSA. Details on the parameters being monitored at the NCore site are shown in Table 23 and Appendix B.

Table 23 – Fresno-Garland NCore Site

Pollutant	Monitor Type	FRM/FEM/Other	Site Type	Spatial Scale	Basic Monitoring Objective	Current Sampling Frequency	QA Collocation
Ozone	SLAMS	FEM	PE	U	NC,RS	Hourly	
NO ₂	SLAMS	FRM	Max PEI	U	NC,RS	Hourly	
CO	SLAMS	FRM	PE	U	NC,RS	Hourly	
SO ₂	SLAMS	FEM	PE	U	NC,RS	Hourly	
NO _y	SLAMS	Other	PE	U	NC,RS	Hourly	
Toxics	SLAMS	Other	PE	N	RS,TP	Hourly	
PM _{2.5} (man.)	SLAMS	FRM	PE, QA	N	NC,RS	1:3	✓
PM _{2.5} (cont.)	SLAMS	FEM	PE	N	NC,RS	Hourly	
PM _{2.5} Speciation (STN)	SLAMS	SLAMS	PE	N,U	RS	1:3	
	SLAMS	SLAMS	PE	N,U	RS	1:3	
PM ₁₀ STP (cont.)	SLAMS	FEM	PE	N	NC,RS	Hourly	
PM _{10-2.5} (cont.)	SLAMS	Other	GB	N	NC,RS	Hourly	

cont. – Continuous man. – Manual PE – Population Exposure Neighborhood U – Urban
 RS – Research Max PEI – Max Precursor Emissions Impact NC – NAAQS Comparison TP – Timely/Public
 STP – Standard Temperature and Pressure 1:3 = 1 in 3 day sampling Hourly = One sample every hour

Non-EPA Federal Monitors

Within the District's air monitoring network, non-EPA federal monitors are located in Sequoia and Kings Canyon National Park and are operated by the National Park Service (NPS). The monitors operating at the Sequoia-Ash Mountain air monitoring site

are affiliated with the national Clean Air Status and Trends Network (CASTNET). CASTNET assesses trends in pollutant concentrations, atmospheric deposition, and ecological effects due to changes in air pollutant emissions. Details on the non-EPA federal monitors are shown in Table 24 and Appendix B.

Table 24 – Non-EPA Federal Monitors

Parameter	Site Type	FRM/FEM/Other	Spatial Scale	Network Affiliation	Basic Monitoring Objective	Current Sampling Frequency
Sequoia-Ash Mountain						
Ozone	HC, RT	Other	R	CASTNET	NC, RS, TP	Hourly
PM _{2.5} (continuous)	HC	Non-FEM	R	IMPROVE	RS, TP	Hourly
Meteorology	GB	Other	R	CASTNET	RS, TP	Hourly
Sequoia-Lower Kaweah						
Ozone	RT	Other	R	None	NC, RS, TP	Hourly
Meteorology	GB	Other	R	None	RS, TP	Hourly

HC – High Concentration RT – Regional Transport GB – General Background R – Regional
 NC – NAAQS Comparison RS – Research TP – Timely/Public Hourly = One sample every hour
 CASTNET – Clear Air Status and Trends Network

As previously noted, the purpose, siting, and operational requirements for each monitor must be met as outlined in Appendices A, C, D, and E of 40 CFR part 58. This detailed site information is provided in Tables 25 through 30 as well as in Appendix B of this network plan.

Table 25 – SLAMS Site Type*

Site Name	Ozone	PM2.5 (man.)	PM2.5 (cont.)	PM10 (man.)	PM10 (cont.)	NO2	CO	NMH
Stockton-University Park	PE		HC, PE		PE	PE	PE	
Tracy-Airport	RT				RT	RT		
Manteca			HC		HC			
Modesto-14th St	PE		PE		PE		PE	
Turlock	HC, PE		HC, PE		PE	PE		
Merced-M St			HC, PE		HC, PE			
Merced-Coffee	HC, PE		PE			PE		
Madera-City	HC, GB		PE		PE			
Madera-Pump Yard	HC, GB					PE		PE
Tranquillity	PE		PE					
Fresno-Sky Park	HC, PE, RT					PE		
Clovis-Villa	Max PEI, HC		HC		HC	HC	Max PEI, PE	HC
Fresno-Pacific			PE					
Fresno-Drummond	PE, HC, RT				HC	HC		
Fresno-Foundry			HC			HC	HC	
Parlier	HC, RT					PE		PE
Hanford-Irwin	HC, PE		PE		PE	PE		
Corcoran-Patterson			HC, PE		HC, PE			
Visalia-W. Ashland Ave	GB		HC, PE		PE	PE		
Porterville	HC, PE							
Shafter	GB, PE					PE		PE
Oildale	HC, RT				SO			
Bakersfield-Golden / M St			PE		PE			
Bakersfield-Westwind						HC		
Bakersfield-California	HC, GB	HC, PE, QA	HC, PE	PE, QA	PE	PE		
Bakersfield-Muni	HC					HC	PE	PE
Bakersfield-Airport (Planz)		HC, PE						
Edison	HC, RT					PE		
Arvin-Di Giorgio	HC, PE							
Maricopa	HC, RT							

cont. – Continuous man. – Manual PE – Population Exposure HC – Highest Concentration
 RT – Regional Transport GB – General/Background QA – QA Collocation SO – Source Oriented
 Max PEI – Max Precursor Emissions Impact

Site Type information for the QA Collocated sites is provided in Table 22.

Site Type information for the Fresno-Garland NCore site is provided in Table 23.

Table 26 – SLAMS Spatial Scale

Site Name	Ozone	PM2.5 (man.)	PM2.5 (cont.)	PM10 (man.)	PM10 (cont.)	NO2	CO	NMH
Stockton-University Park	N		N		N	N		
Tracy-Airport	R				R	R		
Manteca			N		N			
Modesto-14th St	N	N	N		N		N	
Turlock	N		N		N	N		
Merced-M St			N		N			
Merced-Coffee	N		N			N		
Madera-City	N	N	N		N			
Madera-Pump Yard	N					N		N
Tranquillity	U		U					
Fresno-Sky Park	N					N		
Clovis-Villa	N		N		N	N	N	N
Fresno-Pacific		N						
Fresno-Drummond	N				N	N		
Fresno-Foundry			MC			MC	MC	
Parlier	N					N		N
Hanford-Irwin	N		N		N	N		
Corcoran-Patterson			N		N			
Visalia-W. Ashland Ave	N		N		N	N		
Porterville	N							
Shafter	N					N		N
Oildale	U				MD			
Bakersfield-Golden / M St			N		N			
Bakersfield-Westwind						MC		
Bakersfield-California	N	N	N	N		N		
Bakersfield-Muni	N					N	N	N
Bakersfield-Airport (Planz)		N						
Edison	N					N		
Arvin-Di Giorgio	N							
Maricopa	N							

N – Neighborhood U – Urban R – Regional MC – Microscale MD – Middle scale
 cont. – Continuous man. – Manual

Spatial Scale information for the QA Collocated sites is provided in Table 22.

Spatial Scale information for the Fresno-Garland NCore site is provided in Table 23.

Table 27 – SLAMS Basic Monitoring Objective

Site Name	Ozone	PM2.5 (man.)	PM2.5 (cont.)	PM10 (man.)	PM10 (cont.)	NO2	CO	NMH
Stockton-University Park	NC,RS,TP		NC,RS,TP		NC,RS,TP	NC, RS, TP	NC, RS, TP	
Tracy-Airport	NC,RS,TP				NC,RS,TP	NC, RS, TP		
Manteca			NC,RS,TP		NC,RS,TP			
Modesto-14th St	NC,RS,TP		NC,RS,TP		NC,RS,TP		NC, RS, TP	
Turlock	NC,RS,TP		NC,RS,TP		NC, RS, TP	NC, RS, TP		
Merced-M St			NC, RS, TP		NC, RS, TP			
Merced-Coffee	NC,RS,TP		NC,RS,TP			NC, RS,TP		
Madera-City	NC,RS,TP		NC,RS,TP		NC,RS,TP			
Madera-Pump Yard	NC,RS,TP					NC, RS, TP		RS
Tranquillity	NC,RS,TP		NC,RS,TP					
Fresno-Sky Park	NC,RS,TP					NC, RS, TP		
Clovis-Villa	NC,RS,TP		NC,RS,TP		NC,RS,TP	NC,RS, TP	NC, RS, TP	RS
Fresno-Pacific			NC, RS, TP					
Fresno-Drummond	NC,RS,TP				NC, RS, TP	NC,RS,TP		
Fresno-Foundry			NC,RS,TP			NC,RS,TP	NC, RS, TP	
Parlier	NC,RS,TP					NC, RS, TP		RS
Hanford-Irwin	NC,RS,TP		NC,RS,TP		NC,RS,TP	NC,RS,TP		
Corcoran-Patterson			NC,RS,TP		NC,RS,TP			
Visalia-W. Ashland Ave	NC,RS,TP		NC,RS,TP		NC,RS,TP	NC,RS,TP		
Porterville	NC,RS,TP							
Shafter	NC,RS,TP					NC, RS,TP		RS
Oildale	NC,RS,TP				NC,RS,TP			
Bakersfield-Golden / M St					NC, RS, TP			
Bakersfield-Westwind						NC, RS, TP		
Bakersfield-California	NC, RS, TP	NC, RS		NC, RS	NC, RS, TP	NC, RS, TP		
Bakersfield-Muni	NC,RS,TP					NC, RS, TP	NC,RS, TP	RS

Table 27 – SLAMS Basic Monitoring Objective (cont'd)

Site Name	Ozone	PM2.5 (man.)	PM2.5 (cont.)	PM10 (man.)	PM10 (cont.)	NO2	CO	NMH
Bakersfield-Airport (Planz)		NC, RS						
Edison	NC,RS,TP					NC, RS,TP		
Arvin-Di Giorgio	NC,RS,TP							
Maricopa	NC,RS,TP							

NC – NAAQS Comparison RS – Research TP – Timely/Public cont. – Continuous man. – Manual

Basic Monitor Objective information for the QA Collocated sites is provided in Table 22.

Basic Monitor Objective information for the Fresno-Garland NCore site is provided in Table 23.

Table 28 – SLAMS Sampling Frequency

Site Name	Ozone	PM2.5 (man.)	PM2.5 (cont.)	PM10 (man.)	PM10 (cont.)	NO2	CO	NMH
Stockton-University Park	Hourly		Hourly		Hourly	Hourly	Hourly	
Tracy-Airport	Hourly				Hourly	Hourly		
Manteca			Hourly		Hourly			
Modesto-14th St	Hourly		Hourly		Hourly		Hourly	
Turlock	Hourly		Hourly		Hourly	Hourly		
Merced-M St			Hourly		Hourly			
Merced-Coffee	Hourly		Hourly			Hourly		
Madera-City	Hourly		Hourly		Hourly			
Madera-Pump Yard	Hourly					Hourly		Hourly
Tranquillity	Hourly		Hourly					
Fresno-Sky Park	Hourly					Hourly		
Clovis-Villa	Hourly		Hourly		Hourly	Hourly	Hourly	Hourly
Fresno-Pacific			Hourly					
Fresno-Drummond	Hourly				Hourly	Hourly		
Fresno-Foundry			Hourly			Hourly	Hourly	
Parlier	Hourly					Hourly		Hourly
Hanford-Irwin	Hourly		Hourly		Hourly	Hourly		
Corcoran-Patterson			Hourly		Hourly			
Visalia-W. Ashland Ave	Hourly		Hourly		Hourly	Hourly		
Porterville	Hourly							
Shafter	Hourly					Hourly		Hourly
Oildale	Hourly				Hourly			

Table 28 – SLAMS Sampling Frequency (cont'd)

Site Name	Ozone	PM2.5 (man.)	PM2.5 (cont.)	PM10 (man.)	PM10 (cont.)	NO2	CO	NMH
Bakersfield-Golden / M St			Hourly		Hourly			
Bakersfield-Westwind						Hourly		
Bakersfield-California	Hourly	1:1		1:6	Hourly	Hourly		
Bakersfield-Muni	Hourly					Hourly	Hourly	Hourly
Bakersfield-Airport (Planz)		1:3						
Edison	Hourly					Hourly		
Arvin-Di Giorgio	Hourly							
Maricopa	Hourly							

cont. – Continuous man. – Manual Hourly = One sample every hour 1:1 = One sample per day

1:3 = 1 in 3 day sampling 1:6 = 1 in 6 day sampling

Current Sampling Frequency information for the QA Collocated sites is provided in Table 22.

Current Sampling Frequency information for the Fresno-Garland NCore site is provided in Table 23

Table 29 – SPM / Other (PM2.5 Continuous)

Site Name	Site Type	Spatial Scale	Basic Monitoring Objective	Current Sampling Schedule
Tracy-Airport	RT	R	TP	Hourly
Huron	PE	N	TP	Hourly
Porterville	PE	N	TP	Hourly
Bakersfield-California	PE	N	RS, TP	Hourly
Lebec	PE	N	TP	Hourly

PE – Population Exposure RT – Regional Transport N – Neighborhood R – Regional RS – Research

TP - Timely/Public Hourly – One sample every hour

IMPROVEMENTS AND PLANNED CHANGES TO THE DISTRICT'S AIR MONITORING NETWORK

The Valley air monitoring network is continually being improved. MSA/CBSA-specific changes are generally described below. Before any action is taken on future planned changes noted in this section, the District will work with CARB and EPA, as appropriate, to address necessary requirements for documentation. A summary of changes to sites in 2022 and 2023 to-date, along with planned changes to the District's air monitoring network are discussed below and provided in Table 30-31 below.

Fresno-Sierra Sky Park

Vegetation to the south and southwest of the Fresno-Sierra Sky Park site (06-019-0242) had grown to the point of disrupting wind flow from the south, southwest and the southeast. Based on these conditions, the site was not meeting siting requirements for SLAMS monitors. As such, the District has continued operating the site and has been applying the appropriate qualifier code/s to all gaseous data in the EPA AQS database to inform data users of the siting issues. The qualifier code 'SX - Does not meet siting criteria' is the code currently being used. In 2022, the obstruction was cleared. The District plans to work with CARB/EPA to discontinue placing the "SX" flag on the data collected from this site upon the next audit from CARB confirming that the obstruction has been cleared.

Bakersfield-Airport (Planz)

CARB and the District are in the process of evaluating siting challenges at the Bakersfield-Airport (Planz) air monitoring site and reviewing the PM_{2.5} data collected to determine if the site should remain comparable to the annual PM_{2.5} NAAQS. The PM_{2.5} monitor is sited at the Bakersfield Municipal Airport and preliminary analysis of nearby activity and monitoring data from the Planz site and surrounding PM_{2.5} monitors, along with unique siting challenges for the PM_{2.5} monitor, suggests that the Planz monitor PM_{2.5} concentrations are not representative of PM_{2.5} air quality in Bakersfield area and that the site is not collecting data suitable for the intended spatial scale of the site. Further technical analysis is being completed to identify whether the local impacts to the Planz monitor indicate that the site is not meeting siting requirements. CARB's recommendations on the provisions of 40 CFR Part 58.30 and the potential to move the site to a location that meets siting criteria will be made available for public comment prior to submittal of any request for approval to EPA. Any changes to the monitoring network will be reflected in future Air Monitoring Network Plans.

Stockton-University Park

The new site at University Park became operational on November 8, 2021 as the replacement for the Stockton-Hazelton air monitoring site. On February 28, 2022, CARB

sent a letter to EPA with a request for EPA approval of this network change. EPA's July, 20, 2022 letter (included in Appendix C to this document) provided EPA's review and approval for the CARB relocation of the PM_{2.5}, PM₁₀, O₃, NO₂, and CO State/Local Air Monitoring Station (SLAMS) monitors from the Stockton-Hazelton site (AQS site ID: 06-077-1002) to the Stockton-University Park site (AQS site ID: 06-077-1003).

Visalia-W. Ashland Avenue

The new site at W. Ashland Ave. became operational on January 11, 2022 as the replacement for the Visalia-Church St. air monitoring site. On March 7, 2023, CARB sent a letter to the EPA with a request for EPA approval of this change. EPA's April 11, 2023 letter (included in Appendix D to this document) provided EPA's review and approval for the CARB relocation of the O₃, PM_{2.5}, PM₁₀, and NO₂ State/Local Air Monitoring Station (SLAMS) monitors from the Visalia-Church St. site (AQS site ID: 06-107-2002) to the Visalia-West Ashland Avenue site (AQS site ID: 06-107-2003).

Arvin-Di Giorgio

CARB plans to install a new, permanent monitoring shelter within the next 12 months. It is anticipated that the new shelter will have enough space for the District to resume operation of the Type 3 PAMS site at this location after the CARB shelter replacement is complete. Additional details on resuming the PAMS program at this site will be considered as the CARB shelter replacement project is completed.

Table 30 – Summary of Proposed Changes to the Air Monitoring Network

CBSA: Stockton	County: San Joaquin	
Site Name	Operating Agency	Planned Changes
Stockton-University Park	CARB	EPA reviewed and approved the relocation of monitors from Stockton-Hazeltan to Stockton-University on July 20, 2022.
Tracy-Airport	SJVAPCD	None
Manteca	SJVAPCD	None
CBSA: Modesto	County: Stanislaus	
Site Name	Operating Agency	Planned Changes
Modesto-14th St	CARB	None
Turlock	SJVAPCD	None
CBSA: Merced	County: Merced	
Site Name	Operating Agency	Planned Changes
Merced-M St	SJVAPCD	None
Merced-Coffee	SJVAPCD	None
CBSA: Madera	County: Madera	
Site Name	Operating Agency	Planned Changes
Madera-City	SJVAPCD	None
Madera-Pump Yard	SJVAPCD	None
CBSA: Fresno	County: Fresno	
Site Name	Operating Agency	Planned Changes
Tranquillity	SJVAPCD	None
Fresno-Sky Park	SJVAPCD	The District plans to work with CARB/EPA to discontinue placing the "SX" flag on the data collected from this site upon the next audit from CARB confirming that the obstruction has been cleared.
Clovis-Villa	SJVAPCD	None
Fresno-Garland	CARB	None
Fresno-Pacific	SJVAPCD	None
Fresno-Drummond	SJVAPCD	None
Fresno-Foundry (near-road)	SJVAPCD	None
Parlier	SJVAPCD	None
CBSA: Kings	County: Kings	
Site Name	Operating Agency	Planned Changes
Hanford-Irwin	SJVAPCD	None
Corcoran-Patterson	SJVAPCD	None
CBSA: Visalia-Porterville	County: Tulare	
Site Name	Operating Agency	Planned Changes
Visalia-W. Ashland Avenue	CARB	EPA reviewed and approved the relocation of monitors from Visalia-Church to Visalia-W. Ashland on April 11, 2023.
Porterville	SJVAPCD	None
Sequoia-Ash Mountain	NPS	None
Sequoia-Lower Kaweah	NPS	None

Table 31 – Summary of Proposed Changes to the Air Monitoring Network (cont'd)

CBSA: Bakersfield	County: Kern (Valley Portion Only)	
Site Name	Operating Agency	Planned Changes
Shafter	Shared	None
Oildale	CARB	None
Bakersfield-Golden/M St	SJVAPCD	None
Bakersfield-Westwind (near-road)	SJVAPCD	None
Bakersfield-California	CARB	None
Bakersfield-Muni	SJVAPCD	None
Bakersfield-Airport (Planz)	CARB	CARB/District completing analysis and technical review of applicability of the Planz monitor to the annual PM2.5 NAAQS under the provisions of 40 CFR 58.30
Edison	CARB	None
Arvin-Di Giorgio	CARB	CARB plans are to install a new, permanent monitoring shelter within the next 12 months. Plans for installing PAMS equipment will be considered when new shelter is complete.
Maricopa	SJVAPCD	None
Lebec	SJVAPCD	None

DATA SUBMISSION REQUIREMENTS

Air quality and precision data are required to be submitted to EPA 90 days after the end of the calendar quarter after all air quality assurance checks are completed. Accuracy data is submitted to EPA by CARB as part of their scheduled audits. The District is responsible for certifying data from District-operated air monitoring sites. The District certified its 2022 data on April 26, 2023. CARB is responsible for certifying data from all CARB-operated air monitoring sites, as well as weighing and certifying filter-based measurements from District-operated filter measurement sites. 2022 was the last data year the District operated any monitoring equipment that required analysis by the CARB laboratory in Sacramento, CA. For information on CARB's data certification, see CARB's air monitoring network plan.¹

¹ CARB air monitoring network plan webpage: <http://www.arb.ca.gov/aqd/amnr/amnr.htm>

ACRONYMS AND ABBREVIATIONS

AQI:	Air Quality Index
AQS:	Air Quality System
BAM:	Beta Attenuation Monitor
CAA:	Clean Air Act
CASTNET:	Clean Air Status and Trends Network
CARB:	California Air Resources Board
CBSA:	Core-Based Statistical Area
CFR:	Code of Federal Regulations
CRPAQS:	California Regional Particulate Air Quality Study
CO:	Carbon Monoxide
CSA:	Combined statistical area
District:	San Joaquin Valley Air Pollution Control District
BAM:	Beta Attenuation Monitor
EPA:	U.S. Environmental Protection Agency
FEM:	Federal Equivalent Method
FRM:	Federal Reference Method
LAP:	Lower Air Profiler
MSA:	Metropolitan statistical area
NAAQS:	National Ambient Air Quality Standard
NCore:	National Core
NMH:	Non-Methane Hydrocarbons
NO:	Nitrogen Oxide
NO ₂ :	Nitrogen Dioxide
NO _x :	Oxides of Nitrogen
NO _y :	Reactive Nitrogen
NPS:	National Park Service
O ₃ :	Ozone
PAMS:	Photochemical Assessment Monitoring Station
PM:	Particulate Matter
PM _{2.5} :	Particulate Matter 2.5 microns or less in diameter
PM ₁₀ :	Particulate Matter 10 microns or less in diameter
SIP:	State Implementation Plan
SLAMS:	State and Local Air Monitoring Station
SJVAPCD:	San Joaquin Valley Air Pollution Control District
SMS:	Smoke Management System
SO ₂ :	Sulfur Dioxide
SPM:	Special Purpose Monitor
STN:	Speciated Trends Network
TEOM:	Tapered Element Oscillating Microbalance
VOC:	Volatile Organic Compounds

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APPENDIX A:

Air Monitoring Site Descriptions

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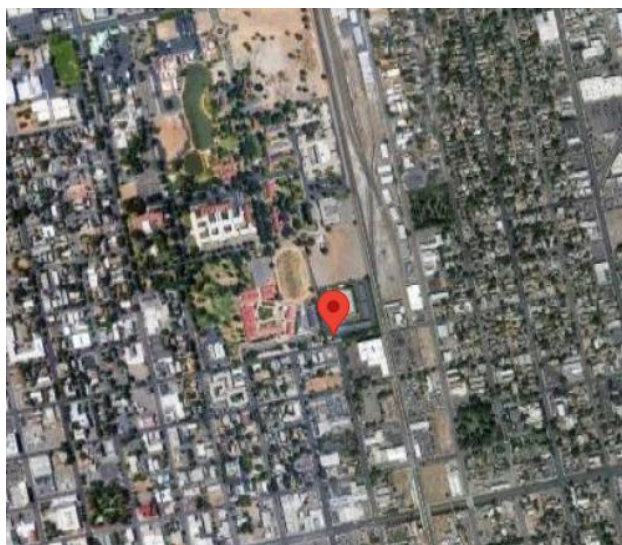
Stockton-University Park

The Stockton-University Park monitoring site is operated by the California Air Resources Board (CARB) and is located in the Stockton, CA metropolitan area. It began operating in November 2021, replacing the Stockton-Hazelton site. The purpose of the site is to monitor representative concentrations of ozone, PM_{2.5}, and PM₁₀ in an urban area. The site also monitors CO, NO₂, toxics, and meteorology.

Site name:	Stockton-University Park
AQS ID:	06-077-1003
County:	San Joaquin
Street Address:	702 N. Aurora Street, Stockton CA 95202
Geographic Coordinates:	37.9158 N, -121.28141 W
Distance to road (meters):	60 m (north)
Traffic Count (AADT; Year):	4,000; 2019
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Stockton-Lodi

Traffic count for nearest cross road: Park St

Source: City of Stockton 2019 Traffic Volume Flow Map



Manteca

The Manteca monitoring site is located in Manteca, CA and operated by the San Joaquin Valley Air Pollution Control District (SJVAPCD or District). It became operational in November 2010. The purpose of the site is to monitor representative concentrations of PM_{2.5} and PM₁₀ from upwind and nearby urban areas. The site also monitors meteorology.

Site name:	Manteca
AQS ID:	06-077-2010
County:	San Joaquin
Street Address:	530 Fishback Rd, Manteca CA 95337
Geographic Coordinates:	37.793392 N, -121.247874 W
Distance to road (meters):	12 m (west)
Traffic Count (AADT; Year):	20,487; 2020*
Ground Cover:	Paved, vegetative
Representative Statistical Area (CBSA):	Stockton-Lodi

*Traffic count for nearest roads: Airport Way between Lathrop Rd and Hwy 120.

Source: San Joaquin Council of Governments, 2020 Monitoring and Conformance Report



Tracy-Airport

The Tracy-Airport monitoring site, located in Tracy, CA, was part of a settlement from a lawsuit between the District and CARB that took place in 1995. This air monitoring station was installed for the purpose of monitoring transport of air pollution from the Bay Area to the San Joaquin Valley. The site became operational in 1994 and was operated by CARB until June 1995. The District began operating the site in 1996. The site has been moved several times over the years and became operational at its current location in January 2006. The site monitors transport of ozone, NO₂, PM_{2.5}, and PM₁₀ from upwind and nearby urban areas. The site also measures meteorology.

Site name:	Tracy-Airport
AQS ID:	06-077-3005
County:	San Joaquin
Street Address:	5749 S Tracy Blvd, Tracy CA 95376
Geographic Coordinates:	37.682635 N, -121.442495 W
Distance to road (meters):	700 m (east)
Traffic Count (AADT; Year):	5,113; 2020*
Ground Cover:	Dirt and Gravel
Representative Statistical Area (CBSA):	Stockton-Lodi

*Traffic count for nearest roads: Linne Rd and Corral Hollow Rd.

Source: San Joaquin Council of Governments, 2020 Monitoring and Conformance Report

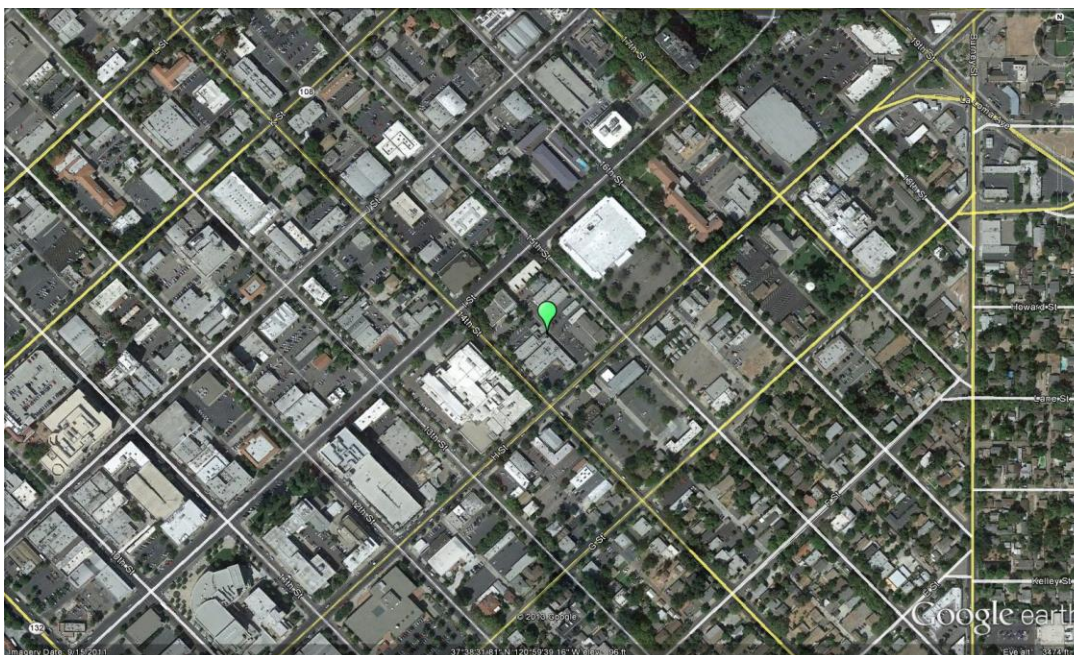


Modesto-14th St

The Modesto-14th St monitoring site is operated by CARB and is located in the Modesto, CA metropolitan area. It began operating in January 1981. The purpose of the site is to monitor representative concentrations of ozone, PM_{2.5}, and PM₁₀ in local and upwind urban areas. The site also monitors CO, PM_{2.5} Speciation, and meteorology.

Site name:	Modesto-14 th St
AQS ID:	06-099-0005
County:	Stanislaus
Street Address:	814 14th St, Modesto CA 95354
Geographic Coordinates:	37.6421 N, -120.9942 W
Distance to road (meters):	50 m (southwest)
Traffic Count (AADT; Year):	131,800; 2019*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Modesto

* Traffic count for nearest roads: H Street / CA Route 99. Source: Caltrans 2019 AADT

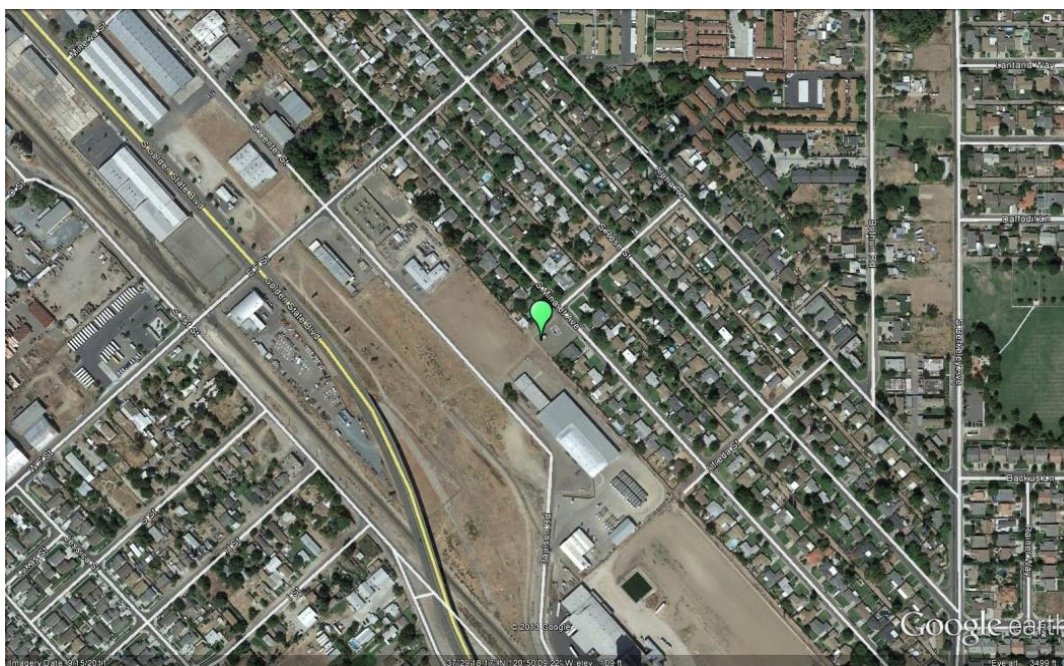


Turlock

The Turlock monitoring site is operated by the SJVAPCD and is located in Turlock, CA. It began operating in April 1992. The purpose of the site is to monitor representative concentrations of ozone, PM_{2.5}, and PM₁₀ from upwind urban areas. The site also monitors NO₂, and meteorology.

Site name:	Turlock
AQS ID:	06-099-0006
County:	Stanislaus
Street Address:	900 S Minaret Ave, Turlock CA 95380
Geographic Coordinates:	37.488317 N, -120.836008 W
Distance to road (meters):	40 m (northeast)
Traffic Count (AADT; Year):	742; 2015*
Ground Cover:	Gravel
Representative Statistical Area (CBSA):	Modesto

* Traffic count for Minaret Ave. between East Ave. and Berkley Ave. Five-day average two-way traffic. Source: City of Turlock Engineering Division 2015



Merced-M St

The Merced-M St monitoring site is operated by the SJVAPCD and is located in Merced, CA. It began operating in April 1999. The purpose of the site is to monitor representative concentrations of PM_{2.5} and PM₁₀ responses from upwind urban areas.

Site name:	Merced-M St
AQS ID:	06-047-2510
County:	Merced
Street Address:	2334 M St, Merced CA 95340
Geographic Coordinates:	37.30832 N, -120.480456 W
Distance to road (meters):	55 m (northwest)
Traffic Count (AADT; Year):	51,000; 2019*
Ground Cover:	Paved, gravel
Representative Statistical Area (CBSA):	Merced

*Traffic count for nearest roads: R St / CA Route 99. Source: Caltrans 2019 AADT

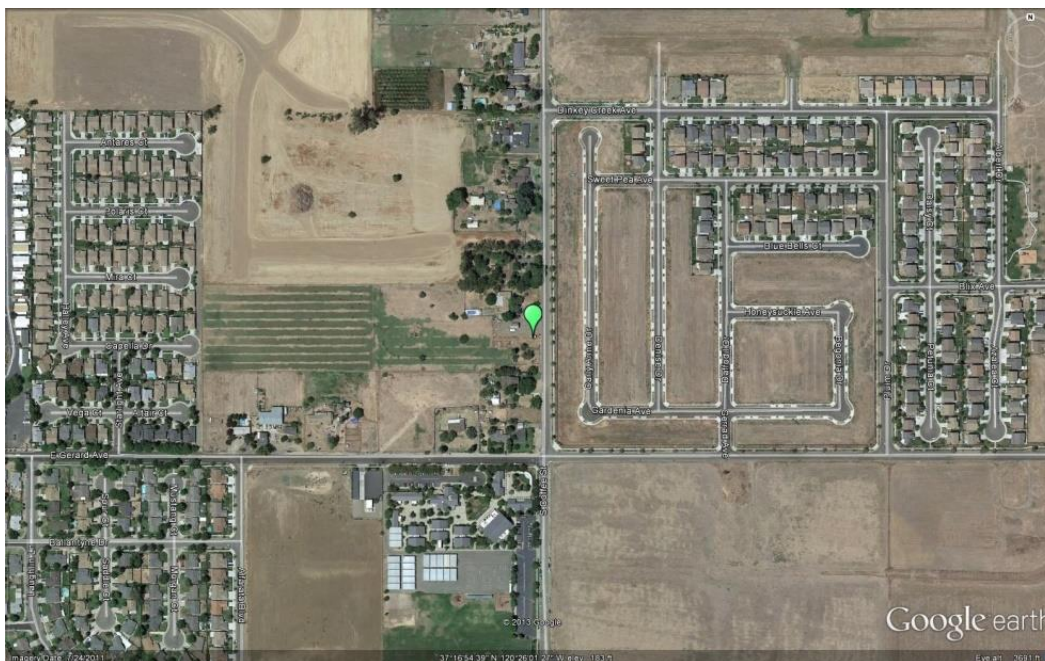


Merced-Coffee

The Merced-Coffee monitoring site is operated by the SJVAPCD and is located in the Merced, CA. It began operating in October 1991. The purpose of the site is to monitor representative concentrations of ozone and PM_{2.5} responses from upwind urban areas. The site also monitors NO₂ and meteorology.

Site name:	Merced-Coffee
AQS ID:	06-047-0003
County:	Merced
Street Address:	385 S. Coffee St., Merced CA 95340
Geographic Coordinates:	37.281853 N, -120.433671 W
Distance to road (meters):	15 m (east)
Traffic Count (AAD; Year):	42,500; 2019*
Ground Cover:	Vegetative, dirt and gravel
Representative Statistical Area (CBSA):	Merced

*Traffic count for nearest roads: Childs Ave / CA Route 99. Source: Caltrans 2019 AADT

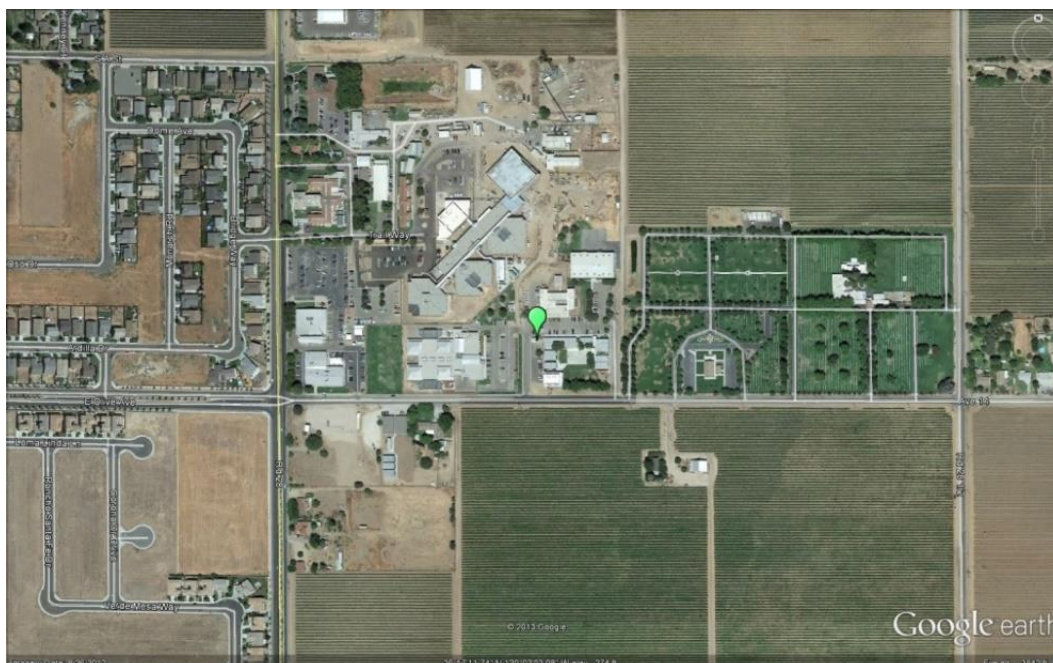


Madera-City

The Madera-City monitoring site is operated by the SJVAPCD and is located in the city of Madera, CA. It began operating in June 2010. The purpose of the site is to monitor representative concentrations of ozone, PM_{2.5}, PM₁₀. The site also monitors meteorology.

Site name:	Madera-City
AQS ID:	06-039-2010
County:	Madera
Street Address:	28261 Avenue 14, Madera CA 93638
Geographic Coordinates:	36.9532 N, -120.0342 W
Distance to road (meters):	70 m (south)
Traffic Count (AADT; Year):	386; 2017*
Ground Cover:	Paved, dirt, and vegetative
Representative Statistical Area (CBSA):	Madera

*Traffic count for nearest roads: Avenue 14 west of Road 29, westbound trips per hour in 24 hours.
Source: Madera County Transportation Commission 2020 Traffic Volumes Report.

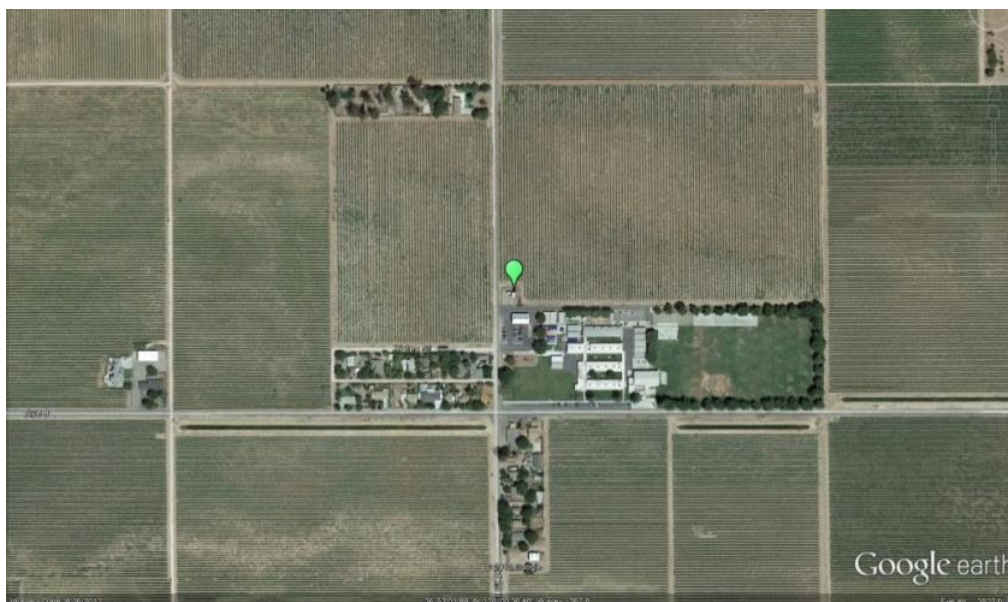


Madera-Pump Yard

The Madera-Pump Yard monitoring site is operated by the SJVAPCD and is located in southern Madera County. It began operating in July 1997. This site was established as a Type 1 site for the Photochemical Assessment Monitoring Stations (PAMS) program, and located in an area upwind of Fresno essentially void of upwind or local ozone precursor emissions influences. This site monitors ozone, NO₂, NMH, Speciated-VOC, and meteorology for the PAMS program.

Site name:	Madera-Pump Yard
AQS ID:	06-039-0004
County:	Madera
Street Address:	Avenue 8 and Road 29 1/2, Madera CA 93637
Geographic Coordinates:	36.867125 N, -120.010158 W
Distance to road (meters):	20 m (west)
Traffic Count (AADT; Year):	2,980; 2017*
Ground Cover:	Dirt, paved
Representative Statistical Area (CBSA):	Madera

*Traffic count for nearest roads: Avenue 7 west of CA Route 99, westbound trips per hour in 24 hours.
Source: Madera County Transportation Commission 2020 Traffic Volumes Report.



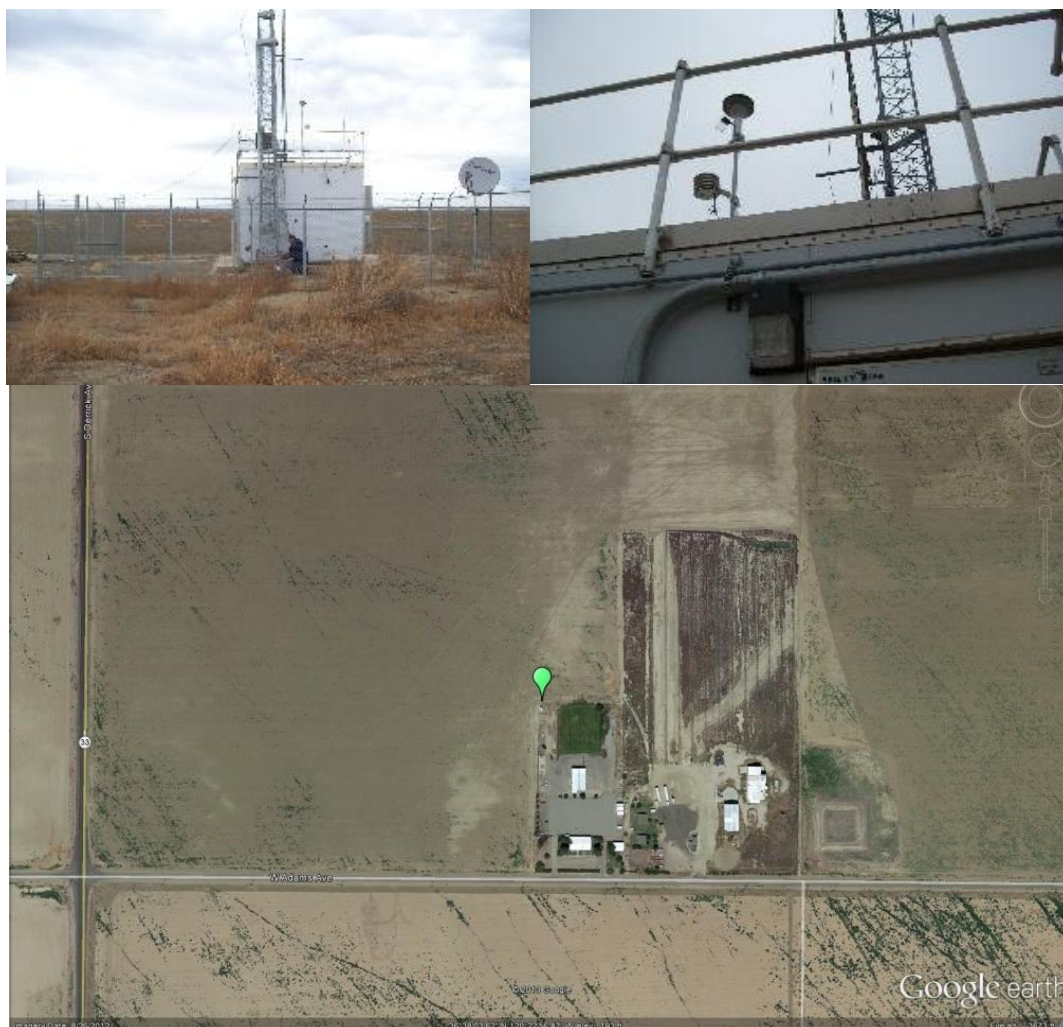
Tranquillity

The Tranquillity monitoring site is located in western Fresno County. It began operating in September 2009 and is operated by the SJVAPCD. The purpose of this site is to monitor representative background and rural pollutant concentrations of ozone and PM2.5. The site also monitors meteorology.

Site name:	Tranquillity
AQS ID:	06-019-2009
County:	Fresno
Street Address:	32650 W Adams, Tranquillity CA 93668
Geographic Coordinates:	36.634225 N, -120.382331 W
Distance to road (meters):	200 m (south)
Traffic Count (AADT; Year):	1,750; 2019*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Fresno

* Raw traffic count for nearest roads: Adams Avenue and Route 33 (S. Derrick Avenue)

Source: Caltrans 2019

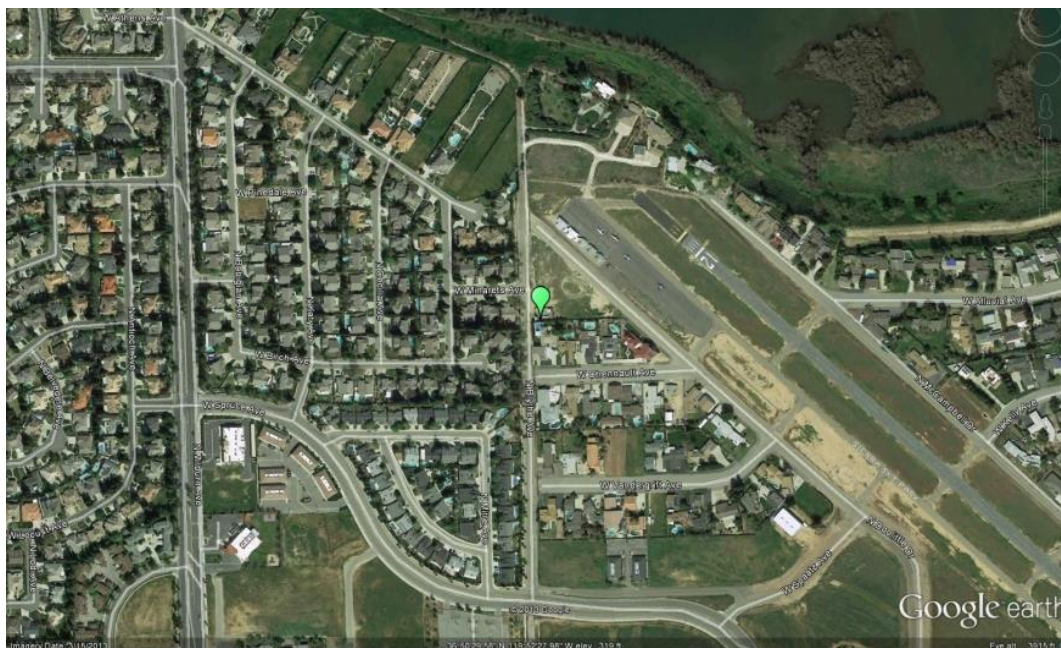


Fresno-Sierra Sky Park

The Fresno-Sierra Sky Park monitoring site is operated by the SJVAPCD and is located in the Fresno, CA metropolitan area. It began operating in July 1986. The purpose of the site is to monitor representative concentrations of ozone responses in an urban area. In addition to ozone, the site also monitors NO₂ and meteorology.

Site name:	Fresno-Sky Park
AQS ID:	06-019-0242
County:	Fresno
Street Address:	4508 Chennault Ave, Fresno CA 93722
Geographic Coordinates:	36.841592 N, -119.874739 W
Distance to road (meters):	12 m (west)
Traffic Count (AADT; Year):	15,626; 2018*
Ground Cover:	Gravel, dirt
Representative Statistical Area (CBSA):	Fresno

*Raw traffic count in a 24-hour period for nearest roads: Spruce Ave east of Milburn Ave
Source: Fresno COG Traffic Counts, 2007-2019 Kittelson & Associates, Inc.

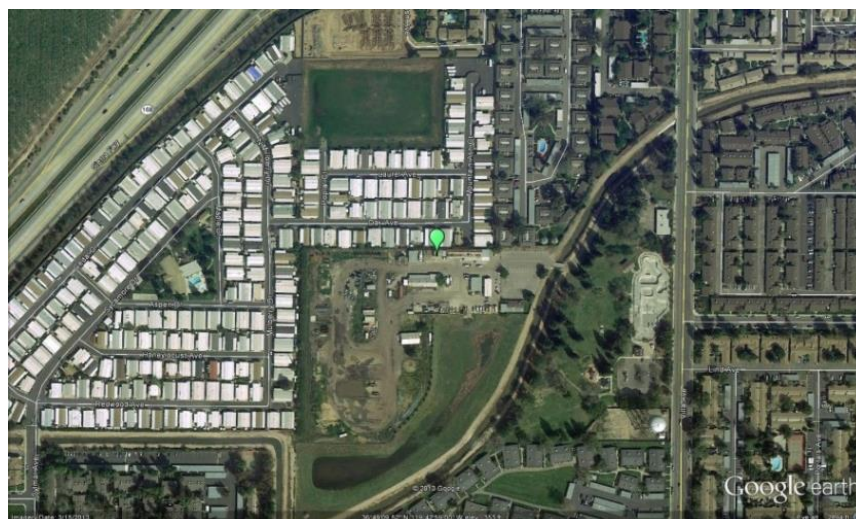


Clovis-Villa

The Clovis-Villa monitoring site is operated by the SJVAPCD and is located in the northeastern portion of the Fresno, CA metropolitan area. It began operating in September 1990. This site is a PAMS Type 2 site, a site intended to measure maximum ozone precursor emissions. The site monitors ozone, CO, NO₂, NMH and speciated-VOC, and meteorology for the PAMS program. PM_{2.5} and PM₁₀ are also monitored at the site.

Site name:	Clovis-Villa
AQS ID:	06-019-5001
County:	Fresno
Street Address:	908 N Villa Ave, Clovis CA 93612
Geographic Coordinates:	36.819449 N, -119.716433 W
Distance to road (meters):	260 m (east)
Traffic Count (AADT; Year):	6,480; 2008*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Fresno

*Raw traffic count in a 24-hour period: 6,480/2008 (Raw traffic count in a 24-hour period: Northbound Villa Avenue south of Bullard Avenue. Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2013 (latest available))



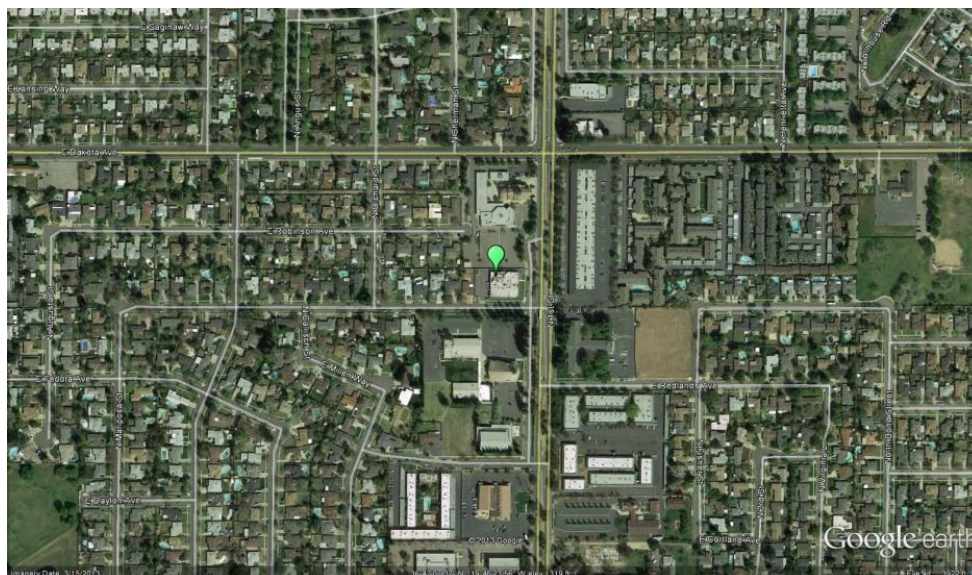
Fresno-Garland

The Fresno-Garland monitoring site is a National Core (NCore) site operated by CARB and is located in the Fresno, CA metropolitan area. It began operating in December 2011. The purpose of the site is to monitor representative concentrations of ozone, PM_{2.5}, and PM₁₀ in an urban area. The site also monitors PM_{10-2.5}, PM_{2.5} Speciation, CO, NO₂, NO_y, SO₂, Toxics, and meteorology.

Site name:	Fresno–Garland
AQS ID:	06-019-0011
County:	Fresno
Street Address:	3727 N First St, Ste.104, Fresno CA 93726
Geographic Coordinates:	36.7853 N, -119.7732 W
Distance to road (meters):	30 m (south)
Traffic Count (AADT; Year):	7,520; 2011*
Ground Cover:	Gravel covered tar paper with wooden deck walkways
Representative Statistical Area (CBSA):	Fresno

*Raw traffic count in a 24-hour period for nearest roads: First St near Dakota Ave

Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2013 (latest available).



Fresno-Pacific

The Fresno-Pacific monitoring site is operated by the SJVAPCD and is located in the Fresno, CA metropolitan area. It began operating in January 2000. The purpose of the site is to monitor representative PM_{2.5} concentrations in an urban area.

Site name:	Fresno-Pacific
AQS ID:	06-019-5025
County:	Fresno
Street Address:	1716 Winery Ave, Fresno, CA 93727
Geographic Coordinates:	36.7263 N, -119.7330 W
Distance to road (meters):	40 m (east)
Traffic Count (AADT; Year):	8,540; 2018*
Ground Cover:	Rubber roof coating
Representative Statistical Area (CBSA):	Fresno

*Raw traffic count in a 24-hour period for nearest roads: Butler Ave/Winery Ave intersection
Source: Fresno COG Traffic Counts, 2007-2019 Kittelson & Associates, Inc.

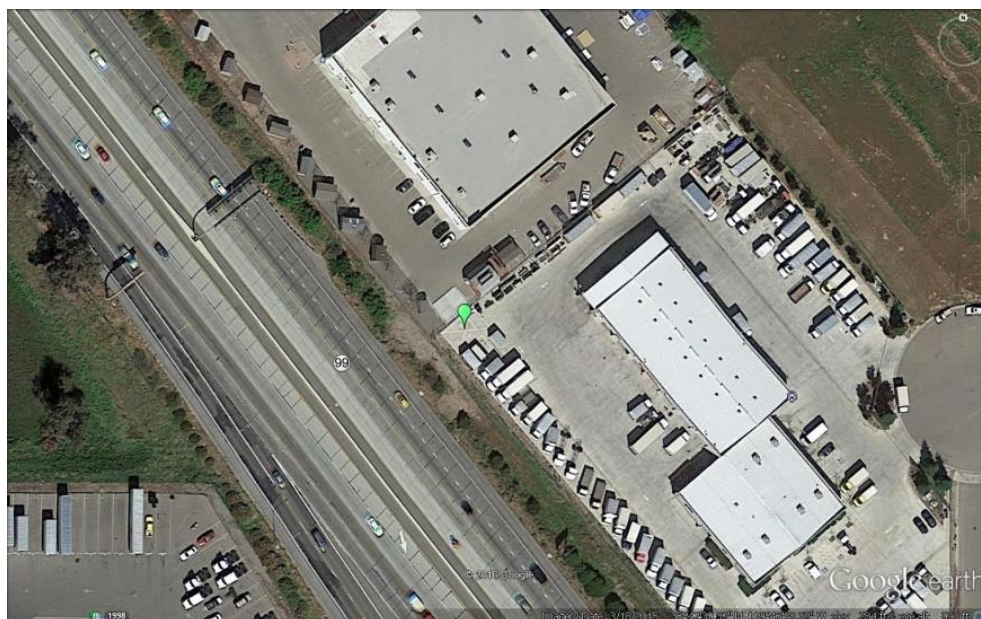


Fresno-Foundry

The Fresno-Foundry near-road NO₂ monitoring site is operated by the SJVAPCD and is located adjacent to Highway 99 in the Fresno, CA metropolitan area. It began operating in January 2016. The purpose of the site is to monitor representative maximum 1-hour NO₂ concentrations near a high traffic roadway in an urban area. In addition to NO₂, the site also monitors PM_{2.5}, CO, and meteorology.

Site name:	Fresno-Foundry
AQS ID:	06-019-2016
County:	Fresno
Street Address:	2482 Foundry Park Ave, Fresno, CA 93706
Geographic Coordinates:	N 36.710833, W -119.7775
Distance to road (meters):	16 to 19 meters
Traffic Count (AADT; Year):	122,000; 2019*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Fresno

*Traffic count for nearest roads: CA Route 99 and Jensen Ave off-ramp. Source: Caltrans (2019)

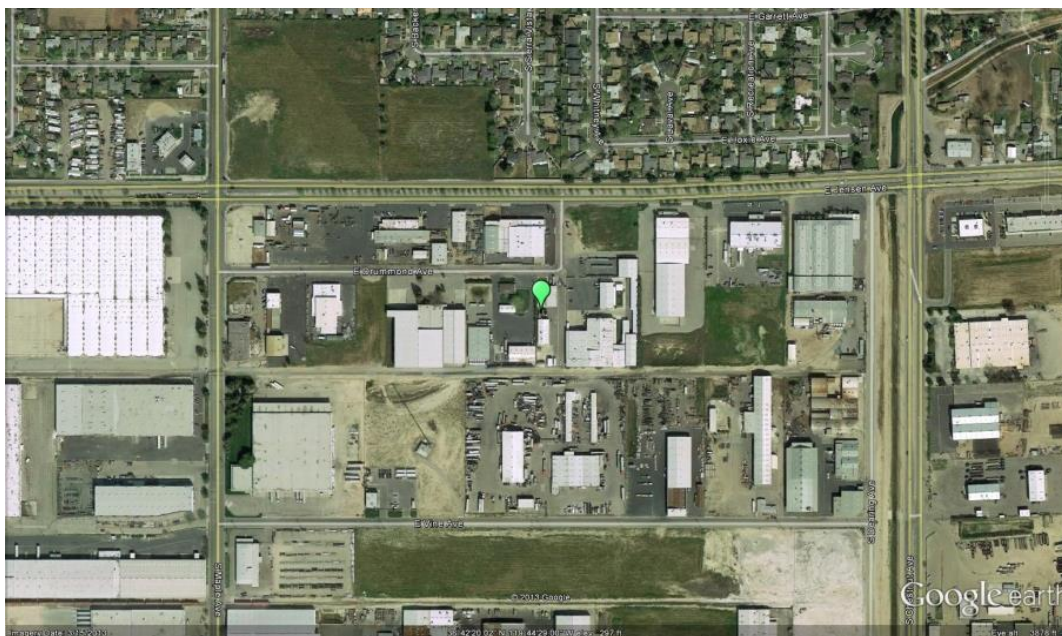
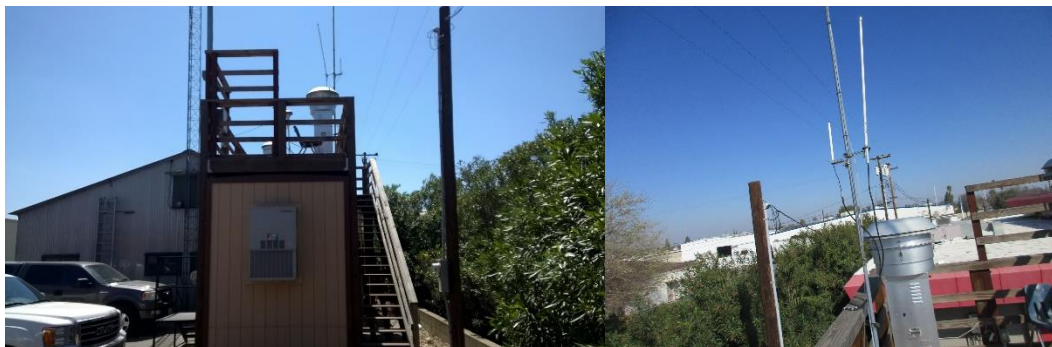


Fresno-Drummond

The Fresno-Drummond monitoring site is operated by the SJVAPCD and is located in the Fresno, CA metropolitan area. It began operating in July 1984. The purpose of the site is to monitor representative concentrations of ozone responses in an urban area. In addition to ozone, the site also monitors PM10, NO2, and meteorology.

Site name:	Fresno-Drummond
AQS ID:	06-019-0007
County:	Fresno
Street Address:	4706 E Drummond Ave, Fresno CA 93725
Geographic Coordinates:	36.705474 N, -119.741332 W
Distance to road (meters):	50 m (north)
Traffic Count (AADT; Year):	27,251; 2018*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Fresno

*Raw traffic count in a 24-hour period for nearest roads: Jensen Ave between Chestnut Ave and Maple Ave.
Source: Fresno COG Traffic Counts, 2007-2019 Kittelson & Associates, Inc.



Parlier

The Parlier monitoring site is operated by the SJVAPCD and is located 20 miles southeast of the Fresno, CA metropolitan area. It began operating in June 1983. The purpose of the site, as a PAMS Type 3 site, is to monitor maximum ozone concentrations and ozone responses from upwind urban areas. The site also monitors NO₂, NMH, speciated-VOC, and meteorology for the PAMS program.

Site name:	Parlier
AQS ID:	06-019-4001
County:	Fresno
Street Address:	9240 S Riverbend Ave, Parlier CA 93648
Geographic Coordinates:	36.597442 N, -119.503659 W
Distance to road (meters):	100 m (east)
Traffic Count (AADT; Year):	10,150; 2009*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Fresno

*Raw traffic count in a 24-hour period for nearest roads: E Manning Ave west of S Lac Jac Ave.
Source: Fresno COG Traffic Report, 2007-2012.

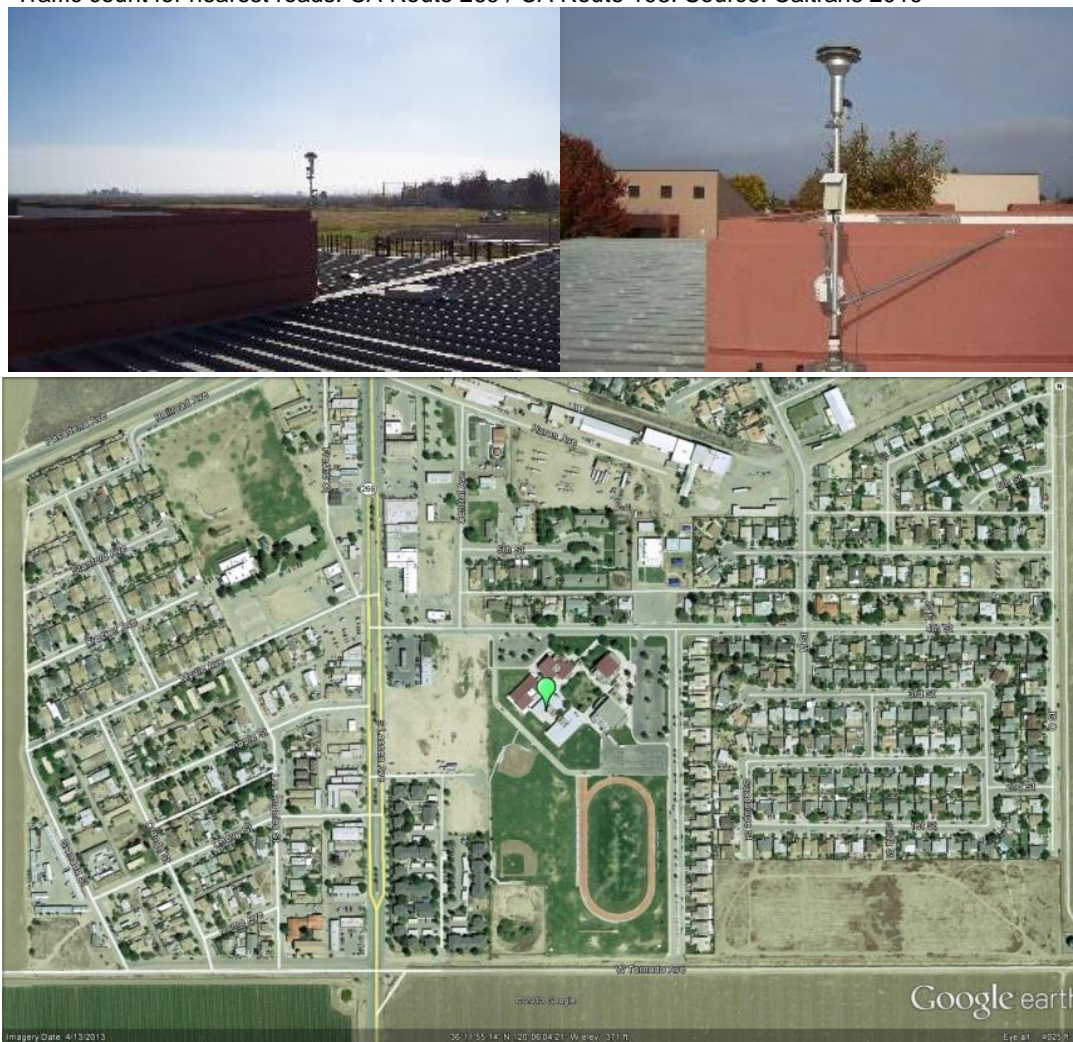


Huron

Huron, CA is located in southwestern Fresno County, and is about 40 miles southwest of Fresno, CA, with the coastal mountain range just to the west of the site. North-South airflow is virtually unobstructed. This monitoring site is operated by the SJVAPCD and was established in September 2009 in order to comply with Assembly Bill (AB) 841. This site monitors PM_{2.5} and meteorology.

Site name:	Huron
AQS ID:	06-019-2008
County:	Fresno
Street Address:	16875 4 th St, Huron, CA 93234
Geographic Coordinates:	36.2363 N, -119.7656 W
Distance to road (meters):	100 m (north)
Traffic Count (AADT; Year):	5,400; 2019*
Ground Cover:	Paved, vegetative
Representative Statistical Area (CBSA):	Fresno

*Traffic count for nearest roads: CA Route 269 / CA Route 198. Source: Caltrans 2019



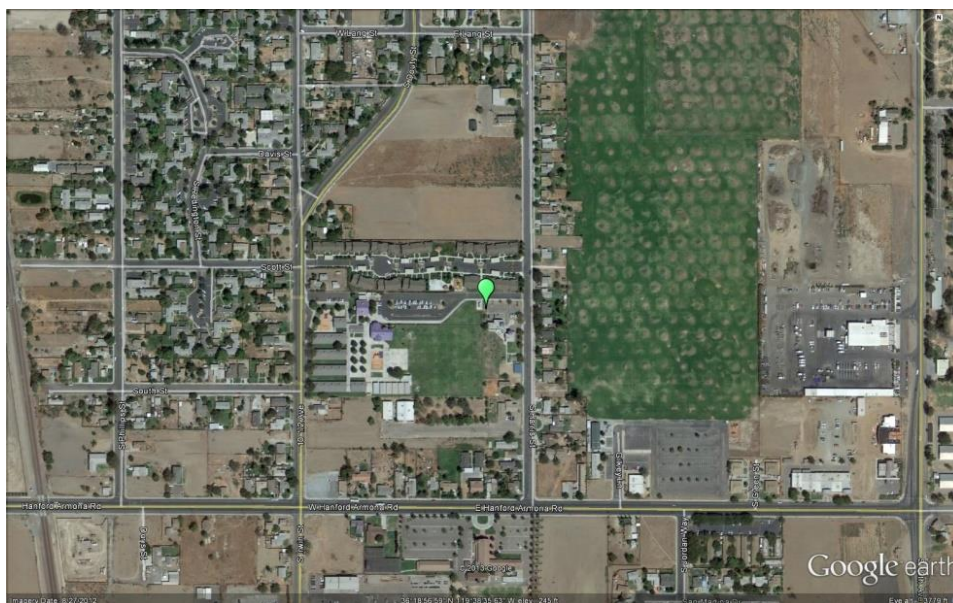
Hanford-Irwin

The Hanford-Irwin monitoring site is operated by the SJVAPCD and is located 51 miles south of the Fresno, CA metropolitan area. The site began operating in October 1993. The purpose of the site is to monitor representative concentrations of ozone, PM_{2.5}, PM₁₀, and NO₂ responses from upwind and nearby urban areas. The site also monitors meteorology.

Site name:	Hanford-Irwin
AQS ID:	06-031-1004
County:	Kings
Street Address:	807 S Irwin St, Hanford CA 93230
Geographic Coordinates:	36.31567 N, -119.643447 W
Distance to road (meters):	60 m (east)
Traffic Count (AADT; Year):	2,828; 2017*
Ground Cover:	Paved, vegetative
Representative Statistical Area (CBSA):	Hanford – Corcoran

*Traffic count for nearest roads: S. Douty Street south of E. Lang Street

Source: City of Hanford Public Works - Engineering, Traffic Counts Volume Summary 2017 – City of Hanford.

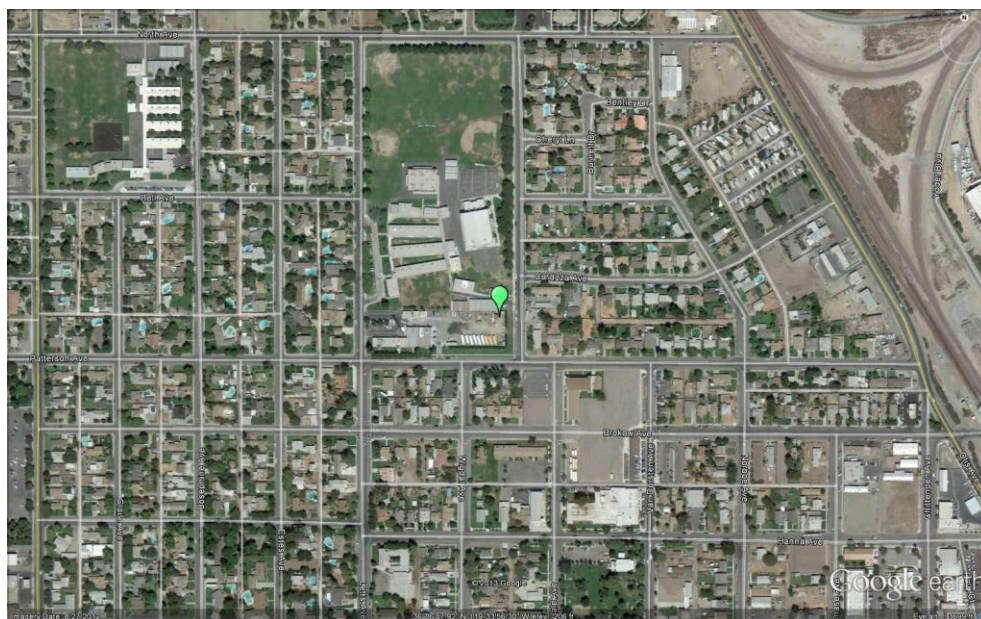


Corcoran-Patterson

The Corcoran-Patterson monitoring site is operated by the SJVAPCD and is located 67 miles south of the Fresno, CA metropolitan area. It began operating in October 1996. The site measures representative concentrations of PM₁₀ and PM_{2.5}. This site also monitors meteorology.

Site name:	Corcoran-Patterson
AQS ID:	06-031-0004
County:	Kings
Street Address:	1520 Patterson Ave, Corcoran CA 93212
Geographic Coordinates:	36.102244 N, -119.56565 W
Distance to road (meters):	30 m (east)
Traffic Count (AADT; Year):	3,000; 2019*
Ground Cover:	Dirt, gravel
Representative Statistical Area (CBSA):	Hanford – Corcoran

*Traffic count for nearest roads: Junction of CA Route 43 / CA Route 137. Source: Caltrans 2019.



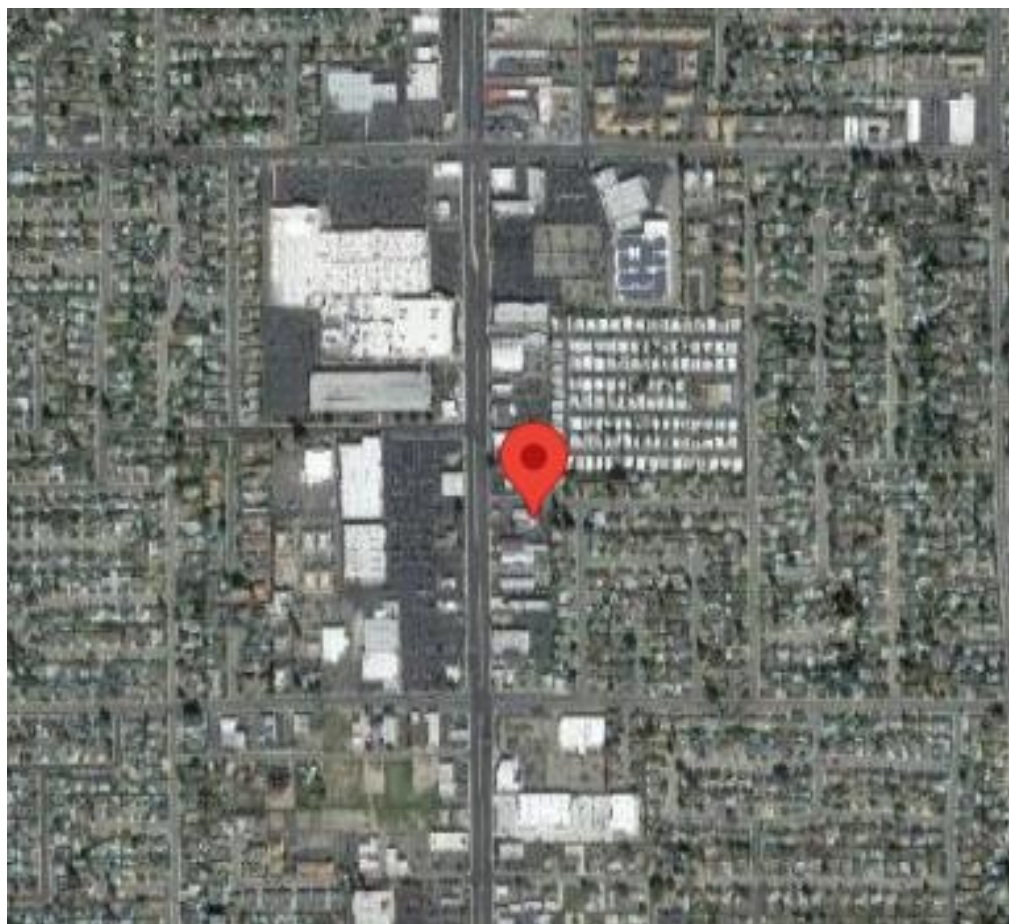
Visalia-W. Ashland Avenue

The Visalia-W. Ashland Avenue monitoring site is operated by CARB. It began operating in January 2022. The purpose of the site is to monitor representative concentrations of ozone, PM_{2.5}, and PM₁₀ from upwind and nearby urban areas. The site also monitors NO₂, and meteorology. The Visalia-W. Ashland Avenue site replaced the Visalia-Church St site in January 2022.

Site name:	Visalia-Ashland Avenue
AQS ID:	06-107-2003
County:	Tulare
Street Address:	2005 West Ashland Avenue, Suite G, Visalia CA 93277
Geographic Coordinates:	36.30815 N, -119.31290 W
Distance to road (meters):	25 m (west)
Traffic Count (AADT; Year):	10,656; 2014*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Visalia – Porterville

*Traffic count for nearest roads: W Whitendale Avenue and S Mooney Blvd

Source: Tulare County Association of Governments Interactive Map.

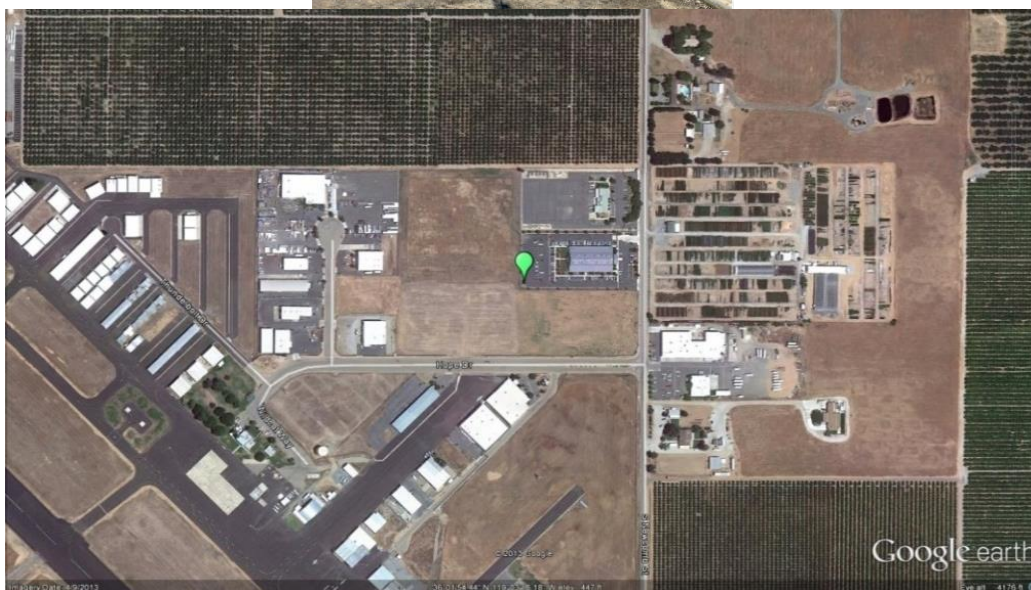


Porterville

The Porterville air-monitoring site became operational in March 2010, and is operated by the SJVAPCD. The purpose of this site is to monitor ozone, PM_{2.5}, and meteorology.

Site name:	Porterville
AQS ID:	06-107-2010
County:	Tulare
Street Address:	1839 S Newcomb St, Porterville CA 93257
Geographic Coordinates:	36.0310 N, -119.0550 W
Distance to road (meters):	100 m (south)
Traffic Count (AADT; Year):	24,500; 2019*
Ground Cover:	Paved, vegetative
Representative Statistical Area (CBSA):	Visalia-Porterville

*Ahead AADT traffic count for nearest roads: Junction CA Route 190/CA Route 65. Source: Caltrans 2019.



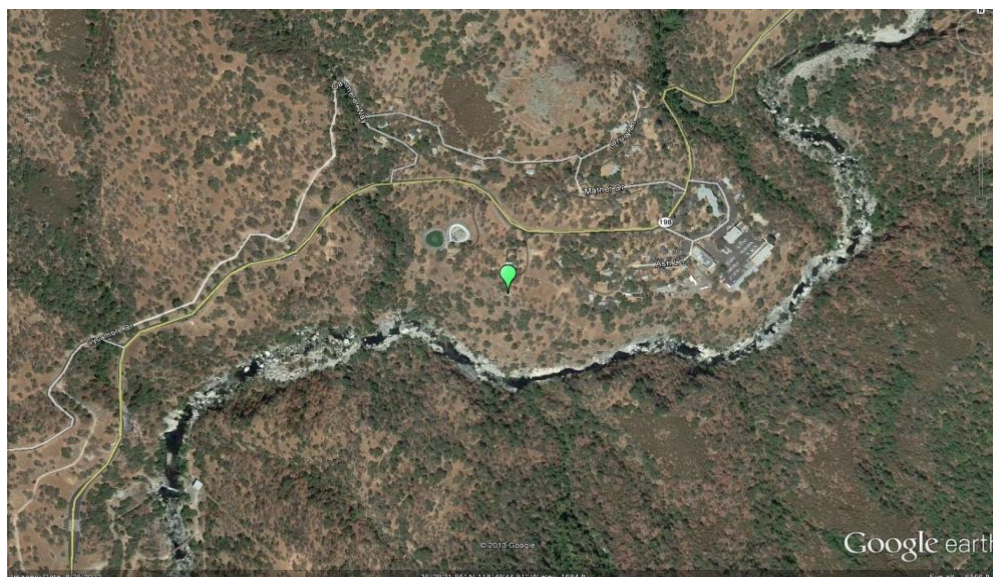
Sequoia-Ash Mountain

The Ash Mountain monitoring station is operated by Sequoia and Kings Canyon National Park and is located at the southern entrance of the Park at 1,500-foot elevation. It began operating in July 1999, though the site has been relocated several times over the years. The site demonstrates the ozone concentrations in the foothills. The site also monitors PM_{2.5} and meteorology.

Site name:	Sequoia-Ash Mountain
AQS ID:	06-107-0009
County:	Tulare
Street Address:	Ash Mountain, Sequoia and Kings Canyon National Park 47050 Generals Hwy, Three Rivers, CA 93271
Geographic Coordinates:	36.4894 N, -118.8290 W
Distance to road (meters):	120 m (north)
Traffic Count (AADT; Year):	2,300; 2017*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Visalia – Porterville

*Traffic count for nearest roads: CA Route 198 / Sequoia National Park boundary.

Source: Caltrans Back AADT 2017



Sequoia-Lower Kaweah

The Lower Kaweah monitoring station is operated by Sequoia and Kings Canyon National Park and is located at the southern entrance of the Park at 6,200-foot elevation. It began operating in January 1987. This is a seasonal-only site that monitors ozone and meteorology from May 31st to October 31st each year. The purpose of the site is to demonstrate the ozone concentrations in a rural, mountainous area.

Site name:	Sequoia-Lower Kaweah
AQS ID:	06-107-0006
County:	Tulare
Street Address:	Giant Forest, Sequoia National Park, 47050 Generals Highway, Three Rivers, CA 93271
Geographic Coordinates:	36.5661 N, -118.7776 W
Distance to road (meters):	380 m (southeast)
Traffic Count (AADT; Year):	2,300; 2017*
Ground Cover:	Dirt, vegetation
Representative Statistical Area (CBSA):	Visalia – Porterville

*Traffic count for nearest roads: CA Route 198 / Sequoia National Park boundary.
Source: Caltrans Back AADT 2017



Shafter

The Shafter monitoring site is a shared site operated by CARB and the SJVAPCD and is located 18 miles northwest of the Bakersfield, CA metropolitan area. It began operating in January 1989. This site was established as a PAMS Type 1 site, located in an area upwind of Bakersfield and not to be influenced by upwind or local ozone precursor emissions. In addition to ozone, the site also monitors NO₂, NMH, speciated-VOC, and meteorology for the PAMS program.

Site name:	Shafter
AQS ID:	06-029-6001
County:	Kern
Street Address:	578 Walker St, Shafter CA 93263
Geographic Coordinates:	35.5034 N, -119.2726 W
Distance to road (meters):	10 m (southwest)
Traffic Count (AADT; Year):	6,028; 2020*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for nearest roads: Central Ave and Walker St. Source: Kern Council of Governments.



Oildale

The Oildale monitoring site is operated by CARB and is located 6 miles north of Bakersfield, CA within the metropolitan area. It began operating in January 1980. The purpose of the site is to monitor representative concentrations of ozone and PM10. The site also monitors meteorology.

Site name:	Oildale
AQS ID:	06-029-0232
County:	Kern
Street Address:	3311 Manor St, Oildale CA 93308
Geographic Coordinates:	35.4380 N, -119.0167 W
Distance to road (meters):	150 m (northwest)
Traffic Count (AADT; Year):	6,444; 2020*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for roads: Manor St near the air monitoring station. Source: Kern Council of Governments.

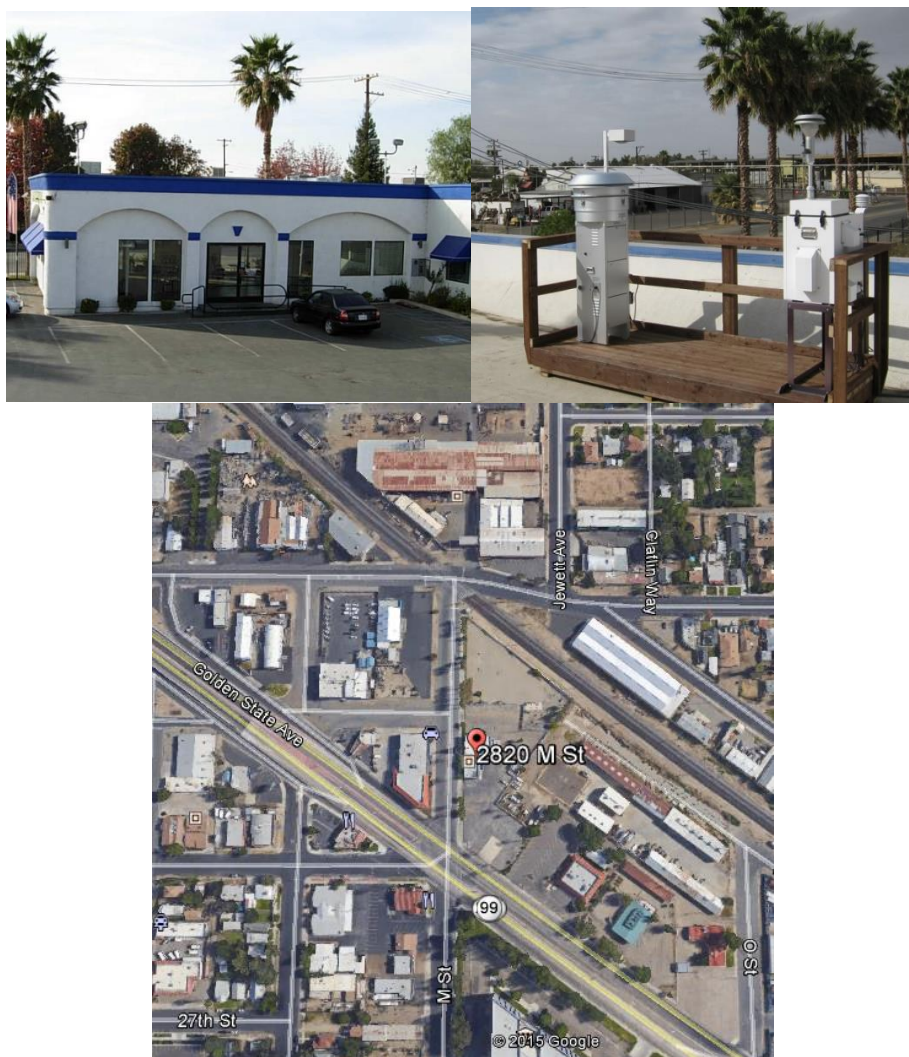


Bakersfield-Golden / M St

The Bakersfield-Golden / M St monitoring site is operated by the SJVAPCD and is located in the Bakersfield, CA metropolitan area. It began operating in 1994 but was moved and began operating at the current location in June 2014. The purpose of the site is to monitor representative concentrations of PM₁₀ and PM_{2.5} in an urban area.

Site name:	Bakersfield-Golden / M St
AQS ID:	06-029-0010
County:	Kern
Street Address:	2820 M St, Bakersfield, CA 93301
Geographic Coordinates:	35.385574 N, -119.015009 W
Distance to road (meters):	13 m
Traffic Count (AADT; Year):	3,486; 2021*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for nearest roads: 30th St at Golden State Ave. Source: Kern Council of Governments.



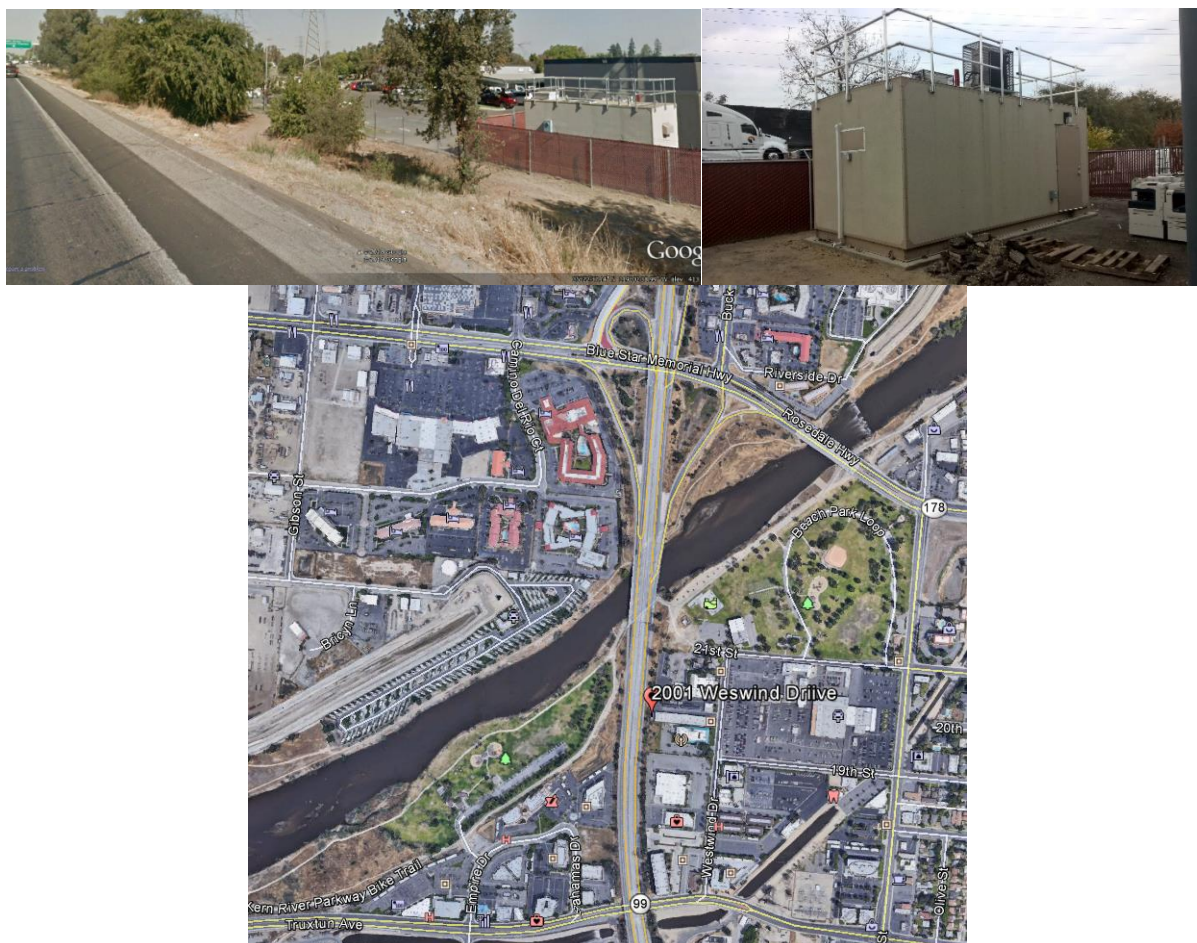
Bakersfield-Westwind

The Bakersfield-Westwind near-road NO₂ monitoring site is operated by the SJVAPCD and is located adjacent to Highway 99 in the Bakersfield, CA metropolitan area. It began operating in January 2019. The purpose of the site is to monitor representative maximum 1-hour NO₂ concentrations near a high traffic roadway in an urban area. In addition to NO₂, the site also monitors meteorology.

Site name:	Bakersfield-Westwind
AQS ID:	06-029-2019
County:	Kern
Street Address:	2001 Westwind Drive, Bakersfield, CA 93301
Geographic Coordinates:	35.37695278N, -119.04388889W
Distance to road (meters):	16 to 19 meters
Traffic Count (AADT; Year):	125,000; 2019* 2,812; 2020**
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Kern

* Traffic count for road adjacent to monitoring station: CA Route 99 and JCT. RTE 58 West / JCT. RTE. 178 East
Source: Caltrans (2017)

** Traffic count for Westwind Drive near the air monitoring station; Source: Kern Council of Governments

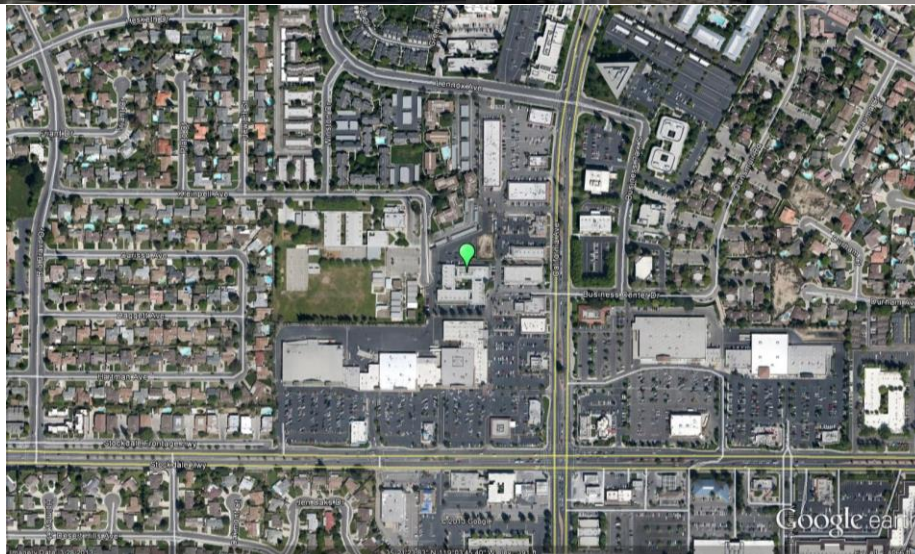


Bakersfield-California

The Bakersfield-California monitoring site is operated by CARB and is located in the Bakersfield, CA metropolitan area. It began operating in March 1994. The purpose of the site is to monitor representative concentrations of ozone, PM10, and PM2.5 in an urban area. The Bakersfield-California site also monitors NO2, PM2.5 Speciation, Toxics, and meteorology.

Site name:	Bakersfield-California
AQS ID:	06-029-0014
County:	Kern
Street Address:	5558 California Ave, Bakersfield, CA 93309
Geographic Coordinates:	35.3566 N, -119.0626 W
Distance to road (meters):	300 m (south)
Traffic Count (AADT; Year):	36,207; 2020*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for roads: California Ave between Stockdale Hwy and Business Center Dr
Source: Kern Council of Governments



Bakersfield-Muni

The Bakersfield-Muni site is located in the Bakersfield, CA metropolitan area and is operated by the SJVAPCD. It became operational in June 2012. The site serves as a PAMS Type 2 site and its purpose is to measure maximum ozone precursor emissions. The site monitors ozone, CO, NO₂, NMH, Speciated-VOC, and meteorology for the PAMS program.

Site name:	Bakersfield-Muni
AQS ID:	06-029-2012
County:	Kern
Street Address:	2000 South Union Ave., Bakersfield, CA 93307
Geographic Coordinates:	35.331612 N, -118.999961 W
Distance to road (meters):	280 m (west)
Traffic Count (AADT; Year):	19,182; 2020* 6,868; 2020**
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for monitoring station's street address: S Union Ave between E Casa Loma Dr. and Watts Dr.

Source: Kern Council of Governments

**Traffic count for road adjacent to monitoring station: Watts Dr. between S Union Ave and Short St

Source: Kern Council of Governments



Bakersfield-Airport (Planz)

The Bakersfield-Airport (Planz) monitoring site is located in the Bakersfield, CA metropolitan area and is operated by CARB. It began operating in September 2000. The purpose of the site is to monitor representative concentrations of PM_{2.5} from upwind and nearby urban areas.

Site name:	Bakersfield-Airport (Planz)
AQS ID:	06-029-0016
County:	Kern
Street Address:	401 E Planz Rd, Bakersfield, CA 93307
Geographic Coordinates:	35.3246 N, -118.9976 W
Distance to road (meters):	500 m (west)
Traffic Count (AADT; Year):	14,235; 2020* 1,334; 2020**
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for nearest cross street: S. Union Ave between E. Planz Rd and E White Lane.

Source: Kern Council of Governments

**Traffic count for monitoring station's street address E. Planz Rd. Source: Kern Council of Governments



Edison

The Edison monitoring site is operated by CARB and is located 9 miles east of the Bakersfield, CA metropolitan area. It began operating in January 1980. The purpose of the site is to monitor representative concentrations of ozone from upwind and nearby urban areas. The site also monitors NO₂ and meteorology.

Site name:	Edison
AQS ID:	06-029-0007
County:	Kern
Street Address:	Johnson Farm, Edison CA 93320
Geographic Coordinates:	35.3456 N, -118.8518 W
Distance to road (meters):	450 m (south)
Traffic Count (AADT; Year):	2,753; 2020*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for nearest roads: Edison Hwy and Comanche Dr.

Source: Kern Council of Governments



Arvin-Di Giorgio

The Arvin-Di Giorgio site is located 18 miles southeast of the Bakersfield, CA metropolitan area. The site began operating in November 2009, and currently monitors ozone and meteorology. The purpose of this site is to measure emissions downwind of the Bakersfield urban area, and serve as a PAMS Type 3 site, which would monitor maximum ozone concentrations and transport from upwind urban areas. PAMS equipment will be installed at the site when space becomes available.

Site name:	Arvin-Di Giorgio
AQS ID:	06-029-5002
County:	Kern
Street Address:	19405 Buena Vista Blvd, Arvin, CA 93203
Geographic Coordinates:	35.2391 N, -118.7886 W
Distance to road (meters):	10 m (east)
Traffic Count (AADT; Year):	394; 2020*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for Buena Vista Blvd east of Tejon Hwy. Source: Kern Council of Governments.

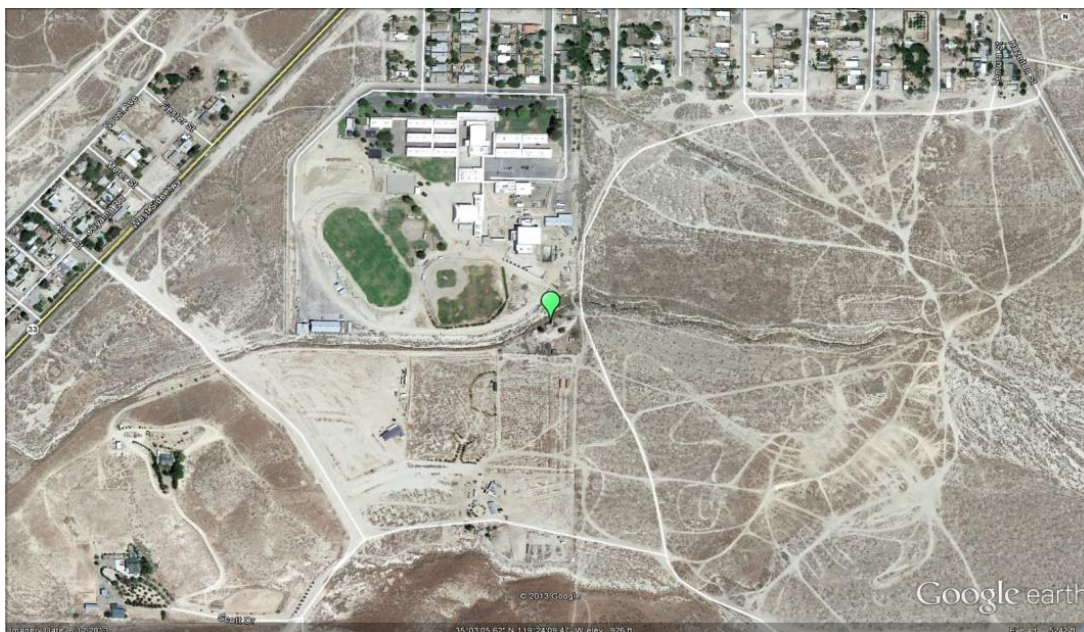
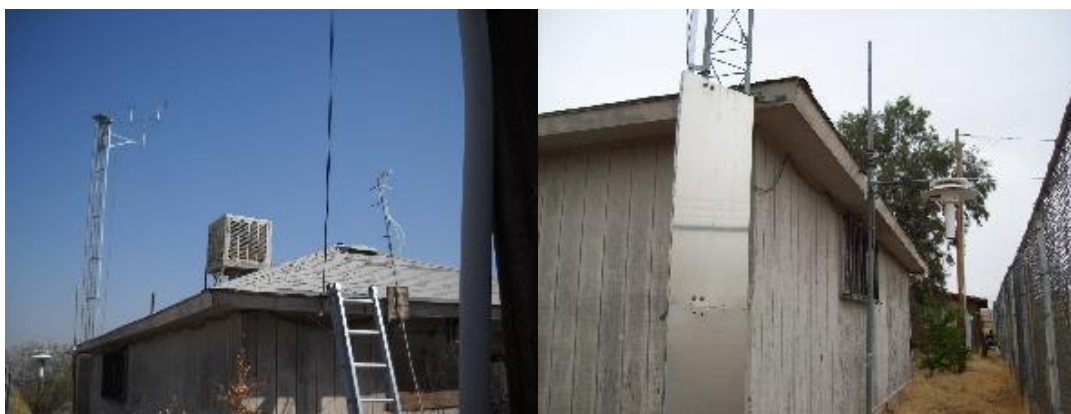


Maricopa

The Maricopa monitoring site is operated by THE SJVAPCD and is located 45 miles southwest of the Bakersfield, CA metropolitan area. It began operating in July 1987. The purpose of the site is to monitor representative concentrations of ozone in a rural area. The site also monitors meteorology.

Site name:	Maricopa
AQS ID:	06-029-0008
County:	Kern
Street Address:	755 Stanislaus St, Maricopa CA 93352
Geographic Coordinates:	35.051454 N, -119.40262 W
Distance to road (meters):	500 m (northwest)
Traffic Count (AADT; Year):	491; 2021*
Ground Cover:	Gravel, dirt, vegetative
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for nearest roads: Union St at California St. Source: Kern Council of Governments



Lebec

The Lebec monitoring station was initiated by the Tejon Ranch in 2004, and the District assumed responsibility for this site as of January 2009. This site monitors PM_{2.5} and meteorology and allows the District to better understand pollution impacts in the southern San Emigdio Mountains. The site is also used for residential wood burning declarations for the Greater Frazier Park Area.

Site name:	Lebec
AQS ID:	06-029-2009
County:	Kern
Street Address:	1277 Beartrap Rd, Lebec, CA 93243
Geographic Coordinates:	34.8415 N, -118.8610 W
Distance to road (meters):	300 m (west)
Traffic Count (AADT; Year):	494; 2018*
Ground Cover:	Gravel, vegetative
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for nearest roads: Lebec Rd and Interstate 5. Source: Kern Council of Governments



Tribal Sites

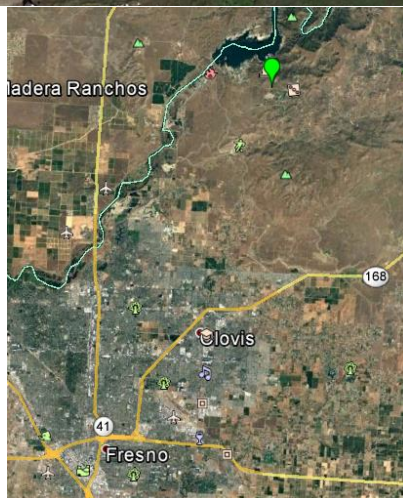
Tribal sites are operated under the Tribal Authority Rule, which is essential to tribal implementation of the CAA. Since tribal sites are not part of the District's jurisdiction, detailed site information for tribal monitors will not be provided in Appendix B.

Table Mountain Air Monitoring Site

The Table Mountain air monitoring station is located on Tribal land near Millerton Lake in Fresno County, CA and is operated by the Monache Tribe and Foothill Yokut Indians. The site began operating in September 2015. The purpose of the site is to monitor representative concentrations of ozone, PM_{2.5}, and PM₁₀ responses from upwind and nearby urban areas. The site also monitors meteorology.

Site name:	Table Mountain Air Monitoring Site
AQS ID:	06-019-0500
County:	Fresno
Street Address:	Millerton Rd and Winchell Rd, Friant, CA 93626
Geographic Coordinates:	36.985119 N, -119.658339 W
Distance to road (meters):	Unknown
Traffic Count (AADT; Year):	53,000; 2019*
Ground Cover:	Dirt
Representative Statistical Area (CBSA):	Fresno-Madera

*Traffic count for nearest roads: CA Route 41 and Friant Rd. Source: Caltrans 2019



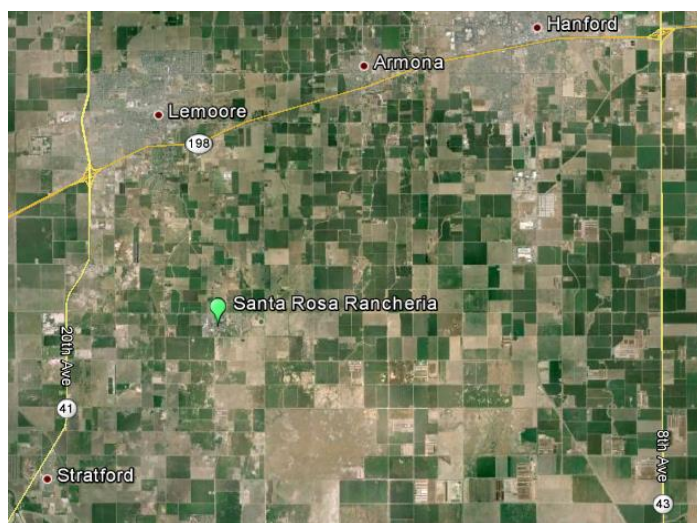
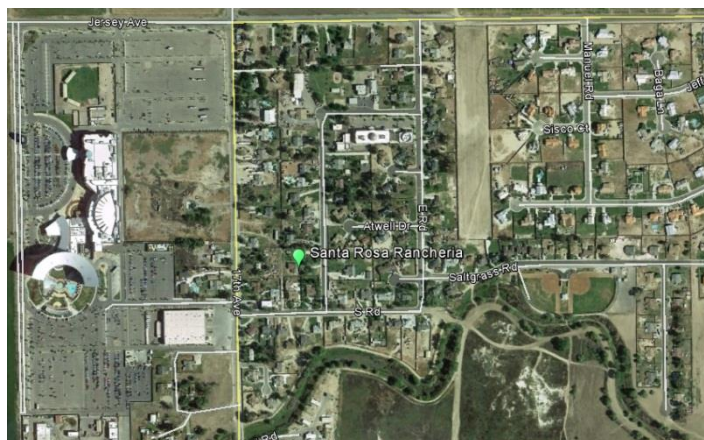
Santa Rosa Rancheria

The Santa Rosa Rancheria air-monitoring site is located on Tribal land in Lemoore, Kings County, CA and is operated by the Tachi-Yokut tribe. The site began operating in August 2006. The purpose of the site is to monitor representative concentrations of ozone, PM_{2.5}, and PM₁₀ responses from upwind and nearby urban areas. The site also monitors meteorology.

Site name:	Santa Rosa Rancheria
AQS ID:	06-031-0500
County:	Kings
Street Address:	17225 Jersey Ave, Lemoore, CA 93245
Geographic Coordinates:	36.2332 N, -119.7662 W
Distance to road (meters):	40 m (south)
Traffic Count (AADT; Year):	775; 2014*
Ground Cover:	Dirt, paved
Representative Statistical Area (CBSA):	Hanford-Corcoran

*Traffic count for nearest roads: Jackson Ave and 16th Ave

Source: 2014 Kings County Regional Transportation Plan – Kings County Association of Governments



Appendix B:
Detailed Site Information

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List of Abbreviations

Site Type	
PE	Population Exposure
HC	Highest Concentration
Max PEI	Max Precursor Emissions Impact
RT	Regional Transport
GB	General/Background
SO	Source Oriented
QA	Quality Assurance Collocation
Spatial Scale	
N	Neighborhood
U	Urban
R	Regional
MC	Microscale
MD	Middle Scale
Basic Monitoring Objective	
NC	NAAQS Comparison
RS	Research
TP	Timely/Public
N/A	Not Applicable
AADT	Annual Average Daily Traffic

Site Name	Stockton-University Park
AQS ID (XX-XXX-XXXX)	06-077-1003
Representative statistical area Name (i.e. MSA, CBSA, other)	Stockton-Lodi
County	San Joaquin
Collecting (Operating) Agency	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB
Reporting Agency	CARB
Site Start Date	10/11/2021
Pollutant Parameters	Ozone, PM10 FRM, PM2.5 FEM, CO, NO ₂ , Toxics
Meteorological Parameters	Outdoor temperature, Relative humidity
Address	702 N. Aurora Street, Stockton CA 95202
GPS Coordinates (decimal degrees)	37.96158 N, -121.28141 W
Distance to roadways	60 m (north)
Traffic Count/Year	3,600 / 2020 (Traffic count for nearest cross road: Park St; Source: City of Stockton 2020 Traffic Volume Flow Map)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Stockton-University Park (1)					
Pollutant	Ozone	CO	NO2	PM10 STP	PM2.5
Parameter code	44201	42101	42602	81102	88101
Spatial scale	N	N	N	N	N
Site type	HC, PE	PE	PE	HC	HC, PE
Monitoring objective	NC, RS, TP	NC, RS,TP	NC, RS,TP	NC, RS,TP	NC, RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	None	None	None	None	None
FRM/FEM/ARM/Other	FRM	FEM	FRM	FEM	FEM
POC	1	3	2	5	3
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	N/A	N/A	Primary	Primary
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A	Y
Instrument manufacturer and model	Teledyne API 400	Teledyne API 300 EU	Teledyne API 200	Met One BAM 1020	Met One BAM 1020
Analysis method	UV	Instrumental	Chemiluminescence	Beta Attenuation	Beta Attenuation
Method code	593	067	099	122	170
Monitoring start date (MM/DD/YYYY)	11/05/2021	11/05/2021	11/05/2021	11/05/2021	12/07/2020
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly	Hourly

Pollutant	Ozone	CO	NO2	PM10 STP	PM2.5
Sampling season (MM/DD - MM/DD)	01/01 - 12/31	01/01 - 12/31	01/01 – 12/31	01/01 - 12/31	01/01 - 12/31
Probe/Inlet height above ground (meters)	5.7	5.7	5.7	5.7	5.7
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.0 m	2.0	2.0	2.0	2.0 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	No Obstructions
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	No Obstructions
Distance from the drip line of closest tree(s)	>10	>10	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360	360	360	360	360
Probe material (Teflon, etc.)	Teflon	Teflon	Teflon	N/A	N/A
Residence time (seconds)	10.5	10.7	9.9	N/A	N/A

Pollutant	Ozone	CO	NO2	PM10 STP	PM2.5
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lo-vol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	No	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hi-vol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	No
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	Semi-Monthly	Semi-Monthly
Frequency of one-point QC check (gaseous)	Daily	Daily	Daily	N/A	N/A
Last Annual Performance Evaluation (gaseous)	2/23/2023	2/23/2023	2/23/2023	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	02/23/2023 09/28/2022	02/23/2023 09/28/2022
Changes planned within the next 18 months (Y/N)	N	N	N	N	N

Stockton-University Park (2)			
Pollutant	Toxics SN20021014	Toxics SN20021016	Meteorology
Parameter code	Many	Many	Many
Spatial scale	N	N	R
Site type	PE	PE, QA	GB
Monitoring objective	RS, TP	RS, TP	RS, TP
Monitor type	Many	Many	Other
Network affiliation	CA Air Toxics	CA Air Toxics	None
FRM/FEM/ARM/Other	Other	Other	Other
POC	Many	Many	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	QA Collocated	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A
Instrument manufacturer and model	Xontech 924	Xontech 924	Vaisala HMP-155 (OT/RH),
Analysis method	Many	Many	Many
Method code	Many	Many	066
Monitoring start date (MM/DD/YYYY)	Varies by compound	Varies by compound	01/01/95
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31
Probe/Inlet height above ground (meters)	6.8	6.8	4.4
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.0	2.0	None
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	No Obstructions	No Obstructions	No Obstructions

Pollutant	Toxics	Toxics	Meteorology
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	No Obstructions	No Obstructions	No Obstructions
Distance from the drip line of closest tree(s)	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A
Unrestricted airflow (degrees)	360	360	360
Probe material (Teflon, etc.)	Teflon	Teflon	Teflon
Residence time (seconds)	8.0	5.8	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A
Frequency of one-point QC check (gaseous)	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	2/17/2022	2/17/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N	N

Site Name	Tracy-Airport
AQS ID (XX-XXX-XXXX)	06-077-3005
Representative statistical area Name (i.e. MSA, CBSA, other)	Stockton-Lodi
County	San Joaquin
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	1/1/2006
Pollutant Parameters	Ozone, PM10 FEM, PM2.5 Non-FEM, NO2
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	5749 S. Tracy Blvd., Tracy, CA 95376
GPS Coordinates (decimal degrees)	37.6826 N, -121.4423 W
Distance to roadways (meters)	700m (east)
Traffic Count/Year	5,113/2020 (Traffic count for nearest roads: Linne Rd and Corral Hollow Rd) Source: San Joaquin Council of Governments, 2020 Monitoring and Conformance Report
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Dirt and Gravel

Tracy-Airport (1)					
Pollutant	Ozone	PM2.5	PM10	NO2	Meteorology
Parameter code	44201	88502	81102	42602	Many
Spatial scale	R	R	R	R	R
Site type	RT	RT	RT	RT	GB
Basic monitoring objective(s)	NC, RS, TP	TP	NC, RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SPM	SLAMS	SLAMS	Other
FRM/FEM/ARM/Other	FEM	Non-FEM	FEM	FEM	Other
POC	1	3	3	1	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Primary	Other	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne T400	Met One BAM 1020	Met One BAM 1020	Teledyne T200	ITP- 125-50HV, OT- Met One 060A-2, BP- Met One 092, WD- Met One 020C, WS-Met One 010C
Analysis method	UV	Beta-Attenuation	Beta-Attenuation	CL	Many
Method code	087	731	122	099	Many
Monitoring start date (MM/DD/YYYY)	01/01/2006	09/27/2006	01/01/2021	01/01/2006	01/01/2006
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	5.8m	5.7 m	5.6 m	5.8 m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.0 m	1.9 m	1.8 m	2.0 m	N/A
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A

Pollutant	Ozone	PM2.5	PM10	NO2	Meteorology
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A
Distance from the drip line of closest tree(s)	N/A	N/A	N/A	N/A	N/A
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 percentage of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A	N/A	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	6.73	N/A	N/A	7.55	N/A
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Bi-Weekly	Bi-Weekly	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	No	No	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	11/1/2022	N/A	N/A	11/1/2022	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	5/19/2022, 11/1/2022	5/19/2022, 11/1/2022	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	N

Site Name	Manteca
AQS ID (XX-XXX-XXXX)	06-077-2010
Representative statistical area Name (i.e. MSA, CBSA, other)	Stockton-Lodi
County	San Joaquin
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	11/16/2010
Pollutant Parameters	PM2.5 FEM; PM10 FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	530 Fishback Rd., Manteca, CA 95337
GPS Coordinates (decimal degrees)	37.7933 N, -121.2477 W
Distance to roadways (meters)	12 m (west)
Traffic Count/Year	20,487/2020 (Traffic count for nearest roads: Airport Way between Lathrop Rd and Hwy 120. Source: San Joaquin Council of Governments, 2020 Monitoring and Conformance Report)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved, vegetative

Manteca				
Pollutant	PM2.5	PM10 LC	PM10 STP	Meteorology
Parameter code	88101	85101	81102	Many
Spatial scale	N	N	N	N
Site type	HC	HC	HC	PE
Basic monitoring objective(s)	NC, RS, TP	RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None	None
FRM/FEM/ARM/Other	FEM	FEM	FEM	Other
POC	3	3	3	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Other	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	Yes	N/A	N/A	N/A
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020	ITP – Hy-Cal 512AA3B, OT – Met One 060A-2, BP – Met One 092, WD – Met One 020C, WS – Met One 010C
Analysis method	Beta Attenuation	Beta Attenuation	Beta Attenuation	Many
Method code	170	122	122	Many
Monitoring start date (MM/DD/YYYY)	09/12/2019	09/12/2019	09/12/2019	11/16/2010
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31	01/01 – 12/31
Probe height (meters)	3.7 m	3.6 m	3.6 m	10 m
Distance from supporting structure (meters)	1.9m	1.8 m	1.8 m	10 m

Pollutant	PM2.5	PM10 LC	PM10 STP	Meteorology
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from the drip line of closest tree(s)	85 m	80 m	80 m	80.5 m
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 percentage of monitoring path)	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	Biweekly	Biweekly	Biweekly	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	No	No	No	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument	N/A	N/A	N/A	N/A

within 2m of the hivol? If yes, list distance (meters) and instrument(s).				
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Pollutant	PM2.5	PM10 LC	PM10 STP	Meteorology
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	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 (MM/DD/YYYY, MM/DD/YYYY)	5/19/2022, 10/31/2022	5/19/2022, 10/31/2022	5/19/2022, 10/31/2022,	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N

Site Name	Modesto-14th St
AQS ID (XX-XXX-XXXX)	06-099-0005
Representative statistical area Name (i.e. MSA, CBSA, other)	Modesto
County	Stanislaus
Collecting (Operating) Agency	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB
Reporting Agency	CARB
Site Start Date	1/1/1981
Pollutant Parameters	Ozone, PM10 FEM, PM2.5 FRM, PM2.5 FEM, CO, PM2.5 Speciation (CSN Supplemental)
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity
Address	814 14th Street, Modesto CA 95354
GPS Coordinates (decimal degrees)	37.6421 N, -120.9942 W
Distance to road	50 m (southwest)
Traffic Count/Year	131,800 / 2019 (Traffic count for nearest roads: H Street / Rte 99, Source: Caltrans 2019 AADDT)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Modesto-14 th St (1)			
Pollutant	Ozone	PM10 STP	PM2.5
Parameter code	44201	81102	88101
Spatial scale	N	N	N
Site type	HC, PE	PE	PE
Monitoring objective	NC, RS, TP	NC, RS, TP	NC, RS, TP
Monitor type	SLAMS	SLAMS	SLAMS
Network affiliation	None	None	None
FRM/FEM/ARM/Other	FEM	FEM	FEM
POC	1	7	3
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Primary	Primary
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	Y
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020
Analysis method	UV	Beta Attenuation	Beta Attenuation
Method code	087	122	170
Monitoring start date (MM/DD/YYYY)	1/1/1981	12/1/2013	5/1/2010
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31
Probe/Inlet height above ground (meters)	8	4.4 m	4.4 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.0 m	2.0 m	2.0 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	No obstructions	No obstructions	No obstructions
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	No obstructions	No obstructions	No obstructions
Distance from the drip line of closest tree(s)	>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)	360	360	360
Probe material (Teflon, etc.)	Teflon	N/A	N/A

Pollutant	Ozone	PM10 STP	PM2.5
Residence time (seconds)	8.5	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lo-vol? If yes, list distance (meters) and instrument(s)	N/A	No	No
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hi-vol? If yes, list distance (meters) and instrument(s)	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	Semi-Monthly	Semi-Monthly
Frequency of one-point QC check (gaseous)	Daily	N/A	N/A
Last Annual Performance Evaluation (gaseous)	10/ 26/2022	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	10/26/2022 05/18/2022	10/26/2022 05/18/2022
Changes planned within the next 18 months (Y/N)	N	N	N

Modesto-14 th St (2)			
Pollutant	PM2.5 Speciation	CO	Meteorology
Parameter code	88502	42101	Many
Spatial scale	N	N	R
Site type	PE	PE	GB
Monitoring objective(s)	RS	NC, TP	RS, TP
Monitor type	SLAMS	SLAMS	Other
Network affiliation	CSN Supplemental	None	None
FRM/FEM/ARM/Other	Other	FRM	Other
POC	5	3	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A
Instrument manufacturer and model	Met-One SASS / Super SASS	Teledyne API 300	Vaisala HMP-155 (OT/RH); RM Young 81000 (WS/WD/3DT)
Analysis method	Gravimetric	IR	N/A
810	143	593	Many
Monitoring start date (MM/DD/YYYY)	01/14/2002	01/01/13	01/01/95
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	1:3	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31
Probe/Inlet height above ground (meters)	6.1	8	8
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.8	2	None
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	No obstructions	No obstructions

Pollutant	PM2.5 Speciation	CO	Meteorology
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	1 (Met tower)	None	None
Distance from the drip line of closest tree(s)	40	>10	>10
Distance to furnace or incinerator flue (meters)	Approx. 40 m	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters)	2.4 (URG 3000n) 4.5 (Partisol) 3.0 (BAM-10)	N/A	N/A
Unrestricted airflow (degrees)	Est. 350	360	360
Probe material (Teflon, etc.)	N/A	Teflon	N/A
Residence time (seconds)	N/A	8.2	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	Annually	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A
Frequency of one-point QC check (gaseous)	N/A	Daily	N/A
Last Annual Performance Evaluation (gaseous)	N/A	10/26/2022	N/A
Last two semi-annual flow rate audits for PM monitors	10/26/2022 05/18/2022	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N

Site Name	Turlock
AQS ID (XX-XXX-XXXX)	06-099-0006
Representative statistical area Name (i.e. MSA, CBSA, other)	Modesto
County	Stanislaus
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB
Reporting Agency	SJVAPD: Ozone, PM2.5 FEM, NO2, Meteorology
Site Start Date	4/1/1992
Pollutant Parameters	Ozone, PM10 FEM, PM2.5 FEM, NO2
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	900 S. Minaret Ave., Turlock, CA 95380
GPS Coordinates (decimal degrees)	37.4880 N, -120.8360 W
Distance to roadways (meters)	40m (northeast)
Traffic Count/Year	742 / 2015 (Traffic count for Minaret Ave. between East Ave. and Berkley Ave. Five-day average two-way traffic. Source: City of Turlock Engineering Division 2015)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Gravel

Pollutant	Ozone	PM2.5	PM10 STP/LC	NO2	Meteorology
Parameter code	44201	88101	81102 / 85101	42602	Many
Spatial scale	N	N	N	N	R
Site type	HC, PE	HC, PE	PE	PE	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC, RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None	None	None
FRM/FEM/ARM/Other	FEM	FEM	FEM	FEM	Other
POC	1	3	3	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Primary	Primary (Installed in 2022)	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	Y	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne T400	Met One BAM 1020	Met One BAM 1020	Teledyne T200	ITP- Hy-Cal 512AA3B, OT- Met One 060A-2, BP- Met One 092, WD- Met One 020C, WS-Met One 010C
Analysis method	UV	Beta Attenuation	Beta Attenuation	Chem.	Many
Method code	087	170	122	099	Many
Monitoring start date (MM/DD/YYYY)	04/01/2000	09/14/2006	02/09/2022	04/01/2000	WS, WD - 4/1/2000; OT, BP 09/03/08
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31

Pollutant	Ozone	PM2.5	PM10 LC	NO2	Meteorology
Probe height (meters)	5.45 m	5.6 m	5.5 m	5.45 m	8.9 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.9 m	2 m	2.1 m	1.9 m	N/A
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A
Distance from the drip line of closest tree(s)	20.0 m	21.5 m	20.0 m	20.0 m	22.0 m
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 percentage of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A	N/A	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	12.39	N/A	N/A	13.70	N/A
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Bi-weekly	Bi-weekly	N/A	N/A

Pollutant	Ozone	PM2.5	PM10 LC	NO2	Meteorology
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lo-vol? If yes, list distance (meters) and instrument(s).	N/A	No	No	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/24/2022	N/A	N/A	10/24/2022	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	5/3/2022, 10/24/2022	5/3/2022, 10/24/2022	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	N

Site Name	Merced-M St
AQS ID (XX-XXX-XXXX)	06-047-2510
Representative statistical area Name (i.e. MSA, CBSA, other)	Merced
County	Merced
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SJVAPCD
Reporting Agency	SJVAPCD
Site Start Date	4/1/1999
Pollutant Parameters	PM10 FEM, PM2.5 FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature
Address	2334 M Street, Merced, CA 95340
GPS Coordinates (decimal degrees)	37.3086 N, -120.4800 W
Distance to roadways (meters)	55 m (northwest)
Traffic Count/Year	51,000/2019 (Traffic count for nearest roads: R Street/Rte 99, Source: Caltrans 2019 AADT)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved, gravel

Merced-M St		
Pollutant	PM10 STP / LC	PM2.5
Parameter code	81102 / 85101	88101
Spatial scale	N	N
Site type	HC, PE	HC, PE
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP
Monitor type	SLAMS	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None
FRM/FEM/ARM/Other	FEM	FEM
POC	3	3
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	Y
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020
Analysis method	Beta Attenuation	Beta Attenuation
Method code	122	170
Monitoring start date (MM/DD/YYYY)	03/04/2022	03/04/2022
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly

Pollutant	PM10 STP/ LC	PM2.5
Sampling season (MM/DD - MM/DD)	01/01-12/31	01/01 – 12/31
Probe height (meters)	9.2 m	9.3 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.1 m	2.2 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from the drip line of closest tree(s)	30 m	30 m
Distance to furnace or incinerator flue (meters)	46.5 m	46 m
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	Bi-weekly	Bi-weekly
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	No	No
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hi-vol? If yes, list distance (meters) and instrument(s).	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	5/18/2022, 10/25/2022	5/18/2022, 10/25/2022
Changes planned within the next 18 months (Y/N)	N	N

Site Name	Merced-Coffee
AQS ID (XX-XXX-XXXX)	06-047-0003
Representative statistical area Name (i.e. MSA, CBSA, other)	Merced
County	Merced
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	10/1/1991
Pollutant Parameters	Ozone, PM2.5 FEM, NO2
Meteorological Parameters	Wind speed, wind direction, outdoor temperature
Address	385 S. Coffee St., Merced, CA 95340
GPS Coordinates (decimal degrees)	37.2816 N, -120.4340 W
Distance to roadways (meters)	15 m (east)
Traffic Count/Year	42,500/2019 (Traffic count for nearest roads: Childs Avenue/Rte 99, Source: Caltrans 2019 AADT)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Vegetative, dirt and gravel

Merced-Coffee				
Pollutant	Ozone	PM2.5	NO2	Meteorology
Parameter code	44201	88101	42602	Many
Spatial scale	N	N	N	R
Site type	HC, PE	PE	PE	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None	None
FRM/FEM/ARM/Other	FEM	FEM	FEM	Other
POC	1	3	1	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Primary	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	Y	N/A	N/A
Instrument manufacturer and model	Teledyne T400	Met One BAM 1020	Teledyne T200	ITP- Hampshire Controls 125-50HVB, OT- Met One 060A-2, WD- Met One 020C-1, WS-Met One 010C
Analysis method	UV	Beta Attenuation	CL	Many
Method code	087	170	099	Many
Monitoring start date (MM/DD/YYYY)	10/01/1991	10/19/2009	10/01/1991	10/01/1991
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	5.4 m	5.4 m	5.4 m	7.6 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.9 m	1.9 m	1.9 m	4.1 m

Pollutant	Ozone	PM2.5	NO2	Meteorology
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from the drip line of closest tree(s)	21.0 m	23.0 m	21.0 m	22.0 m
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 percentage of monitoring path)	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	7.59	N/A	8.38	N/A
Frequency of one-point QC check for gaseous instruments	Daily	N/A	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Bi-weekly	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	No	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/25/22	N/A	10/25/22	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	5/3/22, 10/25/22	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N

Site Name	Madera-City
AQS ID (XX-XXX-XXXX)	06-039-2010
Representative statistical area Name (i.e. MSA, CBSA, other)	Madera
County	Madera
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	7/16/2010
Pollutant Parameters	Ozone, PM10 FEM, PM2.5 FEM,
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity, barometric pressure, solar radiation.
Address	28261 Avenue 14, Madera, CA 93638
GPS Coordinates (decimal degrees)	36.9532 N, -120.0342 W
Distance to roadways (meters)	70 m (south)
Traffic Count/Year	386/2017 (Traffic count for nearest roads: Avenue 14 west of Road 29, westbound trips per hour in 24 hours. Source: Madera County Transportation Commission 2018 Traffic Volumes Report.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved, dirt, and vegetative

Madera-City					
Pollutant	Ozone	PM2.5	PM10 LC	PM10 STP	Meteorology
Parameter code	44201	88101	85101	81102	Many
Spatial scale	N	N	N	N	N
Site type	HC, GB	PE	PE	PE	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None.	None	None	None	None
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	Other
POC	1	3	3	3	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Primary	Other	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	Y	N/A	N/A	N/A
Instrument manufacturer and model	TAPI T265	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020	ITP- Hy-Cal 512AA3B, OT- Met One 060A-2, BP- Met One 092, WD- Met One 020C, WS-Met One 010C
Analysis method	Chem	Beta Attenuation	Beta Attenuation	Beta Attenuation	Many
Method code	199	170	122	122	Many
Monitoring start date (MM/DD/YYYY)	12/01/2020	09/20/2019	09/20/2019	09/20/2019	06/01/2010
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31	01/01 – 12/31
Probe height (meters)	5.1 m	3.7 m	3.6 m	3.6 m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2 m	1.9 m	1.8 m	1.8 m	7 m
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A

Pollutant	Ozone	PM2.5	PM10 LC	PM10 STP	Meteorology
Distance from the drip line of closest tree(s)	13.8 m	15.5 m	13.8 m	13.8 m	14.2 m
Distance to furnace or incinerator flue (meters)	53m	53 m	53 m	53 m	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 percentage of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A	N/A	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; NPAMS: VOCs, Carbonyls (seconds)	9.32	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Bi-Weekly	Bi-Weekly	Bi-Weekly	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	No	No	No	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/24/2022	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 (MM/DD/YYYY, MM/DD/YYYY)	N/A	5/3/2022, 10/24/2022	5/3/2022, 10/24/2022	5/3/2022, 10/24/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	N

Site Name	Madera-Pump Yard
AQS ID (XX-XXX-XXXX)	06-039-0004
Representative statistical area Name (i.e. MSA, CBSA, other)	Madera
County	Madera
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	In 2022 the San Joaquin Valley was contracted with Atmospheric Analysis & Consulting Inc.: Speciated VOC
Reporting Agency	SJVAPCD
Site Start Date	7/1/1997
Pollutant Parameters	Ozone, NO2, Speciated VOC, NMH
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity, barometric pressure, solar radiation
Address	Avenue 8 and Road 29 ½, Madera, CA 93637
GPS Coordinates (decimal degrees)	36.867125 N, -120.010158 W
Distance to roadways (meters)	20 m (west)
Traffic Count/Year	2,980/2017 (Traffic count for nearest roads: Avenue 7 west of Rte 99, westbound trips per hour in 24 hours. Source: Madera County Transportation Commission 2018 Traffic Volumes Report.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Dirt, paved

Madera-Pump Yard					
Pollutant	Ozone	NO2	Speciated VOC	NMH	Meteorology
Parameter code	44201	42602	Many	43102	Many
Spatial scale	N	N	N	N	R
Site type	HC, GB	PE	PE	PE	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	RS	RS	RS, TP
Monitor type	SLAMS	SLAMS	Other	Other	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	PAMS	PAMS	PAMS	PAMS	PAMS
FRM/FEM/ARM/Other	FRM	FEM	Other	Other	Other
POC	1	1	1	1	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	N/A	N/A	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne T265	Teledyne T200	Entech Instruments	Synspec Alpha 115	ITP- Hamp.Control 125-50, OT-Met One 060A-2, BP- Met One 092, RH- Vaisala HMP110A, SRD-Epplly Mod. 8-48, WD- Met One 020C, WS-Met One 010C
Analysis method	Chem.	CL	GC	GC	Many
Method code	199	099	126	011	Many
Monitoring start date (MM/DD/YYYY)	07/01/1997	07/01/1997	07/01/1997	07/01/1997	07/01/1997
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	1:3	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	06/01 – 8/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	5.8 m	5.8 m	5.8 m	5.8 m	4.45 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2 m	2 m	2 m	2 m	8.2 m

Pollutant	Ozone	NO ₂	Speciated VOC	NMH	Meteorology
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	Horiz. 20 m, Vert 0 m above	Horiz. 20 m, Vert 0 m above	Horiz. 20 m, Vert 0 m above	Horiz. 20 m, Vert 0 m above	Horiz. 20 m, Vert 0 m above
Distance from the drip line of closest tree(s)	40.5 m	40.5 m	40.5 m	40.5 m	40.5 m
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 percentage of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	Teflon/Pyrex with Borosilicate	Stainless steel	Stainless steel	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	12.12	12.44	9.71	12.83	N/A
Frequency of one-point QC check for gaseous instruments	Daily	Daily	Daily	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A	N/A	N/A	N/A

Pollutant	Ozone	NO2	Speciated VOC	NMH	Meteorology
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	11/2/2022	11/2/2022	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	N

Site Name	Tranquillity
AQS ID (XX-XXX-XXXX)	06-019-2009
Representative statistical area Name (i.e. MSA, CBSA, other)	Fresno
County	Fresno
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	9/1/2009
Pollutant Parameters	Ozone, PM2.5 FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	32650 W. Adams, Tranquillity, CA 93668
GPS Coordinates (decimal degrees)	36.634225 N, -120.382331 W
Distance to roadways (meters)	200m (south)
Traffic Count/Year	1,750/2019 Raw traffic count for nearest roads: Adams Avenue and Route 33 (S. Derrick Avenue) Source: Caltrans 2019
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Dirt, vegetative

Tranquillity			
Pollutant	Ozone	PM2.5	Meteorology
Parameter code	44201	88101	Many
Spatial scale	U	U	U
Site type	PE	PE	PE
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	TP
Monitor type	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None
FRM/FEM/ARM/Other	FEM	FEM	Other
POC	1	3	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	Y	N/A
Instrument manufacturer and model	Teledyne T400	Met One BAM 1020	ITP- Hy-Cal 512AA3B, OT- Met One 060A-2, BP- Met One 092, WD- Met One 020C, WS-Met One 010C
Analysis method	UV	Beta attenuation	Many
Method code	087	170	Many
Monitoring start date (MM/DD/YYYY)	10/30/2009	10/30/2009	10/30/2009
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	4.6 m	4.9 m	10.6m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8 m	2.1 m	10.6 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A

Pollutant	Ozone	PM2.5	Meteorology
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	82.8 m	76.8 m	76.7m
Distance from the drip line of closest tree(s)	63.7 m	66.1 m	63.7m
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 percentage of monitoring path)	359	359	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	6.5	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Bi-Weekly	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the inlet? If yes, list distance (meters) and instrument(s).	N/A	No	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the inlet? If yes, list distance (meters) and instrument(s).	N/A	No	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/26/2022	N/A	N/A

Pollutant	Ozone	PM2.5	Meteorology
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	5/4/2022, 10/26/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N	N

Site Name	Fresno-Sierra Sky Park
AQS ID (XX-XXX-XXXX)	06-019-0242
Representative statistical area Name (i.e. MSA, CBSA, other)	Fresno
County	Fresno
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	1/1/1987
Pollutant Parameters	Ozone, NO2
Meteorological Parameters	Wind speed, wind direction, outdoor temperature
Address	4508 Chenault Ave., Fresno, CA 93722
GPS Coordinates (decimal degrees)	36.8405 N, -119.8740 W
Distance to roadways (meters)	12m (west)
Traffic Count/Year	15,626 / 2018 (Raw traffic count in a 24-hour period for nearest roads: Spruce Avenue east of Milburn Avenue. Source: Fresno COG Traffic Counts, 2007-2019 Kittelson & Associates, Inc.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Gravel, dirt

Fresno-Sierra Sky Park			
Pollutant	Ozone	NO2	Meteorology
Parameter code	44201	42602	Many
Spatial scale	N	N	N
Site type	HC, PE, RT	PE	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	N/A	N/A	N/A
FRM/FEM/ARM/Other	FRM	FEM	Other
POC	1	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API T265	Teledyne T200	ITP- BA-512-A-A-3-B, OT- Met One 060A-2, WD- Met One 020C, WS- Met One 010C
Analysis method	Chem.	CL	Many
Method code	199	574	Many
Monitoring start date (MM/DD/YYYY)	07/01/1986	07/01/1986	07/01/1986
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	5.5 m	5.5 m	5.6 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.3 m	2.3 m	2.3 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A

Pollutant	Ozone	NO2	Meteorology
Distance from the drip line of closest tree(s)	15.8 m	15.8 m	16.8 m
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	10.08	9.77	N/A
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	2/8/2022	2/8/2022	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A
Changes planned within the next 18 months (Y/N)	The District plans to work with CARB/EPA to discontinue placing the "SX" flag on the data collected from this site upon the next audit from CARB confirming that the obstruction has been cleared.	"The District plans to work with CARB/EPA to discontinue placing the "SX" flag on the data collected from this site upon the next audit from CARB confirming that the obstruction has been cleared.	"The District plans to work with CARB/EPA to discontinue placing the "SX" flag on the data collected from this site upon the next audit from CARB confirming that the obstruction has been cleared.

Site name	Clovis-Villa	
AQS ID (XX-XXX-XXXX)	06-019-5001	
Representative statistical area Name (i.e. MSA, CBSA, other)	Fresno	
County	Fresno	
Collecting (Operating) Agency	SJVAPCD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	In 2022 the San Joaquin Valley was contracted with Atmospheric Analysis & Consulting Inc.: Speciated VOC	
Reporting Agency	SJVAPCD:, PM2.5 FEM, , PM10 FEM, Ozone, CO, NO ₂ , NMH, Speciated VOC, Meteorology	SJVAPCD contracts out so Reporting lab varies from year to year: Speciated VOC
Site Start Date	9/1/1990	
Pollutant Parameters	Ozone, PM10 FRM, PM10 FEM, PM2.5 FEM, PM2.5 FRM, CO, NO ₂ , NMH, Speciated VOC	
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity, barometric pressure, solar radiation	
Address	908 N. Villa Ave., Clovis CA 93612	
GPS Coordinates (decimal degrees)	36.8194 N, -119.7160 W	
Distance to roadways (meters)	260 m (east)	
Traffic Count/Year	6,480/2008 (Raw traffic count in a 24-hour period: Northbound Villa Avenue south of Bullard Avenue. Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2013 (latest available))	
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved	

Clovis-Villa (1)				
Pollutant	Ozone	PM2.5	PM10 LC	PM10 STP
Parameter Code	44201	88101	85101	81102
Spatial scale	N	N	N	N
Site type	Max PEI, HC	HC	HC	HC
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	RS, TP	NC, RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	PAMS	None	None	None
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM
POC	1	3	3	3
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Primary	Primary	Primary
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	Y	N/A	N/A
Instrument manufacturer and model	Teledyne API T265	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020
Analysis method	Chem.	Beta Attenuation	Beta Attenuation	Beta Attenuation
Method code	199	170	122	122
Monitoring start date (MM/DD/YYYY)	05/01/2017	07/01/2020	01/01/2020	01/01/2020
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31	01/01 - 12/31
Probe height (meters)	5.9 m	5.9 m	6.3 m	6.3 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8 m	1.8 m	2.2 m	2.2 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A

Pollutant	Ozone	PM2.5	PM10 LC	PM10 STP
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from the drip line of closest tree(s)	74 m	74 m	74 m	74 m
Distance to furnace or incinerator flue (meters)	16.0 m	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 percentage of monitoring path)	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	12.22	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	No	No	No
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	No	No	No

Pollutant	Ozone	PM2.5	PM10 LC	PM10 STP
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Bi-weekly	Bi-weekly	Bi-weekly
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	2/9/2022	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	2/9/2022, 8/9/2022	2/9/2022, 8/9/2022	2/9/2022,8/9/2022
Changes planned within the next 18 months (Y/N)	N	N	N	N

Clovis-Villa (2)					
Pollutant	CO	NO ₂	Speciated VOC	NMH	Meteorology
Parameter code	42101	42602	Many	43102	Many
Spatial scale	N	N	N	N	R
Site type	Max PEI, PE	HC	PE	HC	Other
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	RS	RS	RS, TP
Monitor type	SLAMS	SLAMS	Other	Other	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	PAMS	PAMS	PAMS	PAMS	PAMS
FRM/FEM/ARM/Other	FEM	FEM	Other	Other	Other
POC	1	1	1	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	N/A	N/A	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Thermo 48i-TLE	Teledyne T200	Entech Instruments 1900	Synpec Alpha 115	ITP- HY-CAL BA 512-A-A-3-B, OT- Met-One 060A-2, BP- Met-One 092, RH- VAISALA HMP45D, SRD-EPPLY Mod.8-48, WD- Met-One 020C, WS- Met One 010C, BP- Met One 092
Analysis method	IR	Chem.	GC / UV Absorption	Flame Ionization	Many
Method code	554	099	177 / 202	011	Many
Monitoring start date (MM/DD/YYYY)	01/01/1990	01/01/2016	01/01/1990	01/01/1990	01/01/1990
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	1:3	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	06/01 – 08/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	5.9 m	5.9 m	5.9 m	5.9 m	10 m

Pollutant	CO	NO ₂	Speciated VOC	NMH	Meteorology
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8 m	1.8 m	1.8 m	1.8 m	7.5 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A m
Distance from the drip line of closest tree(s)	74 m	74 m	74 m	74 m	74 m
Distance to furnace or incinerator flue (meters)	16.0 m	16.0 m	13.5 m	16.0 m	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 percentage of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	Teflon/Pyrex with Borosilicate	Stainless steel	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	13.39	12.33	5.0	9.36	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the inlet? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the inlet? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A	N/A

Pollutant	CO	NO ₂	Speciated VOC	NMH	Meteorology
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A	N/A	N/A	N/A
Frequency of one-point QC check (gaseous)	Daily	Daily	N/A	Daily	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	2/9/2022	2/9/2022	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	N

Site Name	Fresno-Garland
AQS ID (XX-XXX-XXXX)	06-019-0011
Representative statistical area Name (i.e. MSA, CBSA, other)	Fresno
County	Fresno
Collecting (Operating) Agency	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB
Reporting Agency	CARB
Site Start Date	12/23/2011
Pollutant Parameters	Ozone, PM10 STP FEM, PM2.5 FEM, PM2.5 FRM, PM2.5 Speciation (STN), CO, NO ₂ , NO _y , SO ₂ , Toxics
	PM10-2.5: (1) PM10 FEM + (1) PM2.5 FEM = (1) PM10-2.5 FEM.
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure, relative humidity
Address	3727 N. First St., Ste.104, Fresno CA 93726
GPS Coordinates (decimal degrees)	36.7853 N, -119.7732 W
Distance to roadways (meters)	30 m (south)
Traffic Count/Year	7,520/2011 (Raw traffic count in a 24-hour period: First Street near Dakota Avenue. Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2013. (latest available))
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Fresno-Garland (1)						
Pollutant	Ozone	CO	NO2	SO2	NOy	Toxics
Parameter code	44201	42101	42602	42401	42600	Many
Spatial scale	U	U	U	U	U	N
Site type	PE	PE	Max PEI	PE	PE	PE
Basic monitoring objective(s)	NC, RS	NC, RS	NC, RS	NC, RS	NC, RS	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	NCore	NCore	NCore	NCore	NCore	NCore
FRM/FEM/ARM/Other	FEM	FRM	FRM	FEM	Other	Other
POC	1	3	1	1	3	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Primary	Primary	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 400	API 300 EU	Thermo 421Q	Thermo 431Q	Instrumental	Xontech 924
Analysis method	UV	UV	UV	UV	Chem. Teledyne API 200EU/501	Many
Method code	087	593	74	560	699	Many
Monitoring start date (MM/DD/YYYY)	12/23/2011	01/18/2012	02/1/2012	01/18/2012	01/18/2012	12/23/2011
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe/Inlet height above ground (meters)	6.8	6.6	6.8	6.6	6.2	5.8
Distance from supporting structure (meters) (vertical and horizontal, if applicable, should be provided)	2.8	2.8	2.8	2.8	N/A	2.8
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None	None	None

Pollutant	Ozone	CO	NO2	SO2	NOy	Toxics
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None	None	None
Distance from the drip line of closest tree(s)	None	None	None	None	None	None
Distance to furnace or incinerator flue (meters)	None	None	None	None	None	None
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360	360	360	360	360	360
Probe material (Teflon, etc.)	Teflon	Teflon	Teflon	Teflon	Teflon	Teflon
Residence time (seconds)	17.4	13.4	13.17	15.0	< 20 seconds	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A	N/A	N/A
Frequency of one-point QC check (gaseous)	5 Times/Week	5 Times/Week	5 Times/Week	5 Times/Week	5 Times/Week	5 Times/Week
Last Annual Performance Evaluation (gaseous)	2/10/2022	2/3/2022	2/3/2022	2/3/2022	not audited by CARB-QAS	8/9/2022
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	N	N

Fresno-Garland (2)				
Pollutant	PM2.5	PM10 STP / PM10 LC	PM2.5	PM10-2.5
Parameter code	88101	81102 / 85101	88101	86101
Spatial scale	N	N	N	N
Site type	PE, QA	PE	PE	GB
Basic monitoring objective(s)	NC, RS	NC, RS, TP / RS, TP	NC, RS	NC, RS
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	NCore	NCore	NCore	NCore
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM
POC	2	3	3	3
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	QA Collocated	Primary	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	Y	N/A	Y	N/A
Instrument manufacturer and model	R&P 2025	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020
Analysis method	Sequential	Beta Attenuation	Beta Attenuation	Beta Attenuation
Method code	145	122	170	185
Monitoring start date (MM/DD/YYYY)	1/25/2012	1/1/2012	1/18/2012	1/1/2012
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	1:3	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe/Inlet height above ground (meters)	6.0	6.3	6.3	6.3
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.2	2.5	2.5	2.5
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None

Pollutant	PM2.5	PM10 STP / PM10 LC	PM2.5	PM10-2.5
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None
Distance from the drip line of closest tree(s)	None	None	None	None
Distance to furnace or incinerator flue (meters)	None	None	None	None
Distance between collocated monitors (meters)	1.0	1.0	1.0	N/A
Unrestricted airflow (degrees)	360	360	360	360
Probe material (Teflon, etc.)	N/A	N/A	N/A	N/A
Residence time (seconds)	N/A	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	No	No	No	No
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	Monthly	Bi-weekly	Bi-weekly	Bi-weekly
Frequency of flow rate verification for automated PM analyzers audit	Monthly	BI-weekly	BI-weekly	Bi-weekly
Frequency of one-point QC check (gaseous)	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits 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
Changes planned within the next 18 months (Y/N)	N	N	N	N

Fresno-Garland (3)				
Pollutant	PM2.5 Speciation	PM2.5 Speciation	PM2.5 Speciation	Meteorology
Parameter code	63102	68101	88103	Many
Spatial scale	N, U	N, U	N, U	U
Site type	PE	PE	GB	GB
Monitor objective	RS	RS	RS	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	NCore, CSN STN	NCore, CSN STN	NCore, IMPROVE	NCore
FRM/FEM/ARM/Other	Other	Other		Other
POC	5	5	1	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A
Instrument manufacturer and model)	Met-One SASS	URG 3000-N	IMPROVE Module A with Cyclone Inlet-Teflon Filter, 2.2 aq. Cm.	Vaisala HMP-155 (OT/RH), RM Young 81000 (WS/WD/3DT)
Method code	898	838	800	Many
Analysis method	Filter Absorption at 633nm by HIPS	Calculation	X-Ray Fluorescence	Many
Monitoring start date (MM/DD/YYYY)	1/1/2019	11/20/2015	01/25/2012	12/23/2011
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	1:3	1:3	1:3	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe/Inlet above ground (meters)	5.5	5.5	9.5	4.5
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2	2	2	8
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	10	10	15	None
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	11	9	None	None

Pollutant	PM2.5 Speciation	PM2.5 Speciation	PM2.5 Speciation	Meteorology
Distance from the drip line of closest tree(s)	11	9	N/A	None
Distance to furnace or incinerator flue (meters)	9	9	None	N/A
Distance between collocated monitors (meters)	2.5	2.5	N/A	N/A
Unrestricted airflow (degrees)	360	360	360	360
Probe material (Teflon, etc.)	N/A	N/A	N/A	Teflon
Residence time (seconds)	N/A	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	No	No	NO	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	Bi-weekly	Bi-weekly	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A
Frequency of one-point QC check (gaseous)	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	1/31/2023	1/31/2023	Not Auditable	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N

Site Name	Fresno-Pacific
AQS ID (XX-XXX-XXXX)	06-019-5025
Representative statistical area Name (i.e. MSA, CBSA, other)	Fresno
County	Fresno
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SJVAPCD
Reporting Agency	SJVAPCD
Site Start Date	12/31/1999
Pollutant Parameters	PM2.5 FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	1716 Winery, Fresno, CA 93727
GPS Coordinates (decimal degrees)	36.7263N, -119.7330W
Distance to roadways (meters)	40 m (east)
Traffic Count/Year	8,540 / 2018 (Raw traffic count in a 24-hour period: Butler Avenue/Winery Avenue intersection, Source: Fresno COG Traffic Counts, 2007-2019 Kittelson & Associates, Inc.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Vegetative and paved

Fresno-Pacific	
Pollutant	PM _{2.5}
Parameter code	88101
Spatial scale	N
Site type	PE
Basic monitoring objective(s)	NC,RS, TP
Monitor type	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None
FRM/FEM/ARM/Other	FEM
POC	3
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	Y
Instrument manufacturer and model	Met One BAM 1020
Analysis method	Beta Attenuation
Method code	170
Monitoring start date (MM/DD/YYYY)	3/11/2022
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31
Probe height (meters)	13.65 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.9 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None

Pollutant	PM2.5
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	53.4 m NE 5.1 m above vertical
Distance from the drip line of closest tree(s)	77 m
Distance to furnace or incinerator flue (meters)	None
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Aluminum
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	No
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	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 (MM/DD/YYYY)	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	03/23/2022, 08/09/2022
Changes planned within the next 18 months (Y/N)	N

Site Name	Fresno-Drummond
AQS ID (XX-XXX-XXXX)	06-019-0007
Representative statistical area Name (i.e. MSA, CBSA, other)	Fresno
County	Fresno
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB
Reporting Agency	SJVAPCD: Ozone, NO2
Site Start Date	7/1/1984
Pollutant Parameters	Ozone, PM10 FEM, NO2
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	4706 E. Drummond Street, Fresno, CA 93725
GPS Coordinates (decimal degrees)	36.7055 N, -119.7410 W
Distance to roadways (meters)	50m
Traffic Count/Year	27,251/2018 (Raw traffic count in a 24-hour period for nearest roads: Jensen Avenue between Chestnut Avenue and Maple Avenue, Source: Fresno COG Traffic Counts, 2007-2019 Kittelson & Associates, Inc.
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Fresno-Drummond				
Pollutant	Ozone	PM10 STP / LC	NO ₂	Meteorology
Parameter code	44201	81102 / 85101	42602	Many
Spatial scale	N	N	N	R
Site type	PE, HC, RT	HC	HC	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC,RS,TP	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None	None
FRM/FEM/ARM/Other	FRM	FEM	FEM	Other
POC	1	3	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API T265	Met One BAM 1020	Teledyne API T200	ITP- HY-CAL BAAA3B, OT- Met One 060A-2, BP- Met One 092, WD- Met One 020C, WS- Met One 010C
Analysis method	Chem.	Beta Attenuation	CL	Many
Method code	199	122	099	Many
Monitoring start date (MM/DD/YYYY)	05/01/2017	01/01/2022	03/01/2017	07/01/1984
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 - 12/31	01/01 -12/31	01/01 – 12/31
Probe height (meters)	8.0 m	5.7 m	8.0 m	9.8 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	4.4 m	2.1 m	4.4 m	N/A

Pollutant	Ozone	PM10 STP / LC	NO2	Meteorology
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from the drip line of closest tree(s)	27.4 m	28.0 m	27.4 m	28.4 m
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 percentage 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 with Borosilicate	N/A	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.85	N/A	9.89	N/A
Frequency of one-point QC check for gaseous instruments	Daily	N/A	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Bi-weekly	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	None	N/A	N/A

Pollutant	Ozone	PM10 STP / LC	NO2	Meteorology
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	No	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	3/23/2022	N/A	3/23/2022	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	3/23/2022, 8/9/2022	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N

Site Name	Fresno-Foundry
AQS ID (XX-XXX-XXXX)	06-019-2016
Representative statistical area Name (i.e. MSA, CBSA, other)	Fresno
County	Fresno
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	1/1/2016
Pollutant Parameters	NO2, PM2.5 FEM, CO
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	2482 Foundry Park Ave, Fresno, CA 93706
GPS Coordinates (decimal degrees)	36.710833N, -119.7775W
Distance to roadways (meters)	16 to 19 meters
Traffic Count/Year	122,000/2016 (Rte 99 and Jensen Avenue off-ramp, Source: Caltrans 2019)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Fresno-Foundry				
Pollutant	PM _{2.5}	CO	NO ₂	Meteorology
Parameter code	88101	42101	42602	Many
Spatial scale	MC	MC	MC	N
Site type	HC	HC	HC	PE
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	Near-road	Near-road	Near-road	Near-road
FRM/FEM/ARM/Other	FEM	FEM	FEM	Other
POC	3	1	1	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	N/A	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N	N/A	N/A	N/A
Instrument manufacturer and model	Met One BAM 1020	Thermo 48i-TLE	Teledyne T500U	ITP – Hamp. Control 140-100Hv, OT – MET One 060-A-2, BP – MET One 092, WD – MET One 020C, WS – METOne 010C
Analysis method	Beta Attenuation	IR	CL	Many
Method code	170	554	212	Many
Monitoring start date (MM/DD/YYYY)	1/1/2020	1/1/2020	01/01/2016	01/01/2016
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	5.1 m	5.7 m	5.7 m	4.9 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.2 m	1.8 m	1.8 m	2.0 m

Pollutant	PM2.5	CO	NO ₂	Meteorology
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	26.3m H (north), 4m V 37m H (east), 4m V	26.3m H (north), 4m V 37m H (east), 4m V	26.3m H (north), 4m V 37m H (east), 4m V	26.3m H (north), 4m V 37m H (east), 4m V
Distance from the drip line of closest tree(s)	22.0 m	22.0 m	22.0 m	19.0 m
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 percentage of monitoring path)	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	Teflon/Pyrex with Borosilicate	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	N/A	14.17	12.71	N/A
Frequency of one-point QC check for gaseous instruments	N/A	Daily	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A	N/A	N/A

Pollutant	PM2.5	CO	NO ₂	Meteorology
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	N/A	2/7/2022	Audit procedure not established for method	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	2/7/2022, 8/9/2022	N/A	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N

Site Name	Parlier
AQS ID (XX-XXX-XXXX)	06-019-4001
Representative statistical area Name (i.e. MSA, CBSA, other)	Fresno
County	Fresno
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	In 2022 the San Joaquin Valley was contracted with Atmospheric Analysis & Consulting Inc.: Speciated VOC
Reporting Agency	SJVAPCD
Site Start Date	6/1/1983
Pollutant Parameters	Ozone, NO2, Speciated VOC, NMH
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity, barometric pressure, solar radiation
Address	9240 S. Riverbend Ave., Parlier, CA 93648
GPS Coordinates (decimal degrees)	36.5972 N, -119.5040 W
Distance to roadways (meters)	100 m (east)
Traffic Count/Year	1,050/2009 (Raw traffic count in a 24-hour period for nearest roads: E. Manning Avenue *Raw traffic count in a 24-hour period for nearest roads: E Manning Ave west of S Lac Jac Ave. Source: Fresno COG Traffic Report, 2007-2012.
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Dirt, vegetation

Parlier					
Pollutant	Ozone	NO2	Speciated VOC	NMH	Meteorology
Parameter code	44201	42602	Many	43102	Many
Spatial scale	N	N	N	N	R
Site type	HC, RT	PE	PE	PE	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	RS	RS	RS, TP
Monitor type	SLAMS	SLAMS	Other	Other	Many
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	PAMS	PAMS, RA40	PAMS	PAMS	PAMS
FRM/FEM/ARM/Other	FRM	FEM	Other	Other	Other
POC	1	1	1	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	N/A	N/A	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne T265	Teledyne T200	Entech 1900	Synspec Alpha 115	ITP- Hy-Cal 512AA3B, OT- Met One 060A-2, BP- Met One 092, RH- Vaisala HMP45D, SRD-Epply Mod.8-48, WD- Met One 020C, WS- Met One 010C
Analysis method	Chemiluminescence	CL	GC	GC	Many
Method code	199	099	126	011	Many
Monitoring start date (MM/DD/YYYY)	06/01/1983	06/01/1983	06/01/1983	06/01/1983	06/01/1983
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	1:3	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	06/01 – 08/31	01/01 – 12/31	01/01 - 12/31
Probe height (meters)	6.65 m	6.65 m	6.65 m	6.65 m	9.1 m

Pollutant	Ozone	NO2	Speciated VOC	NMH	Meteorology
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.96 m	2.96m	2.96 m	2.96 m	4.9 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None	None
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	33.9 m	33.9 m	33.9 m	33.9 m	31.9 m
Distance from the drip line of closest tree(s)	23.4 m	23.4 m	23.4 m	23.4 m	25.3 m
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 percentage of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	Teflon/Pyrex with Borosilicate	Stainless steel	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	10.86	10.26	4.69	8.67	N/A
Frequency of one-point QC check for gaseous instruments	daily	daily	daily	daily	N/A

Pollutant	Ozone	NO2	Speciated VOC	NMH	Meteorology
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/20/2022	10/20/2022	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	N

Site Name	Huron
AQS ID (XX-XXX-XXXX)	06-019-2008
Representative statistical area Name (i.e. MSA, CBSA, other)	Fresno
County	Fresno
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	9/1/2009
Pollutant Parameters	PM2.5 Non-FEM
Meteorological Parameters	Barometric Pressure
Address	16875 4 th St, Huron, CA 93234
GPS Coordinates (decimal degrees)	36.2363 N, -119.7656 W
Distance to roadways (meters)	100 m (north)
Traffic Count/Year	5,400/2019 (Traffic count for nearest roads: Rte 269/Rte 198, Source: Caltrans 2019)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved, vegetative

Huron		
Pollutant	PM2.5	Meteorology
Parameter code	88502	64101
Spatial scale	N	N
Site type	PE	PE
Basic monitoring objective(s)	TP	TP
Monitor type	SPM	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None
FRM/FEM/ARM/Other	Non-FEM	Other
POC	3	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	N/A
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N	N/A
Instrument manufacturer and model	Met One BAM 1020	OTP – Hy-Cal BA-512-A-A-3-B, BP – Met One 092
Analysis method	Beta-Attenuation	Many
Method code	731	014
Monitoring start date (MM/DD/YYYY)	09/12/2009	02/01/2010
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	5.84 m	5.5 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.44 m	N/A
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from the drip line of closest tree(s)	13.5 m	N/A
Distance to furnace or incinerator flue (meters)	5 m S	N/A
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A

Pollutant	PM2.5	Meteorology
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360
Probe material for reactivity gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	Bi-Weekly	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	None	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	None	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	5/4/2022, 10/26/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N

Site Name	Hanford-Irwin
AQS ID (XX-XXX-XXXX)	06-031-1004
Representative statistical area Name (i.e. MSA, CBSA, other)	Hanford-Corcoran
County	Kings
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD: Ozone, PM10 FEM, PM2.5 FEM, NO2, Meteorology
Site Start Date	9/1/1993
Pollutant Parameters	Ozone, PM10 FEM, PM2.5 FEM, NO2
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	807 S. Irwin St., Hanford, CA 93230
GPS Coordinates (decimal degrees)	36.3147 N, -119.6440 W
Distance to roadways (meters)	60 m (east)
Traffic Count/Year	2,828/2017 (Traffic count for nearest roads: S. Douty Street south of E. Lang Street, Source: City of Hanford Public Works - Engineering, Traffic Counts Volume Summary 2017 – City of Hanford.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved, vegetative

Hanford-Irwin (1)				
Pollutant	Ozone	PM2.5	NO ₂	Meteorology
Parameter code	44201	88101	42602	Many
Spatial scale	N	N	N	N
Site type	HC, PE	PE	PE	PE
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	Many
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None	None
FRM/FEM/ARM/Other	FRM	FEM	FEM	Other
POC	1	3	1	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Primary	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	Y	N/A	N/A
Instrument manufacturer and model	Teledyne T265	Met One BAM 1020	Teledyne T200	ITP- Hy-Cal 512AA3B, OT-Met One 060A-2, BP- Met One 092, WD- Met One 020C, WS-Met One 010C
Analysis method	Chem	Mass Monitor w/VSCC, BETA Attenuation	CL	Many
Method code	199	170	099	Many
Monitoring start date (MM/DD/YYYY)	1/1/2021	8/20/2020	02/25/2010	02/25/2010
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	4.7 m	4.6 m	4.7 m	9.7 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.9 m	1.9 m	1.9 m	N/A

Pollutant	Ozone	PM2.5	NO ₂	Meteorology
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	22.0 m V, 2.5 m H	19.0 m V, 2.5 m H	22.0 m V, 2.5 m H	N/A
Distance from the drip line of closest tree(s)	12.0 m	16.0 m	12.0 m	14.5 m
Distance to furnace or incinerator flue (meters)	23.5 m	23.3 m	23.5 m	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 percentage of monitoring path)	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	10.71	N/A	10.66	N/A
Frequency of one-point QC check for gaseous instruments	Daily	N/A	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Biweekly	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	No	N/A	N/A

Pollutant	Ozone	PM2.5	NO2	Meteorology
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	No	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/22/2022	N/A	10/22/2022	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	5/17/2022, 10/22/2022	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N

Hanford-Irwin (2)		
Pollutant	PM10 LC	PM10 STP
Parameter code	85101	81102
Spatial scale	N	N
Site type	PE	PE
Basic monitoring objective(s)	RS, TP	NC, RS, TP
Monitor type	SLAMS	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None
FRM/FEM/ARM/Other	FEM	FEM
POC	3	3
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N	N
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020
Analysis method	Beta Attenuation	Beta Attenuation
Method code	122	122
Monitoring start date (MM/DD/YYYY)	8/20/2020	8/20/2020
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	4.5 m	4.5 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8 m	1.8 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	19.0m V, 2.5m H	19.0 m V, 2.5 m H
Distance from the drip line of closest tree(s)	15.0 m	15.0 m
Distance to furnace or incinerator flue (meters)	22.8 m	22.8 m

Pollutant	PM10 LC	PM10 STP
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	Biweekly	Biweekly
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	No	No
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	No	No
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	5/17/2022, 10/22/2022	5/17/2022, 10/22/2022
Changes planned within the next 18 months (Y/N)	N	N

Site Name	Corcoran-Patterson
AQS ID (XX-XXX-XXXX)	06-031-0004
Representative statistical area Name (i.e. MSA, CBSA, other)	Hanford-Corcoran
County	Kings
Collecting (Operating) Agency	SJVAPCD
Reporting Agency	SJVAPCD: PM2.5 FEM, PM10 FEM, Meteorology
Site Start Date	10/1/1996
Pollutant Parameters	PM2.5 FEM, PM10 FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature
Address	1520 Patterson Ave., Corcoran, CA 93212
GPS Coordinates (decimal degrees)	36.1022 N, -119.5660 W
Distance to roadways (meters)	30 m (east)
Traffic Count/Year	3,000/2019 (Traffic count for nearest roads: JCT. Rte 43/Rte 137, Source: Caltrans 2019.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Corcoran-Patterson				
Pollutant	PM2.5	PM10 LC	PM10 STP	Meteorology
Parameter code	88101	85101	81102	Many
Spatial scale	N	N	N	N
Site type	HC, PE	HC, PE	HC, PE	GB
Basic monitoring objective(s)	NC, RS, TP	RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None	None
FRM/FEM/ARM/Other	FEM	FEM	FEM	Other
POC	8	8	8	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	Y	N	N	N/A
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020	ITP- Hampshire Controls Corp. 125-50HLV, OT- Met One 060A-2, WD- Met One 020C, WS-Met One 010C
Analysis method	Beta Attenuation	Beta Attenuation	Beta Attenuation	Many
Method code	170	122	122	Many
Monitoring start date (MM/DD/YYYY)	01/13/2021	01/01/2021	01/01/2021	01/01/2017
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	6.3 m	6.2 m	6.2 m	7.0 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.1 m	2.0 m	2.0 m	N/A

Pollutant	PM2.5	PM10 LC	PM10 STP	Meteorology
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	118.1 m H, 1.5 m V	118.1 m H, 1.5 m V	118.11 m H, 1.5 m V	118.6 m H, 1.5 m V
Distance from the drip line of closest tree(s)	63.7 m E, 65.9 m S	63.7 m E, 65.9 m S	63.7 m E, 65.9 m S	65.5 m E, 66.3 m S
Distance to furnace or incinerator flue (meters)	76.6 m	76.6 m	76.6 m	76.8 m
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	Biweekly	Biweekly	Biweekly	N/A

Pollutant	PM2.5	PM10 LC	PM10 STP	Meteorology
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	No	No	No	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	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 (MM/DD/YYYY, MM/DD/YYYY)	5/4/2022, 10/25/2022	5/4/2022, 10/25/2022	5/4/2022, 10/25/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N

Site Name	Visalia-W. Ashland Avenue
AQS ID (XX-XXX-XXXX)	06-107-2003
Representative statistical area Name (i.e. MSA, CBSA, other)	Visalia–Porterville
County	Tulare
Collecting (Operating) Agency	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB
Reporting Agency	CARB
Site Start Date	1/11/2022
Pollutant Parameters	Ozone, NO ₂ , PM10 FEM, PM2.5 FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity
Address	2005 West Ashland Avenue, Suite G, Visalia CA 93277
GPS Coordinates (decimal degrees)	36.30815 N, -119.31290 W
Distance to road	25 m (west)
Traffic Count/Year	10,656 / 2014 (Traffic count for nearest roads: W Whitendale Avenue and S Mooney Blvd; Source: Tulare County Association of Governments Interactive Map.)
Ground Cover	Paved

Visalia-W. Ashland Avenue (1)						
Pollutant	Ozone	NO ₂	PM ₁₀ STP / PM ₁₀ LC	PM _{2.5}	PM _{2.5} Speciation	Meteorology
Parameter code	44201	42602	81102 / 85101	88101	88102	Many
Spatial scale	N	N	N	N	N	R
Site type	GB	PE	PE	HC, PE	PE	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC, RS, TP / RS, TP	NC, RS, TP	RS	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None	None	CSN Supplemental	None
FRM/FEM/ARM/Other	FEM	FRM	FEM	FEM	Other	Other
POC	1	1	5	1	5	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Primary	Primary	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	Y	N/A	N/A
Instrument manufacturer and model	Teledyne API 400	Teledyne API 200E	Met One BAM 1020	Met One BAM 1020	Met One SASS / Super SASS Teflon	Vaisala HMP-155 (OT/RH) RM Young 81000 (WS/WD/3DT)
Analysis method	UV	Chemiluminescence	Beta attenuation	Beta attenuation	Many	Many
Method code	087	074	122	170	811	Many

Pollutant	Ozone	NO ₂	PM10 STP / PM10 LC	PM2.5	PM2.5 Speciation	Meteorology
Monitoring start date (MM/DD/YYYY)	01/12/2022	01/12/2022	01/12/2022	01/12/2022	01/11/2022	01/12/2022
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly	1:3	Hourly
Sampling season (MM/DD - MM/DD)	01/01 - 12/31	01/01 -12/31	01/01 -12/31	01/01 - 12/31	01/01 -12/31	01/01 -12/31
Probe/Inlet height above ground (meters)	6.7	6.7	6.2	5.9	9.5	11.9
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.8	2.8	2.3	2.1	2.6	None
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None	None	None
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None	None	None
Distance from the drip line of closest tree(s)	None	None	None	None	N/A	None

Pollutant	Ozone	NO2	PM10 STP / PM10 LC	PM2.5	PM2.5 Speciation	Meteorology
Distance to furnace or incinerator flue (meters)	None	None	None	None	None	None
Distance between collocated monitors (meters)	None	None	N/A	2.3	N/A	None
Unrestricted airflow (degrees)	360	360	360	360	360	360
Probe material (Teflon, etc.)	Teflon	Teflon	N/A	N/A	N/A	N/A
Residence time (seconds)	7.8	14.7	N/A	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	N/A	No	No	No	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	Monthly	Monthly	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	Bi-Monthly	Bi-Monthly	N/A	N/A

Pollutant	Ozone	NO2	PM10 STP / PM10 LC	PM2.5	PM2.5 Speciation	Meteorology
Frequency of one-point QC check (gaseous)	5x/week	5x/week	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	11/3/2022	11/3/2022	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	5/17/2022, 11/3/2022	5/17/2022, 11/3/2022	5/17/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	N	N

Site Name	Porterville
AQS ID (XX-XXX-XXXX)	06-107-2010
Representative statistical area Name (i.e. MSA, CBSA, other)	Visalia-Porterville
County	Tulare
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	12/1/2009
Pollutant Parameters	Ozone, PM2.5 Non-FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	1839 S. Newcomb St., Porterville, CA 93257
GPS Coordinates (decimal degrees)	36.0310 N, -119.0550 W
Distance to roadways (meters)	100m (south)
Traffic Count/Year	24,500/2019 (Ahead AADT traffic count for nearest roads: Junction SR 190/SR 65, Source: Caltrans 2019)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved, vegetative

Porterville			
Pollutant	Ozone	PM2.5	Meteorology
Parameter code	44201	88502	Many
Spatial scale	N	N	N
Site type	HC, PE	PE	PE
Basic monitoring objective(s)	NC, RS, TP	TP	TP
Monitor type	SLAMS	SPM	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None
FRM/FEM/ARM/Other	FEM	Non-FEM	Other
POC	1	3	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Other	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N	N/A
Instrument manufacturer and model	Teledyne T400	Met One BAM 1020	ITP- Hy-Cal 512AA3B, OT- Met One 060A-2, BP- Met One 092, WD- Met One 020C, WS-Met One 010C
Analysis method	UV	Beta Attenuation	Many
Method code	087	731	Many
Monitoring start date (MM/DD/YYYY)	03/08/2010	03/08/2010	03/08/2010
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 -12/31	01/01 -12/31	01/01 -12/31
Probe height (meters)	4.3 m	4.2 m	9.1 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8 m	1.8 m	0 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A
Distance from the drip line of closest tree(s)	22 m E	23 m E	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A

Pollutant	Ozone	PM2.5	Meteorology
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	6.10	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Biweekly	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	No	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/25/2022	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	5/4/2022, 10/25/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N	N

Site name	Sequoia-Ash Mountain
AQS ID (XX-XXX-XXXX)	06-107-0009
Representative statistical area Name (i.e. MSA, CBSA, other)	Visalia-Porterville
County	Tulare
Collecting (Operating) Agency	All equipment operated by National Park Service
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	All data reported by NPS
Site Start Date	7/1/1999
Pollutant Parameters	Ozone, PM2.5
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity, solar radiation
Address	Ash Mountain, Sequoia National Park 47050 Generals Hwy, Three Rivers, CA 93271
GPS Coordinates (decimal degrees)	36.4894 N, -118.8290 W
Distance to road	120 m (north)
Traffic Count/Year	2,300/2017 (Traffic count for nearest roads: Rte 198 / Sequoia National Park boundary, Source: Caltrans Back AADT 2017)
Ground Cover	Dirt, vegetative

Sequoia-Ash Mountain			
Pollutant	Ozone	PM2.5	Meteorology
Parameter code	44201	88101	Many
Spatial scale	R	R	R
Site type	HC, RT	HC	GB
Monitor objective	NC, RS, TP	RS, TP	RS, TP
Monitor type	Non-EPA Federal	Non-EPA Federal	Non-EPA Federal
Network affiliation	CASTNET	IMPROVE	CASTNET
FRM/FEM/ARM/Other	Other	FEM	Other
POC	1	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N	N/A
Instrument manufacturer and model	Thermo TECO 49, 49C	Met One BAM 1020	Many
Analysis method	UV	Beta Attenuation	Many
Method code	047	170	Many
Monitoring start date (MM/DD/YYYY)	07/01/1999	12/1/2020	10/4/2001
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	10 m	4 m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	3 m	1.5 m	3 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	5 m	N/A	5 m
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A
Distance from the drip line of closest tree(s)	5 - 10 m	5 - 10 m	5 - 10 m
Distance to furnace or incinerator flue (meters)	305 m	305 m	305 m
Distance between monitors fulfilling a QA collocation requirement (meters).	3 m	3 m	3 m

Pollutant	Ozone	PM2.5	Meteorology
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	13.4	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Monthly	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	Monthly	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	Monthly	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/6/2022	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	10/6/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N	N

Site name	Sequoia-Lower Kaweah
AQS ID (XX-XXX-XXXX)	06-107-0006
Representative statistical area Name (i.e. MSA, CBSA, other)	Visalia-Porterville
County	Tulare
Collecting (Operating) Agency	All equipment operated by National Park Service (NPS)
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	All data reported by NPS
Site Start Date	1/1/1987
Pollutant Parameters	Ozone
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity, solar radiation
Address	Giant Forest, Sequoia National Park, 47050 Generals Highway, Three Rivers, CA 93271
GPS Coordinates (decimal degrees)	36.5661 N, -118.7776 W
Distance to road	380 m (southeast)
Traffic Count/Year	2,300/2017 (Traffic count for nearest roads: Rte 198 / Sequoia National Park boundary, Source: Caltrans Back AADT 2017)
Ground Cover	Dirt, vegetation

Sequoia-Lower Kaweah		
Pollutant	Ozone	Meteorology
Parameter code	44201	Many
Spatial scale	R	R
Site type	RT	GB
Monitor objective	NC, RS, TP	RS, TP
Monitor type	Non-EPA Federal	Non-EPA Federal
Network affiliation	CASTNET	CASTNET
FRM/FEM/ARM/Other	Other	Other
POC	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A
Instrument manufacturer and model	Thermo TECO 49, 49C	Many
Analysis method	UV	Many
Method code	047	Many
Monitoring start date (MM/DD/YYYY)	01/01/1987	04/01/1987
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	05/01 – 10/31 (Seasonal only)	05/01 – 10/31 (Seasonal only)
Probe height (meters)	5	5
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.5	10
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	1	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from the drip line of closest tree(s)	5-10 m Location heavily forested. Cutting trees not possible. NPS working to get inlet moved to platform closer to station's shelter.	5-10 m Location heavily forested. Cutting trees not possible. NPS working to get inlet moved to platform closer to station's shelter.
Distance to furnace or incinerator flue (meters)	457 m	457 m
Distance between monitors fulfilling a QA collocation requirement (meters)	5-10 m	10-15 m

Pollutant	Ozone	Meteorology
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	13.9	N/A
Frequency of one-point QC check for gaseous instruments	Monthly	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/6/2022	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N

Site Name	Shafter	
AQS ID (XX-XXX-XXXX)	06-029-6001	
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield	
County	Kern	
Collecting (Operating) Agency	CARB: Ozone, NO ₂ ; Meteorology (2023+)	SJVAPCD: Meteorology (2022), Speciated VOC, NMH
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB: Ozone, NO ₂	Varies based on which laboratory is contracted with the SJVAPCD: Speciated VOC, NMH In 2022 the San Joaquin Valley was contracted with Atmospheric Analysis & Consulting Inc.
Reporting Agency	CARB: Ozone, NO ₂ (2023+)	SJVAPCD: Speciated VOC, NMH, Meteorology (2022)
Site Start Date	1/1/1989	
Pollutant Parameters	Ozone, NO ₂ , Speciated VOC, NMH	
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity, barometric pressure, solar radiation	
Address	578 Walker St., Shafter, CA 93263	
GPS Coordinates (decimal degrees)	35.5034 N, -119.2726 W	
Distance to roadways (meters)	10m (southwest)	
Traffic Count/Year	6,028/2020 (Traffic count for nearest roads: Central Ave and Walker St., Source: Kern Council of Governments.)	
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved	

Shafter					
Pollutant	Ozone	NO ₂	Speciated VOC	NMH	Meteorology
Parameter code	44201	42602	Many	43102	Many
Spatial scale	N	N	N	N	R
Site type	GB, PE	PE	HC	PE	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	RS	RS	RS, TP
Monitor type	SLAMS	SLAMS	Other	Other	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	PAMS	PAMS	PAMS	PAMS	PAMS
FRM/FEM/ARM/Other	FEM	FRM	Other	Other	Other
POC	1	1	1	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Other	Other	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne 400E (ARB)	Teledyne API 200E	Xontech 910/912	Synspec Alpha 115	ITP- Hy-Cal BA512AA3BB, OT- Met One 060A-2, SRD- Epply Mod. 8-48, WD- Met One 020B, WS- Met One 010C, BP- Met One 092
Analysis method	UV	CL	Preconc. GC/FID/MSD	Flame Ionization	Many
Method code	087	099	177	011	Many
Monitoring start date (MM/DD/YYYY)	07/01/1989	07/01/1989	07/25/2001	01/01/2016	01/01/1989
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	1:3	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	06/01 – 08/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	7.3	7.3	7.0	7.0	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.6	2.6	2.4	2.4	None
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None	None

Pollutant	Ozone	NO ₂	Speciated VOC	NMH	Meteorology
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	19m H, 2m V (Tree)	19m H, 2m V (Tree)	N/A
Distance from the drip line of closest tree(s)	None	None	19m N, 70m SE	19m N, 70m SE	70m SE
Distance to furnace or incinerator flue (meters)	None	None	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters).	None	None	N/A	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360	355	350	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	TEFLON	TEFLON	Stainless Steel	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	7.8	15.5	2.79	14.38 sec.	N/A
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A

Pollutant	Ozone	NO ₂	Speciated VOC	NMH	Meteorology
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	8/30/2022	11/8/2022	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	Yes. CARB has taken over all MET for this location in 2023

Site Name	Oildale
AQS ID (XX-XXX-XXXX)	06-029-0232
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield
County	Kern
Collecting (Operating) Agency	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB
Reporting Agency	CARB
Site Start Date	1/1/1980
Pollutant Parameters	Ozone, PM10 FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, sonic temperature, relative humidity
Address	3311 Manor St, Oildale CA 93308
GPS Coordinates (decimal degrees)	35.4380 N, -119.0167 W
Distance to road	150 m (northwest)
Traffic Count/Year	6,444/2020 (Traffic count for roads: Manor St. near the air monitoring station. Source: Kern Council of Governments.)
Ground Cover	Dirt, vegetative

Oildale			
Pollutant	Ozone	PM10 STP / PM10 LC	Meteorology
Parameter code	44201	81102, 85101	Many
Spatial scale	U	MD	U
Site type	HC, RT	SO	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP / RS,TP	NC
Monitor type	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None
FRM/FEM/ARM/Other	FEM	FEM	Other
POC	1	3	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	RM Young 81000, Vaisala HMP 155
Analysis method	UV	Beta Attenuation	Many
Method code	087	122	Many
Monitoring start date (MM/DD/YYYY)	01/01/1984	06/01/2017	01/01/1999, 03/0620/04, 10/01/2005
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe/Inlet height above ground (meters)	5.8	6.0	8.5
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.9	2.1	1.3
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None

Pollutant	Ozone	PM10 STP / LC	Meteorology
Distance from the drip line of closest tree(s)	10.1	None	None
Distance to furnace or incinerator flue (meters)	None	None	None
Distance between colocated monitors (meters)	N/A	N/A	N/A
Unrestricted airflow (degrees)	360	360	360
Probe material (Teflon, etc.)	Teflon	N/A	N/A
Residence time (seconds)	16.6	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	No	N/A
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	Monthly	N/A
Frequency of one-point QC check (gaseous)	Daily	N/A	N/A
Last Annual Performance Evaluation (gaseous)	9/15/2022	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	3/22/2022, 9/15/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N	N

Site Name	Bakersfield-Golden/M St
AQS ID (XX-XXX-XXXX)	06-029-0010
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield
County	Kern
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SJVAPCD
Reporting Agency	SJVAPCD
Site Start Date	6/1/1994
Pollutant Parameters	PM10 FEM and PM2.5 FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature
Address	2820 M St., Bakersfield, CA 93301
GPS Coordinates (decimal degrees)	35.385574 N, -119.015009 W
Distance to roadways (meters)	13 M
Traffic Count/Year	3,486/2021 (Traffic count for nearest roads: 30th St. at Golden State Ave., Source: Kern Council of Governments.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Bakersfield-Golden/M St		
Pollutant	PM10 LC / STP	PM2.5
Parameter code	81102	88101
Spatial scale	N	N
Site type	PE	PE
Basic monitoring objective(s)	NC, RS	NC, RS,
Monitor type	SLAMS	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None
FRM/FEM/ARM/Other	FEM	FEM
POC	3	3
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	Y
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020
Analysis method	Beta Attenuation	Beta Attenuation
Method code	122	170
Monitoring start date (MM/DD/YYYY)	1/20/2022	01/20/2022
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01-12/31	01/01-12/31
Probe height (meters)	6.9 m	7.0 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.8 m	2.9 m

Pollutant	PM10 LC / STP	PM2.5
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from the drip line of closest tree(s)	12 m WSW	11.5 m WSW
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 percentage 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
Frequency of one-point QC check for gaseous instruments	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	Bi-weekly	Bi-weekly
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	No	No
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	No	No
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	3/22/2022, 9/14/2022	3/22/2022, 9/14/2022
Changes planned within the next 18 months (Y/N)	N	N

Site Name	Bakersfield-Westwind
AQS ID (XX-XXX-XXXX)	06-019-2019
Representative statistical area Name (i.e. MSA, CBSA, other)	Kern
County	Kern
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	1/1/2019
Pollutant Parameters	NO2
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	2001 Westwind Drive, Bakersfield, CA 93301
GPS Coordinates (decimal degrees)	35.37695278N -119.04388889W
Distance to roadways (meters)	16 to 19 meters
Traffic Count/Year	125,000; 2019* Traffic count for road adjacent to monitoring station: CA Route 99 and JCT. RTE 58 West / JCT. RTE. 178 East Source: Caltrans (2019) 2,812; 2020** Westwind Drive near the air monitoring station. Source: Kern Council of Governments
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Bakersfield-Westwind		
Pollutant	NO2	Meteorology
Parameter code	42602	Many
Spatial scale	MC	N
Site type	HC	PE
Basic monitoring objective(s)	NC, RS, TP	RS, TP
Monitor type	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	Near-road	Near-road
FRM/FEM/ARM/Other	FEM	Other
POC	1	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A
Instrument manufacturer and model	Teledyne T500U	ITP – Hamp. Control 140-100Hv, OT – MET One 060-A-2, BP – MET One 092, WD – MET One 020C, WS – METOne 010C
Analysis method	CAPS (Cavity Attenuated Phase Shift Spectroscopy)	Many
Method code	212	Many
Monitoring start date (MM/DD/YYYY)	01/01/2019	01/01/2019
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	N/A	N/A
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	N/A	N/A
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A

Pollutant	NO2	Meteorology
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from the drip line of closest tree(s)	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	N/A	N/A
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	5.43	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	Audit procedure not established for method	N/A

Pollutant	NO ₂	Meteorology
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N

Site Name	Bakersfield-California
AQS ID (XX-XXX-XXXX)	06-029-0014
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield
County	Kern
Collecting (Operating) Agency	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB
Reporting Agency	CARB
Site Start Date	3/1/1994
Pollutant Parameters	Ozone, PM10 FRM, PM2.5 Non-FEM, NO ₂ , Toxics, PM2.5 Speciation (STN, CSN Supplemental)
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, sonic temperature, relative humidity
Address	5558 California Ave., Bakersfield CA 93309
GPS Coordinates (decimal degrees)	35.3566 N, -119.0626 W
Distance to road	300 m (south)
Traffic Count/Year	36,207/2020 (Traffic count for roads: California Ave between Stockdale Hwy and Business Center Dr., Source: Kern Council of Governments.)
Ground Cover	Paved

Bakersfield-California (1)				
Pollutant	Ozone	PM10 STP	PM2.5	PM2.5
Parameter code	44201	81102	88101	88101
Spatial scale	N	N	N	N
Site type	HC, GB	PE	HC, PE	HC, PE, QA
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC, RS	NC, RS
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None	None
FRM/FEM/ARM/Other	FEM	FEM	FRM	FRM
POC	1	7	1	2
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Primary	QA Collocated
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	Y	Y
Instrument manufacturer and model	Teledyne API 400E	Met One BAM 1020	Thermo 2025i	Thermo 2025i
Analysis method	UV	Beta Attenuation	Gravimetric	Gravimetric
Method code	087	122	145	145
Monitoring start date (MM/DD/YYYY)	3/1/1994	2/1/2021	1/1/1999	1/1/1999
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	1:1	1:12
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe/Inlet height above ground (meters) (ground to rooftop = 4.1m)	6.8	6.3	6.3	6.3
Distance from supporting structure (above rooftop) (meters)	3.0	2.5	2.5	2.5
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None

Pollutant	Ozone	PM10 STP	PM2.5	PM2.5
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	1.2 H x 4.37 D Parapet	None	1.2 H x 3.12 D Parapet	1.2 H x 3.12 D Parapet
Distance from the drip line of closest tree(s)	>10m	>10m	>10m	>10m
Distance to furnace or incinerator flue (meters)	3	2.8	2.7	3.5
Distance between collocated monitors (meters)	N/A	3.5	2.3	2.3
Unrestricted airflow (degrees)	360	360	360	360
Probe material (Teflon, etc.)	Teflon	N/A	N/A	N/A
Residence time (seconds)	6.9	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	No	No
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	No	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers audit	N/A	Semi-Monthly	N/A	N/A
Frequency of one-point QC check (gaseous)	Daily	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	9/13/2022	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	3/23/2022, 9/13/2022	3/23/2022, 9/13/2022	3/23/2022, 9/13/2022
Changes planned within the next 18 months (Y/N)	N	N	N	N

Bakersfield-California (2)				
Pollutant	PM2.5	PM2.5 Speciation	PM2.5 Speciation	PM2.5 Speciation
Parameter code	88502	88357	63102	63102
Spatial scale	N	N,U	N, U	N,U
Site type	PE	PE, QA	PE	PE, QA
Basic monitoring objective(s)	RS, TP	RS	RS	RS
Monitor type	Other	SLAMS	SLAMS	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	CSN STN	NCore, CSN STN	CSN STN
FRM/FEM/ARM/Other	Non-FEM	Other	Other	Other
POC	3	6	5	6
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary & QA Collocated	Primary	QA Collocated
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N	N/A	N/A	N/A
Instrument manufacturer and model	Met One BAM 1020	URG 3000-N	Met-One SASS	Met One SASS
Analysis method	Beta Attenuation	Cyclone inlet	Many	Many
Method code	731	838	898	898
Monitoring start date (MM/DD/YYYY)	11/01/2001	05/03/2007	11/20/2015	01/01/2001
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	1:3	1:3	1:6
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe/Inlet height above ground (meters)	6.6	6.15	5.95	5.95

Pollutant	PM2.5	PM2.5 Speciation	PM2.5 Speciation	PM2.5 Speciation
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.8	2.05	1.85	1.85
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	5 rooftop access	11 & 13 rooftop access	7.5 rooftop access	9.5 rooftop access
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	1.2 H x 4.37 D	Parapet height of 1.1 m surrounding rooftop (1.2 H x 7.0 D)	1.2 H x 7.0 D	1.2 H x 7.0 D
Distance from the drip line of closest tree(s)	>10m	7 & 9	7	8
Distance to furnace or incinerator flue (meters)	1.5	5 & 7	5	6
Distance between collocated monitors (meters)	N/A	1.5 & 1.5	2	2
Unrestricted airflow (degrees)	360	360 & 360	360	360
Probe material (Teflon, etc.)	N/A	N/A	N/A	N/A
Residence time (seconds)	N/A	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	No	No	No	No
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A

Pollutant	PM2.5	PM2.5 Speciation	PM2.5 Speciation	PM2.5 Speciation
Frequency of flow rate verification for manual PM samplers audit	N/A	Monthly	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers audit	Semi-Monthly	N/A	N/A	N/A
Frequency of one-point QC check (gaseous)	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	3/23/2022, 9/13/2022	3/23/2022	3/23/2022	3/23/2022
Changes planned within the next 18 months (Y/N)	N	N	N	N

Bakersfield-California (3)				
Pollutant	NO2	Toxics	Toxics	Meteorology
Parameter code	42602	Many	Many	Many
Spatial scale	N	N	N	R
Site type	PE	PE	PE, QA	GB
Basic monitoring objective(s)	NC, RS, TP	RS, TP	RS, TP	RS, TP
Monitor type	SLAMS	Many	Many	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	CA Air Toxics	CA Air Toxics	None
FRM/FEM/ARM/Other	FRM	Other	Other	Other
POC	1	Many	Many	Many
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	QA Collocated	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 200E	Xontech 924	Xontech 924	Vaisala HMP-155 (OT/RH) RM Young 81000 (WS/WD/3DT)
Analysis method	CL	Many	Many	Many
Method code	099	Many	Many	Many
Monitoring start date (MM/DD/YYYY)	04/01/1994	01/01/2007	01/01/2007	04/01/1994
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	1:12	1:12	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe/Inlet height above ground (meters)	6.8	5.7	5.7	13.8

Pollutant	NO2	Toxics	Toxics	Meteorology
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	7.5	9.5	None
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	1.2 H x 4.37 D	1.2 H x 3.89 D	1.2 H x 3.89 D	None
Distance from the drip line of closest tree(s)	>10m	14	15	None
Distance to furnace or incinerator flue (meters)	3	2	3	None
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360	360	360	360
Probe material (Teflon, etc.)	Teflon	N/A	N/A	N/A
Residence time (seconds)	7.1	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	N/A	Monthly	Monthly	N/A

Pollutant	NO2	Toxics	Toxics	Meteorology
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A
Frequency of one-point QC check (gaseous)	Daily	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	9/13/2022	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	3/23/2022	3/23/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N

Site Name	Bakersfield-Muni
AQS ID (XX-XXX-XXXX)	06-029-2012
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield
County	Kern
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	In 2022 the San Joaquin Valley was contracted with Atmospheric Analysis & Consulting Inc.: Speciated VOC
Reporting Agency	SJVAPCD
Site Start Date	6/1/2012
Pollutant Parameters	Ozone , CO, NO2, Speciated VOC, NMH
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, relative humidity, barometric pressure, solar radiation
Address	2000 South Union Ave., Bakersfield, CA 93307
GPS Coordinates (decimal degrees)	35.3313 N, -119.0000 W
Distance to roadways (meters)	280m (west)
Traffic Count/Year	19,182 / 2020 (Traffic count for monitoring station's street address: S Union Ave between E Casa Loma Dr and Watts Dr. Source: Kern Council of Governments) 6,868 / 2020 (Traffic count for road adjacent to monitoring station: Watts Dr between S Union Ave and Short St. Source: Kern Council of Governments)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Bakersfield-Muni						
Pollutant	Ozone	CO	NO2	Speciated VOC	NMH	Meteorology
Parameter code	44201	42101	42602	Many	43102	Many
Spatial scale	N	N	N	N	N	R
Site type	HC	PE	HC	HC	PE	GB
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC, RS, TP	RS	RS	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	Other	Other	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	PAMS	PAMS	PAMS, RA40	PAMS	PAMS	PAMS
FRM/FEM/ARM/Other	FRM	FEM	FEM	Other	Other	Other
POC	1	1	1	1	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	N/A	N/A	N/A	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API T265	Thermo 48i TLE	TeledyneT 200	Entech 1900	Synspec Alpha 115	Many
Analysis method	Chemiluminescence	Non-dispersive IR	Chem.	GC / UV Absorption	TEI 55: Propane	Many
Method code	199	554	099	177 / 202	011	Many
Monitoring start date (MM/DD/YYYY)	06/01/2012	07/01/2012	07/01/2012	06/01/2012	10/01/2012	07/01/2012
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	1:3	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31	06/01 – 08/31	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	6.0 m	6.0 m	6.0 m	6.3 m	6.0 m	10 m

Pollutant	Ozone	CO	NO ₂	Speciated VOC	NMH	Meteorology
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.1 m	2.1 m	2.1 m	2.4 m	2.1 m	N/A
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Distance from the drip line of closest tree(s)	Over 75 m	Over 75 m	Over 75 m	Over 75 m	Over 75 m	Over 75 m
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	350	350	350	350	350	350
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	Teflon/Pyrex with Borosilicate	Teflon/Pyrex with Borosilicate	Stainless Steel	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	12.82	13.23	12.85	4	13.08	N/A
Frequency of one-point QC check for gaseous instruments	Daily	Daily	Daily	N/A	Daily	N/A

Pollutant	Ozone	CO	NO2	Speciated VOC	NMH	Meteorology
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A	N/A	N/A	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol?	N/A	N/A	N/A	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	9/14/2022	9/14/2022	9/14/2022	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N	N	N	N

Site Name	Bakersfield-Airport (Planz)
AQS ID (XX-XXX-XXXX)	06-029-0016
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield
County	Kern
Collecting (Operating) Agency	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	CARB
Reporting Agency	CARB
Site Start Date	2/18/2000
Pollutant Parameters	PM2.5 FRM
Meteorological Parameters	None
Address	401 E. Planz Rd., Bakersfield CA 93307
GPS Coordinates (decimal degrees)	35.3246 N, -118.9976 W
Distance to road	500 m (west)
Traffic Count/Year	14,235 / 2020 (Traffic count for nearest cross street): S. Union Ave between E. Planz Rd and E White Lane Source: Kern Council of Governments 1,334 / 2020 (Traffic count for monitoring station's street address) Source: Kern Council of Governments)
Ground Cover	Paved

Bakersfield-Airport (Planz)	
Pollutant	PM2.5
Parameter code	88101
Spatial scale	N
Site type	HC, PE
Basic monitoring objective(s)	NC, RS
Monitor type	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None
FRM/FEM/ARM/Other	FRM
POC	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	Y
Instrument manufacturer and model	R&P 2025
Analysis method	Gravimetric
Method code	145
Monitoring start date (MM/DD/YYYY)	09/19/2000
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	1:3
Sampling season	01/01 – 12/31
Probe Inlet height above ground (meters)	2.2
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	None
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None
Distance from the drip line of closest tree(s)	None
Distance to furnace or incinerator flue (meters)	None
Distance between collocated monitors (meters)	None
Unrestricted airflow (degrees)	360
Probe material (Teflon, etc.)	N/A
Residence time (seconds)	N/A

Pollutant	PM2.5
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A
Frequency of flow rate verification for manual PM samplers audit	Monthly
Frequency of flow rate verification for automated PM analyzers audit	N/A
Frequency of one-point QC check (gaseous)	N/A
Last Annual Performance Evaluation (gaseous)	N/A
Last two semi-annual flow rate audits for PM monitors	3/24/2022, 9/13/2022
Changes planned within the next 18 months (Y/N)	CARB and District in the process of evaluating siting challenges at this site and reviewing whether the site should remain comparable to the annual PM2.5 NAAQS. Additional information will be made available for public review when available.

Site Name	Edison
AQS ID (XX-XXX-XXXX)	06-029-0007
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield
County	Kern
Collecting (Operating) Agency	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	CARB
Site Start Date	1/1/1980
Pollutant Parameters	Ozone, NO ₂
Meteorological Parameters	Wind speed, wind direction, outside temperature, relative humidity
Address	Johnston Farm, Edison, CA 93320
GPS Coordinates (decimal degrees)	35.34561 N, -118.85183 W
Distance to road	450 m (south)
Traffic Count/Year	2,753/2020 (Traffic count for nearest roads: Edison Hwy. and Comanche Dr., Source: Kern Council of Governments)
Ground Cover	Dirt, vegetative

Edison			
Pollutant	Ozone	NO ₂	Meteorology
Parameter code	44201	42602	Many
Spatial scale	N	N	R
Site type	HC, RT	PE	GB
Monitoring objective	NC, RS, TP	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS	Other
Network affiliation	None	None	None
FRM/FEM/ARM/Other	FEM	FRM	Other
POC	1	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 400	Teledyne API 200E	RM Young 81000, Vaisala HMP 155
Analysis method	UV	CL	Many
Method code	087	099	Many
Monitoring start date (MM/DD/YYYY)	01/01/1981	01/01/1980	01/01/1995
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31	01/01 – 12/31
Probe/Inlet height above ground (meters)	5.4	5.4	10 (OT 2.1 m)
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.5	1.5	None
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None
Distance from the drip line of closest tree(s)	16.1 (11.0 m to dripline)	16.1 (11.0 m to dripline)	18.5
Distance to furnace or incinerator flue (meters)	None	None	None
Distance between collocated monitors (meters)	N/A	N/A	N/A
Unrestricted airflow (degrees)	360	360	360

Pollutant	Ozone	NO ₂	Meteorology
Probe material (Teflon, etc.)	Teflon	Teflon	N/A
Residence time (seconds)	8.5	14.5	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	7.7	7.9	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A
Frequency of one-point QC check (gaseous)	Daily	Daily	N/A
Last Annual Performance Evaluation (gaseous)	8/31/2022	8/31/2022	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N	N

Site Name	Arvin-Di Giorgio
AQS ID (XX-XXX-XXXX)	06-029-5002
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield
County	Kern
Collecting (Operating) Agency	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	CARB
Site Start Date	11/16/2009
Pollutant Parameters	Ozone
Meteorological Parameters	Outdoor temperature, wind speed, wind direction, sonic temperature, relative humidity
Address	19405 Buena Vista Blvd, Arvin CA 93203
GPS Coordinates (decimal degrees)	35.2391 N, -118.7886 W
Distance to road	10 m (east)
Traffic Count/Year	394 / 2020 (Traffic count for Buena Vista Blvd east of Tejon Hwy., Source: Kern Council of Governments.)
Ground Cover	Dirt, vegetative

Arvin-Di Giorgio		
Pollutant	Ozone	Meteorology
Parameter code	44201	Many
Spatial scale	N	R
Site type	HC, PE	GB
Monitor objective	NC, RS, TP	RS, TP
Monitor type	SLAMS	SLAMS (WD, WS), Other (OT, RH)
Network affiliation	PAMS (pending)	PAMS (pending)
FRM/FEM/ARM/Other	FEM	Other
POC	1	2
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A
Instrument manufacturer and model	Teledyne API 400E	RM Young 81000, Vaisala HMP155
Analysis method	UV	Many
Method code	087	Many
Monitoring start date (MM/DD/YYYY)	11/16/2009	11/16/2009, 9/2/2015 (Vaisala)
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	4.4	10
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8	N/A
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None
Distance from the drip line of closest tree(s)	>10	18.5
Distance to furnace or incinerator flue (meters)	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A
Unrestricted airflow (degrees)	360	360
Probe material (Teflon, etc.)	TEFLON	TEFLON
Residence time (seconds)	7.0	N/A

Pollutant	Ozone	Meteorology
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A
Frequency of one-point QC check (gaseous)	Daily	N/A
Last Annual Performance Evaluation (gaseous)	10/18/2022	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A
Changes planned within the next 18 months (Y/N)	Plans are to install a new, permanent monitoring shelter within the next 12 months.	Plans are to install a new, permanent monitoring shelter within the next 12 months.

Site Name	Maricopa
AQS ID (XX-XXX-XXXX)	06-029-0008
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield
County	Kern
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	1/1/1988
Pollutant Parameters	Ozone
Meteorological Parameters	Wind speed, wind direction, outdoor temperature, barometric pressure
Address	755 Stanislaus St., Maricopa, CA 93252
GPS Coordinates (decimal degrees)	35.0515 N, -119.4026 W
Distance to roadways (meters)	500 (northwest)
Traffic Count/Year	491/2021 (Traffic count for nearest roads: Union St. at California St., Source: Kern Council of Governments.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Gravel, dirt, vegetative

Maricopa		
Pollutant	Ozone	Meteorology
Parameter code	44201	Many
Spatial scale	N	N
Site type	HC, RT	GB
Basic monitoring objective(s)	NC, RS, TP	RS, TP
Monitor type	SLAMS	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None
FRM/FEM/ARM/Other	FEM	Other
POC	1	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	N/A	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A
Instrument manufacturer and model	Teledyne API 400E	ITP- Hy-Cal 512AA3B, OT- Met One 060A-2, BP- Met One 092, WD- Met One 020C, WS-Met One 010C
Analysis method	UV	Many
Method code	087	Many
Monitoring start date (MM/DD/YYYY)	07/01/1987	07/01/1987
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 – 12/31	01/01 – 12/31
Probe height (meters)	4.89 m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.89 m	N/A
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from the drip line of closest tree(s)	20.5 m H5.5 m V	20 m
Distance to furnace or incinerator flue (meters)	N/A	N/A

Pollutant	Ozone	Meteorology
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon/Pyrex with Borosilicate	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	7.64	N/A
Frequency of one-point QC check for gaseous instruments	Daily	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	N/A	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	N/A	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	9/1/2022	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A
Changes planned within the next 18 months (Y/N)	N	N

Site Name	Lebec
AQS ID (XX-XXX-XXXX)	06-029-2009
Representative statistical area Name (i.e. MSA, CBSA, other)	Bakersfield
County	Kern
Collecting (Operating) Agency	SJVAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SJVAPCD
Site Start Date	1/1/2009
Pollutant Parameters	PM2.5 Non-FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature,
Address	1277 Beartrap Road, Lebec, CA 93243
GPS Coordinates (decimal degrees)	34.8415N, -118.8610W
Distance to roadways (meters)	300 m (west)
Traffic Count/Year	494/2018 (Traffic count for nearest roads: Lebec Rd near Interstate 5, Source: Kern Council of Governments.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Gravel, vegetative

Lebec		
Pollutant	PM2.5	Meteorology
Parameter code	88502	Many
Spatial scale	N	R
Site type	PE	GB
Basic monitoring objective(s)	TP	RS, TP
Monitor type	SPM	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None
FRM/FEM/ARM/Other	Non-FEM	Other
POC	3	1
Primary / QA Collocated / Other (provide for all PM _{2.5} , PM ₁₀ , PM _{10-2.5} , Pb and NO ₂ monitors. Non-PM, Pb, NO ₂ monitors should be listed as "N/A".)	Primary	Other
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N	N/A
Instrument manufacturer and model	Met One BAM 1020	ITP- Hy-Cal 512AA3B, OT- Met One 060A-2, , WD- Met One 020C, WS-Met One 010C
Analysis method	Beta Attenuation	Many
Method code	731	Many
Monitoring start date (MM/DD/YYYY)	01/27/2009	OT, WS, WD - 12/09/2009;
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly
Sampling season (MM/DD - MM/DD)	01/01 -12/31	01/01 – 12/31
Probe height (meters)	4.67 m	5.0 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.0 m	2.0 m
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	N/A	N/A
Distance from the drip line of closest tree(s)	200 m	200 m
Distance to furnace or incinerator flue (meters)	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A

Pollutant	PM2.5	Meteorology
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	360	360
Probe material for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A
Residence time for reactive gases NO/NO ₂ /NO _y , SO ₂ , O ₃ ; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers (routine checks)	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	Monthly	N/A
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If yes, list distance (meters) and instrument(s).	No	N/A
For high volume PM instrument (flow rate > 200 liters/minute), is any PM instrument within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	4/5/2022, 10/18/2022	N/A
Changes planned within the next 18 months (Y/N)	N	N

APPENDIX C:

EPA Approval Letter for the Relocation of the Stockton-Hazelton Site to the Stockton-University Park Site

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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}, PM₁₀, O₃, NO₂, 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 NO₂ 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 NO₂ 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. NO₂ 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}, PM₁₀, and O₃ 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 Plan¹, 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}, PM₁₀, O₃, NO₂, 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}, PM₁₀, O₃, NO₂, 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,

Yoshimura, Gwen

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Gwen
Date: 2022.07.20 16:01:18 -07'00'

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>

APPENDIX D:

**EPA Approval Letter for the Relocation of the
Visalia-Church St Site to the Visalia-West Ashland Avenue Site**

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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 O₃, PM_{2.5}, PM₁₀, and NO₂ 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 NO₂ 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 NO₂ 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 NO₂ 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 O₃, PM_{2.5}, PM₁₀ 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 O₃, PM_{2.5}, PM₁₀, 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 O₃, PM_{2.5}, PM₁₀ and NO₂ 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 O₃, PM_{2.5}, PM₁₀, and NO₂ 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

Dena Vallano

Manager, Monitoring and Analysis Section
Air and Radiation Division

Digitally signed by
DENA VALLANO
Date: 2023.04.11
12:50:56 -07'00'

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

APPENDIX E:

San Joaquin Valley Air Pollution Control District Notice of Public Comment Period on the 2023 Air Monitoring Network Plan

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**SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT
NOTICE OF PUBLIC COMMENT PERIOD ON THE 2023 AIR MONITORING
NETWORK PLAN**

NOTICE IS HEREBY GIVEN that a 30-day public comment period is being held on the San Joaquin Valley Unified Air Pollution Control District's (District) 2023 Air Monitoring Network Plan. The 2023 Air Monitoring Network Plan provides information regarding air monitoring network activities in the San Joaquin Valley, and any planned changes over the next year.

Interested persons may submit comments to:

Madison Jordan-Perkins
San Joaquin Valley Unified Air Pollution Control District
1990 East Gettysburg Avenue
Fresno, CA 93726
Email: Madison.Perkins@valleyair.org

The public comment period began May 30, 2023 and will end June 30, 2023.

Copies of the Draft 2023 Air Monitoring Network Plan can be obtained by calling (559) 230-6000. You may download a copy of the Draft 2023 Air Monitoring Network Plan from the District's website on or after May 30, 2023, under the Other Notices portion of the Public Notices page:

https://www.valleyair.org/notices/public_notices_idx.htm#Other Notices

For additional information, contact Madison Jordan-Perkins by phone at (559) 230-6000.

**DISTRITO UNIFICADO DE CONTROL DE LA CONTAMINACIÓN
DEL AIRE DEL VALLE DE SAN JOAQUÍN
AVISO DE PERÍODO DE COMENTARIOS PÚBLICOS SOBRE EL PLAN DE LA RED
DE MONITOREO DEL AIRE 2023**

POR EL PRESENTE SE NOTIFICA que se llevará a cabo un período de comentarios públicos de 30 días sobre el Plan de la Red de Monitoreo del Aire 2023 del Distrito de Control de la Contaminación del Aire del Valle de San Joaquín (Distrito). El Plan de la Red de Monitoreo del Aire 2023 proporciona información sobre las actividades de la red de monitoreo del aire en el Valle de San Joaquín y cualquier cambio planificado para el próximo año.

Las personas interesadas pueden enviar comentarios a:

Madison Jordan-Perkins
Distrito Unificado de Control de la Contaminación del Aire del Valle de San Joaquín
1990 East Gettysburg Avenue
Fresno, CA 93726
Correo electrónico: Madison.Perkins@valleyair.org

El período de comentarios públicos comenzará el 30 de mayo de 2023 y se finalizará a el 30 de junio de 2023.

Copias del Borrador del Plan de la Red de Monitoreo del Aire 2023 se pueden obtener llamando al (559) 230-6000. También puede descargar una copia del Borrador del Plan de la Red de Monitoreo del Aire 2023 desde el sitio web del Distrito a partir del 30 de mayo de 2023, en la sección "Avisos Adicionales" de la página de Avisos Públicos:

https://www.valleyair.org/notices/public_notices_idx.htm#Other Notices

Para obtener información adicional, comuníquese con Madison Jordan-Perkins por teléfono al (559) 230-6000.

APPENDIX F:

Comments and Responses

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Appendix F: Comments and Responses

The District received no comments relating to the contents of the 2023 Air Monitoring Network Plan.