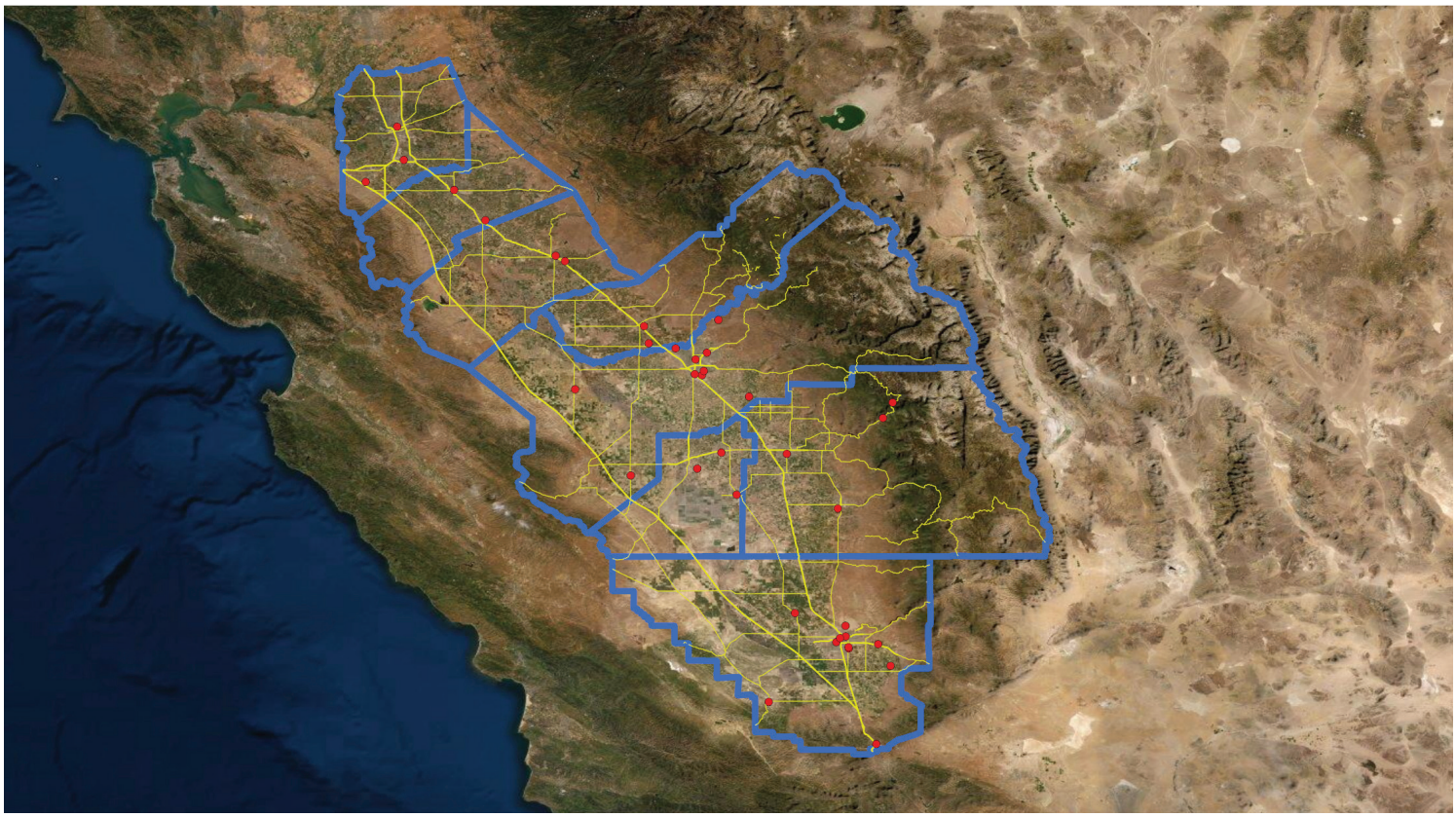
San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

2026 Air Monitoring Network Plan



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2026 Air Monitoring Network Plan

San Joaquin Valley Air Pollution Control District

May 22, 2026

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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) and the EPA AirNow system, 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 EPA AirNow 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 mediums 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 produces declarations for 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.

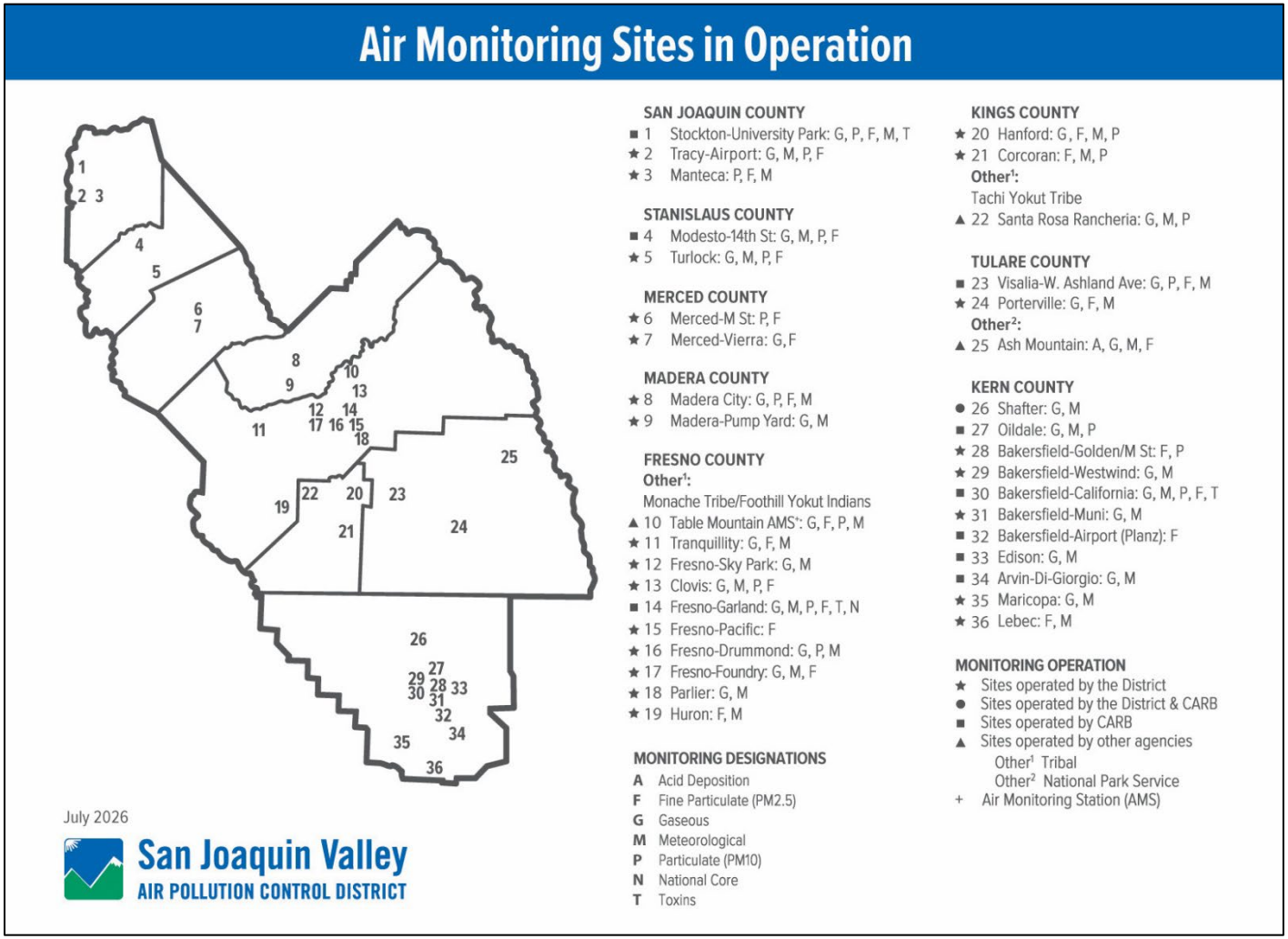
As part of the District's long-term efforts to improve public health, air monitors collect data that is rigorously analyzed by laboratory technicians and District staff. This monitoring data reflects the status of the Valley's air quality and is fundamental to efforts to improve air quality and achieve 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 experiences some of the most challenging air quality issues 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 (NO_2), Sulfur Dioxide (SO_2), 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 PM2.5 NAAQS and the federal 1-hour ozone standard. The Valley is also designated as a maintenance area for the PM10 NAAQS and EPA has finalized an attainment determination for the 1997 annual PM2.5 NAAQS. The Valley is designated as a nonattainment area for the remaining federal PM2.5 standards including the 2006 24-hour NAAQS, and the 2012 annual NAAQS as well as the 1997, 2008 and 2015 federal 8-hour ozone (O_3) standards. No areas have yet been designated under the new 2024 annual PM2.5 NAAQS, as the U.S. EPA's designation process is still underway. 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 these areas 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, including tribal sties, is provided in Figure 1.

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 of the Code of Federal Regulations (CFR), and as a requirement of the Clean Air Act (CAA) section 105 grant the District receives, the District updates the air monitoring network plan annually to report the current state of its air monitoring network and any planned changes to it that may be forthcoming. All monitors in the District's air monitoring network meet the requirements outlined in 40 CFR § 58.10 as well as Appendices A, B, C, D and E of part 58, where applicable. Additionally, this air monitoring network plan provides information on the establishment and maintenance of the various types of air monitoring stations, monitors, and networks currently operating in the District's air monitoring network (see Table 1). The District posts its annual air monitoring network plan for public comment for at least 30 days, and addresses pertinent comments received prior to submitting the plan, along with comments received and the District's responses, to the EPA Regional Administrator.

Table 1 – Types of Stations, Monitors, and Networks in the San Joaquin Valley

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	PM2.5 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 meet 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 – *Included in Table 2 of this document*
    - MSA: Metropolitan statistical area
    - CBSA: Core-based statistical area
    - CSA: Combined statistical area
- Air Quality System (AQS) site identification number – Included in Table 3.
- Population estimate – *Included in Table 4 of this document*
- Location: Street address and geographical coordinates – *Included in Appendices A and B of this document*
- Sampling and analysis methods for each measured parameter – *Included in Appendix B of this document*
- Operating schedules for each monitor – *Included in Appendix B*
- Monitoring objective and spatial scale of representativeness for each monitor – *Included in Appendix B of this document*
- 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 – *Included in Improvements and Planned Changes section of this document*

There are several network plan requirements that pertain specifically to PM2.5 monitoring:

- The air monitoring network plan must identify which sites are suitable and which are not suitable for comparison against the PM2.5 NAAQS as described in 40 CFR Section 58.30. Per 40 CFR part 58 Appendix D, section 4.7.1b, the required PM2.5 monitoring stations must be sited to represent area-wide air quality and will typically be at neighborhood or urban-scale. However, micro-or middle-scale are appropriate for PM2.5 monitoring sites that are located throughout a metropolitan area and considered representative of area-wide air quality.
- The plan must also document how the District provides for public review of changes to the PM2.5 monitoring network when the change impacts the location of a violating PM2.5 monitor, or the creation/change to a community monitoring zone.
- Any public comments received on PM2.5 monitoring changes must be included in the submittal of the air monitoring network plan to the EPA Regional Administrator.

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-Vierra	06-047-2024	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
MSA/CBSA: Bakersfield		
County: Kern (Valley Portion)		
Site Name	**AQS ID**	**Operating Agency**
Shafter	06-029-6001	CARB
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 2025 Population

County		Total County Population*	Major Urban Area Pop > 100,000	Urban Area Pop < 100,000 and > 50,000
San Joaquin		805,856	Stockton	Lodi, Manteca, Tracy
Stanislaus		555,765	Modesto	Turlock
Merced		293,080	—	Merced
Madera		162,599	—	Madera
Fresno		1,037,053	Fresno, Clovis	—
Kings		154,015	—	Hanford
Tulare		487,209	Visalia	Porterville, Tulare
Kern	Valley Portion**	785,367	Bakersfield	Delano
	Entire County	923,961		
San Joaquin Valley Total* **		4,280,944		

* Data from California Department of Finance E-1 Population Estimates for Cities, Counties and the State, January 1, 2024, Released May 1, 2024.

** 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 an 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 are specific to peak and typical pollution levels in populated areas, air pollution transported to and from a city or region, and pollution levels near specific sources. 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 up to several city blocks in sized ranging between about 100 meters to 0.5 kilometers.
- **Neighborhood scale**: An extended area of the city that has relatively uniform land use with dimensions ranging 0.5 to 4.0 kilometers.
- **Urban scale**: 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 pollutant 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 dependent on weather data. Such activities include air quality and smoke management forecasting, Photochemical Assessment Monitoring Stations (PAMS), exceptional events, long-term planning, and air quality trend assessment. Meteorological data also help increase public awareness of air quality and inform strategies 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 2025. Additionally, known or anticipated changes to the network that may be initiated within 18 months 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	NO_2	CO	SO_2	NMH	Speciated VOC	NOy	PM2.5 Speciation	Toxics
Stockton-University Park	✓	✓	✓		✓	✓						✓
Tracy-Airport	✓	✓	✓		✓							
Manteca		✓	✓									
Modesto-14th St	✓	✓	✓			✓					✓	
Turlock	✓	✓	✓		✓							
Merced-M St		✓	✓									
Merced-Vierra	✓	✓										
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	✓	✓										
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-M St	✓	✓	✓			
Merced-Vierra	✓	✓	✓		✓	
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	✓	✓	✓	✓		✓
Shafter	✓	✓	✓	✓	✓	✓
Oildale	✓	✓	✓	✓		
Bakersfield-Golden / M St	✓	✓	✓			
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 (NOx) 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 in the summer months. Winds at ground level or at higher altitudes transport pollutants, including ozone precursors, from other air basins into the Valley, from upwind toward downwind areas within the Valley, and from the Valley into other regions.

As specified in 40 CFR part 58, appendix D, table D-2, ozone minimum monitoring requirements are based on MSA (metropolitan statistical area) population and design values as summarized in Table 7. 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 monitors 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 a result, the ozone monitors in the Valley 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 ≥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	2025 Population	Exceptional Event Impacts Included*		Exceptional Event Impacts Removed*		Number of SLAMS required	SLAMS in MSA
		Max 2024 8-hour Ozone Design Value	≥85% of any Ozone NAAQS	Max 2024 8-hour Ozone Design Value	≥85% of any ozone NAAQS		
Stockton-Lodi MSA							
San Joaquin	805,856	63	Yes	58	Yes	2	2
Modesto MSA							
Stanislaus	555,765	76	Yes	70	Yes	2	2
Merced MSA							
Merced	293,080	75	Yes	70	Yes	1	1
Madera MSA							
Madera	162,599	74	Yes	69	Yes	1	2
Fresno MSA							
Fresno	1,037,053	82	Yes	76	Yes	2	6
Hanford-Corcoran MSA							
Kings	154,015	77	Yes	73	Yes	1	1
Visalia-Porterville MSA							
Tulare	487,209	86	Yes	81	Yes	2	2
Bakersfield MSA							
Kern**	785,367	87	Yes	83	Yes	2	7

* Values shown for each county both including and excluding air quality data that was impacted by wildfire exceptional events.

** Bakersfield MSA population represents only the population within the San Joaquin Valley Air Basin portion of Kern County, based on census tract data. The number of SLAMS required does not change when comparing to the entire Kern County population (see Table 4).

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 (NO_2), oxides of nitrogen (NO_x), and non-methane hydrocarbon (NMH) as well as meteorology. PAMS is only required in the San Joaquin Valley in the Fresno MSA as it is the only area to exceed the 1,0000,000 population threshold. CARB has completed the process of adding a continuous VOC sampler to the Fresno-Garland NCore site alongside a carbonyl sampler that will remain active during the operational months of the PAMS program.

Due to the ozone nonattainment status in the Valley and to enhance research objectives, the District will continue to operate six PAMS enhanced ozone monitoring sites to support the needs for increased understanding of ozone formation in the Fresno and Bakersfield MSAs. There are four classifications of PAMS enhanced ozone monitoring sites in the San Joaquin Valley:

- 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 not required for the San Joaquin Valley and there are no Type 4 sites in the District's PAMS enhanced ozone monitoring networks.

As shown in Table 9, the District's PAMS enhanced ozone monitoring network has a total of six PAMS sites configured as two networks, one for the Fresno MSA and one for the Bakersfield MSA.

Each year, the District's PAMS enhanced ozone monitoring 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". Additional samples are collected on "Episode Days", which are 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) operate on an hourly basis year-round.

Table 9 – San Joaquin Valley PAMS Enhanced Ozone Monitoring Networks

MSA	Site	Site Type
Fresno	Madera-Pump Yard	Type 1: Upwind/Background site
	Clovis-Villa	Type 2: Maximum precursor emissions
	Fresno-Garland	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

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). The purpose of the EMP is to explain how continued measurements of ozone and ozone precursors will assist in understanding the formation of ozone in the area. Only an EMP submitted by CARB will satisfy the requirement and CARB is responsible for submitting the EMP

for the state of California. CARB submitted this documentation to the EPA in June 2025 as part of the CARB 5-Year Monitoring Network Assessment. CARB's Enhanced Monitoring Plan is included as Appendix C to this document.

Nitrogen Dioxide

On April 6, 2018 EPA issued the decision to retain the existing NAAQS for NO2. 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 roadway segments with 250,000 or more AADTT counts. Additionally, for CBSAs with populations of 1,000,000 or more, EPA requires that one PM2.5 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 the two near-road stations is located in the Fresno CBSA and became operational in January 2016. In 2019, ahead if when the Fresno CBSA population reached 1,000,000, the District installed CO and PM2.5 analyzers to meet EPA requirements for near-road air monitoring. Both analyzers became operational in December 2019.

The District's other near-road monitoring station is located in the Bakersfield CBSA. The Bakersfield near-road air monitoring station became operational for NO2 measurements in January 2019. When the area's population approaches 1,000,000, the District will revisit the requirement to install CO and PM2.5 analyzers to meet EPA requirements.

(2) Area-wide NO2 Monitoring Requirement

Although the Valley does not exceed federal or state standards for NO2, NOx reductions contribute to air quality improvement for both ozone and particulate matter (PM). The District and CARB operate an extensive NO2 monitoring network consisting of 17 monitors, including one near-road NO2 monitor in Fresno and a second near-road NO2 monitor in Bakersfield. The District operates 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, there are national requirements that 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, specifically the requirement for area-wide monitoring in areas where concentrations are not exceeding or near the NAAQS and minimum monitoring requirements are not sufficient to meet area-wide objectives. These sites are located in towns with susceptible and vulnerable populations downwind from urban areas.

Carbon Monoxide

On August 12, 2011 the 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 Regional Administrators have authority 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). The District also monitors CO at the Fresno-Foundry near-road site since the Fresno population is greater than 1,000,000.

Sulfur Dioxide

In 2010, EPA strengthened the primary NAAQS for sulfur dioxide (SO2) by establishing a 1-hour standard at a level of 75 ppb, measured as the three year average of the annual 99th percentile of daily maximum 1-hour concentrations (75 FR 35520, June 2, 2010). As part of that action, EPA revoked the previous 24-hour and annual primary SO2 standards. On February 25, 2019, EPA issued a final decision to retain the 75 ppb 1-hour standard without revision (84 FR 9866, March 18, 2019).

The monitoring requirements for SO2 are outlined in 40 CFR Part 58 Appendix D Section 4.4. Under the 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 PWEI values for each Valley county are shown in Table 10.

Table 10 – San Joaquin Valley SO2 PWEI Values for 2025

County	County 2025 Population	SO2 Tons per Year*	PWEI
San Joaquin	805,856	344	277
Stanislaus	555,765	2,069	1,150
Merced	293,080	200	59
Madera	162,599	3,075	500
Fresno	1,037,053	2,689	2,789
Kings	154,015	83	13
Tulare	487,209	2,902	1,414
Kern (whole county)**	923,961	985	910

* Source: EPA National Emissions Inventory (2020 National Emissions Inventory: March 2023 Updated Release) https://www.epa.gov/air-emissions-inventories/2020-nei-supporting-data-and-summaries

** 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 2,789 for Fresno County, which is far below the minimum PWEI value of 5,000 that would require one monitor. As a result, SO2 monitoring is not required for any CBSA in the District. Regardless, there is one SO2 monitor operating within the District's network at the Fresno-Garland site, which meets requirements for the NCore network.

Reactive Nitrogen Compounds (NOy)

Reactive nitrogen compounds (NOy) are important precursors to both ozone and PM2.5 and are measured to support the understanding of atmospheric photochemistry and pollutant formation. As part of EPA's national ambient air monitoring network, NOy monitoring is required at NCore multipollutant monitoring stations in accordance with 40 CFR Part 58 Appendix D. 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 gaseous pollutants monitoring network in the Valley are shown in Table 11, Table 12, Table 23 through Table 28, and Appendix B.

Table 11 – Gaseous Monitoring Methods

Site Name	FRM/FEM/Other				
	Ozone	NO2	CO	NMH	Speciated VOC
Stockton-University Park	FRM	FRM	FEM		
Tracy-Airport	FEM	FEM			
Modesto-14th St	FRM		FEM		
Turlock	FEM	FEM			
Merced-Vierra	FEM				
Madera-City	FEM				
Madera-Pump Yard	FEM	FEM		Other	Other
Tranquillity	FEM				
Fresno-Sky Park	FEM	FEM			
Clovis-Villa	FEM	FEM	FEM	Other	Other
Fresno-Drummond	FEM	FEM			
Fresno-Foundry		FEM	FEM		
Parlier	FEM	FEM		Other	Other
Hanford-Irwin	FEM	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	FEM	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 Monitoring Station 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-Vierra	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 (PM2.5).

To better understand the influence of meteorology, natural events, and sources of emissions on the Valley's PM2.5 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 PM2.5 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 collect 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) can be designated as an FEM or as non-FEM and are continuous, near real-time monitors that provide hourly PM2.5 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. The hourly PM2.5 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, as only those that meet the rigorous engineering design, quality assurance, and quality control standards collect data that are considered suitable for comparison to the NAAQS. Monitors not meeting these requirements are designated as non-FEM. The District operates four PM2.5 monitors as non-FEM SPM sites. These analyzers do not meet all of the

certification requirements to be comparable to the PM2.5 NAAQS. Specifically, EPA requires a runtime of 42 minutes per hour with an eight-minute count, while the non-FEM monitors operate with a runtime of 50 minutes per hour with a four-minute count. Additionally, these instruments use a sharp cut cyclone (SCC) PM2.5 inlet instead of a very sharp cut cyclone (VSCC) PM2.5 inlet used for FEM monitors. 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 supporting District programs. All other required PM2.5 analyzers in the District's network are operated in compliance with 40 CFR part 58 Appendix A and Appendix E and collect data that are comparable to the PM2.5 NAAQS.

The four non-FEM PM2.5 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), as well as reporting to the EPA AirNow system. 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 type, spatial scale, site type, basic monitoring objectives, sampling frequency, and other requirements being met by the District's PM network are shown in Table 19 through Table 29, and in Appendix B.

PM Collocation Requirements

Per 40 CFR 58, Appendix A, Sections 3.2.3 and 3.3.4, particulate matter collocation requirements are met at the Primary Quality Assurance Organization (PQAO) level. CARB is the PQAO for the District, and as such, CARB's Air Monitoring Network Plan[1] contains the details on how collocation requirements are met within the CARB PQAO. Table 21 shows the collocated PM monitors currently operating in the District's monitoring network.

Public Review of Changes to the PM2.5 Monitoring Network

Public input is required whenever the District proposes to move an existing violating PM2.5 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 PM2.5 network. The Plan is posted on the District website, after which the

[1] CARB Annual Monitoring Network Report, Annual Network Plan, https://ww2.arb.ca.gov/our-work/programs/ambient-air-monitoring-regulatory/annual-monitoring-network-report

public is notified of the availability of the document for the 30-day review. In the event of unanticipated changes to the PM2.5 network at violating sites 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 $\mu g/m^3$). 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.

As part of the *2024 PM2.5 NAAQS* update, EPA modified PM10 monitoring requirements to a site specific, combined site data record. A combined site data record requires one monitor to be designated as a "Primary Monitor". A "Primary Monitor", according to 40 CFR Part 58.1, is "the monitor identified by the monitoring organization that provides concentration data used for comparison to the NAAQS." District primary monitor designations for PM10 sites are reflected in Appendix B.

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 maximum 24-hour PM10 concentration for a three year period. Valley maximum PM10 concentrations in 2023-2025 were influenced by high wind blowing dust events, particularly in 2024 and 2025. Table 14 and Table 15 show the highest measured 24-hour PM10 concentrations in each MSA by site. PM10 maximum concentrations are shown both including data impacted by potential exceptional events and excluding data that was impacted by potential 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 $\mu g/m^3$	Medium concentration ≥ 120 $\mu g/m^3$	Low concentration < 120 $\mu g/m^3$
>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	2025 Population	Event Impacts Included*		Event Impacts Removed*		Number of SLAMS in MSA
		2023-2025 Max 24-hour Concentration **	Number of SLAMS required	2023-2025 Max 24-hour Concentration **	Number of SLAMS required	
Stockton-Lodi MSA						
San Joaquin	805,856	190	4-8	100	1-2	3
Modesto MSA						
Stanislaus	555,765	130	2-4	110	1-2	2
Merced MSA						
Merced	293,080	110	0-1	110	0-1	1
Madera MSA						
Madera	162,599	150	0-1	140	0-1	1
Fresno MSA						
Fresno	1,037,053	180	4-8	110	2-4	3
Hanford-Corcoran MSA						
Kings	154,015	190	1-2	120	0-1	2
Visalia-Porterville MSA						
Tulare	487,209	170	1-2	110	0-1	1
Bakersfield MSA						
Kern***	773,755	350	4-8	130	2-4	3

* Values shown for each area both including and excluding air quality data that was impacted by potential exceptional events.

** Values are rounded to the nearest 10 $\mu g/m^3$ following conventions for comparison of PM10 values to the NAAQS from 40 CFR Part 50, Appendix K

*** Bakersfield MSA population represents only the population within the San Joaquin Valley Air Basin portion of Kern County, based on census tract data. The number of SLAMS required does not change when comparing to the entire Kern County population (see Table 4).

Table 15 – Highest 24-Hour PM10 Concentrations (by Site)

Site Name	2023-2025 Highest Concentration*	
	Exceptional Event Impacts Included**	Exceptional Event Impacts Removed**
Stockton-Lodi MSA		
Stockton-University Park	80	80
Tracy-Airport	90	70
Manteca	190	100
Modesto MSA		
Modesto-14th St	100	90
Turlock	130	110
Merced MSA		
Merced-M St	110	110
Madera MSA		
Madera-City	150	140
Fresno MSA		
Clovis-Villa	120	110
Fresno-Garland	130	110
Fresno-Drummond	180	110
Hanford-Corcoran MSA		
Hanford-Irwin	170	120
Corcoran-Patterson	190	120
Visalia-Porterville MSA		
Visalia-W. Ashland Ave	170	110
Bakersfield MSA		
Oildale	350	130
Bakersfield-Golden/M St	280	130
Bakersfield-California	350	110

* Values are rounded to the nearest 10 µg/m^3 following conventions for comparison of PM10 values to the NAAQS from 40 CFR Part 50, Appendix K

** Values shown for each MSA both including and excluding air quality data that was impacted by potential exceptional events.

PM2.5 Monitoring Requirements

The Environmental Protection Agency has determined that the Valley has attained the 1997 24-hour PM2.5 NAAQS (65 µg/m³) and the 1997 annual PM2.5 NAAQS (15 µg/m³). The Valley is designated as a nonattainment area for the remaining federal PM2.5 standards including the 2006 24-hour NAAQS (35 µg/m^3), and the 2012 annual NAAQS (12 µg/m^3). On February 6, 2024, EPA revised the primary annual PM2.5 standard, strengthening it from 12.0 micrograms per cubic meter (µg/m^3) to 9.0 µg/m^3. The EPA area designations process is not yet complete.

Per requirements in section 4.7.1 of Appendix D to part 58, the minimum number of PM2.5 sites required in an MSA is based on MSA population and observed PM2.5 concentrations. The requirements from Table D-5 in section 4.7.1 of appendix D to part 58 are shown below in Table 16. Section 4.7.2 of appendix D to part 58 requires that continuous PM2.5 monitors be at least one-half the minimum required monitors. Table 17 shows that the District's PM2.5 monitoring network meets or exceeds minimum

PM2.5 monitoring requirements as well as requirements for continuous PM2.5 monitoring in the San Joaquin Valley. Additionally, the 2023-2025 24-hour and annual PM2.5 design values for each site in the District's PM2.5 network are provided in Table 18 below.

Table 16 – Minimum PM2.5 Network Requirements

MSA population	3-year design value % of the 24-Hour or Annual PM2.5 NAAQS*	
	≥85% NAAQS (24-Hour: ≥29.8 µg/m^3 Annual: ≥7.7 µg/m^3)	<85% NAAQS (24-Hour: <29.8 µg/m^3 Annual: <7.7 µg/m^3)
>1,000,000	3	2
500,000 - 1,000,000	2	1
50,000 - <500,000	1	0

* 24-hour PM2.5 NAAQS is 35 µg/m^3. Annual PM2.5 NAAQS is 9 µg/m^3.

Table 17 – PM2.5 Monitoring Requirements for the Valley

County	2025 Population	Max 2025 24-hr DV	Max 2025 Annual DV	SLAMS required	SLAMS in MSA	Number of Continuous PM2.5 Monitors*
Stockton-Lodi						
San Joaquin	805,856	30	9.9	2	2	3
Modesto						
Stanislaus	555,765	31	9.4	2	2	2
Merced						
Merced	293,080	28	8.4	1	2	2
Madera						
Madera	162,599	28	9.4	1	1	1
Fresno						
Fresno	1,037,053	38	12.5	3	5	6
Hanford-Corcoran						
Kings	154,015	35	11.8	1	2	2
Visalia- Porterville						
Tulare	487,209	35	12.0	1	1	3
Bakersfield						
Kern**	785,367	42	13.7	2	3	3

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

** Bakersfield MSA population represents only the population within the San Joaquin Valley Air Basin portion of Kern County, based on census tract data. The number of SLAMS required does not change when comparing to the entire Kern County population (see Table 4).

Table 18 – 24-Hour and Annual PM2.5 Maximum Design Values

Site Name	Exceptional Events Included*		Exceptional Events Excluded*		Exceptional Events Included*	
	2025 24-Hour DV	2025 Annual DV	2025 24-Hour DV	2025 Annual DV	Max Site in MSA	
					24-Hour	Annual
Stockton-Lodi MSA						
Stockton-University Park	30	9.9	23	8.6	✓	✓
Manteca	28	7.8	23	7.1		
Modesto MSA						
Modesto-14th St	31	9.4	27	8.2	✓	✓
Turlock	29	9.2	22	7.8		
Merced MSA						
Merced-M St	28	8.4	24	7.4	✓	✓
Merced-Vierra	27	7.7	24	7.5		
Madera MSA						
Madera-City	28	9.4	26	8.6	✓	✓
Fresno MSA						
Tranquility	18	5.9	13	5.7		
Clovis-Villa	27	9.2	24	7.9		
Fresno-Garland	32	10.4	31	10.1		
Fresno-Pacific	38	12.1	36	10.3	✓	
Fresno-Foundry	34	12.5	31	10.9		✓
Hanford-Corcoran MSA						
Hanford-Irwin	35	11.8	34	9.9	✓	✓
Corcoran-Patterson	29	10.3	27	10.0		
Visalia-Porterville MSA						
Visalia-W. Ashland Ave	35	12.0	33	10.7	✓	✓
Bakersfield MSA						
Bakersfield-Golden/M St	42	13.4	39	12.9	✓	
Bakersfield-California	41	12.2	36	11.2		
Bakersfield-Airport (Planz)	41	13.7	38	12.3		✓

* 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.

In addition to setting the annual PM2.5 standard to 9.0 µg/m^3, on February 6, 2024 the EPA finalized modifications to the PM2.5 network design criteria to include an EJ factor to address at-risk communities. While this modification to the PM2.5 network design requires new and replacement sites to be located in at-risk communities whose air quality is potentially affected by local sources of concern, such sites must still meet the requirement for being considered ‘‘area-wide’’ air quality.

Specifically, the requirement in Appendix D of 40 CFR Part 58 section 4.7.1(b)(3) provides that, for areas with additional required SLAMS, a monitoring station is to be sited in an at-risk community with poor air quality, particularly where there are anticipated effects from sources in the area. The District’s PM2.5 monitoring network meets minimum monitoring requirements, as shown in Table 17 above, and as such there are no areas with additional required SLAMS. The District will incorporate all EPA requirements, including the new EJ requirements, into any future changes to the

District's PM2.5 air monitoring network and any PM2.5 monitoring network changes will be reflected in future SJV air monitoring network plans.

Table 19 and Table 20 show the monitoring methods, monitor types, and collocated monitors operating in the District's PM monitoring network.

Table 19 – PM Monitoring Methods

Site Name*	FRM/FEM/Non-FEM/Other			Valid PM2.5 Design Value?		QA Collocated
	PM10 (cont.)	PM2.5 (man.)	PM2.5 (cont.)	24-Hour NAAQS	Annual NAAQS	PM2.5 (man.)
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-Vierra			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	Yes	
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	FRM	Non-FEM	Yes	Yes	FRM
Bakersfield-Airport (Planz)		FRM		Yes	Yes	
Lebec			Non-FEM	No	No	

cont. – Continuous man. – Manual

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

Table 20 – PM Monitoring Station Type

Site Name*	Monitor Type			QA Collocated
	PM2.5 (man.)	PM2.5 (cont.)	PM10 (cont.)	PM2.5 (man.)
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-Vierra		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
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.

Table 21 – QA Collocated PM2.5 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	N	NC,RS	1:3
Bakersfield-California	PM2.5 (man.)	SLAMS	FRM	HC, PE	N	NC, RS	1:12

man. – Manual PE – Population Exposure HC – Highest Concentration N – Neighborhood
RS – Research NC – NAAQS Comparison 1:3 = One sample per 3 days 1:12 = One sample per 12 days

PM2.5 Chemical Speciation Site Requirements

The PM2.5 Chemical Speciation Network (CSN) includes the Speciation Trends Network (STN) sites and supplemental sites. Per section 4.7.4 of appendix D of 40 CFR part 58, PM2.5 chemical speciation monitoring and analyses are required at sites designated to be part of the PM2.5 STN. The selection of and modifications to PM2.5 chemical speciation sites (including monitoring methods and sampling schedules) in the STN must be approved by the EPA Administrator. These sites monitor mass concentrations and constituents of PM2.5, including trace elements, ions (such as sulfate, nitrate, sodium, potassium, and ammonium), elemental carbon, and organic carbon.

CSN data are not used for attainment or nonattainment decisions, but are intended to complement the activities of the larger PM2.5 measurement network. Speciation data can be used to support a variety of efforts including:

- Assessing trends;
- Developing State Implementation Plans (SIPs);
- The development of emission control strategies and tracking progress of control programs;
- Aiding the interpretation of health studies by linking health effects to PM2.5 constituents; and
- Characterizing annual and seasonal spatial variation of aerosols.

Under the Clean Air Act, Congress recognized that visibility is a resource to be valued and preserved now and for future generations, and set forth a national goal that calls for "the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I federal areas which impairment results from manmade air pollution." The Regional Haze Rule (RHR) expanded this mandate by requiring monitoring in locations representative of the 156 visibility-protected federal Class I areas. The Interagency Monitoring of Protected Visual Environments (IMPROVE) network was designated as the visibility monitoring network to be used to carry out this responsibility.[2]

There are seven PM2.5 speciation monitors operating in the District's network. Per the requirements referenced above, six of the monitors meet the CSN requirement, two of which are supplemental monitors. Four of the monitors also meet the STN requirement. One of the monitors serves as part of the IMPROVE network. Details on these PM2.5 speciation monitors are shown in Table 22, and Appendix B.

[2] IMPROVE Program, https://vista.cira.colostate.edu/Improve/improve-program/

Table 22 – PM2.5 Speciation Monitors

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

CSN – Chemical Speciation Network STN – Speciation Trends Network
IMPROVE – Interagency Monitoring of PROtected Visual Environments
PE – Population Exposure N – Neighborhood U – Urban RS – Research TP – Timely/Public
1:3 = One sample per 3 days 1:6 = One sample per 6 days
*PM2.5 Speciation monitor information for the Fresno-Garland NCore site is also provided in Table 23.

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 part 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 PM2.5, speciated PM2.5, 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 SO_2, trace level NOy, and continuous PM10 and 2.5 paired monitors at this site. A gas dilution calibrator, a zero air generator, and digital data loggers capable of ingesting minute data 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	
NO2	SLAMS	FRM	PE	U	NC,RS	Hourly	
CO	SLAMS	FRM	PE	N	NC,RS	Hourly	
SO2	SLAMS	FEM	PE	U	NC,RS	Hourly	
NOy	SLAMS	Other	PE	U	NC,RS	Hourly	
Toxics	SLAMS	Other	PE	N	RS,TP	Hourly	
PM2.5 (man.)	SLAMS	FRM	PE	N	NC,RS	1:3	✓
PM2.5 (cont.)	SLAMS	FEM	PE	N	NC,RS	Hourly	
PM2.5 Speciation (CSN, STN)	SLAMS	SLAMS	PE	N,U	RS	1:3	
	SLAMS	SLAMS	PE	N,U	RS	1:3	
PM2.5 Speciation (IMPROVE)	SLAMS	SLAMS	GB	N,U	RS	1:3	
PM10 STP (cont.)	SLAMS	FEM	PE	N	NC,RS,TP	Hourly	
PM10-2.5 (cont.)	SLAMS	Other	GB	N	NC,RS	Hourly	

cont. – Continuous man. – Manual PE – Population Exposure N – Neighborhood U – Urban
RS – Research Max PEI – Max Precursor Emissions Impact NC – NAAQS Comparison
TP – Timely/Public STP – Standard Temperature and Pressure 1:3 = One sample per 3 days
Hourly = One sample every hour CSN – Chemical Speciation Network STN – Speciation Trends Network
IMPROVE -- Interagency Monitoring of PROtected Visual Environments

Non-EPA Federal Monitors

Non-EPA Federal Monitors are operated by a federal agency other than EPA. Within the District's air monitoring network, non-EPA federal monitors are located in Sequoia and Kings Canyon National Parks 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.

As of December 2020, the PM2.5 monitor at Ash Mountain has been operating as an FEM and is collecting PM2.5 air quality data under AQS parameter code 88101. This was a change from the previous non-FEM configuration and parameter code 88502. The PM2.5 FEM monitor at Ash Mountain continues to operate as a non-EPA federal special purpose monitor (SPM). Although NPS has been operating the PM2.5 monitor as an FEM, the data has not been certified annually and thus does not meet requirements for comparability to the PM2.5 NAAQS. Details on the non-EPA federal monitors are provided 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	WRI, GB	FEM	R	CASTNET	NC, RS, TP	Hourly
PM2.5 (continuous)	HC	FEM	R	None	RS, TP	Hourly
Meteorology	GB	Other	R	None	RS, TP	Hourly

HC – High Concentration RT – Regional Transport WRI – Welfare Related Impacts GB – General Background
R – Regional NC – NAAQS Comparison RS – Research TP – Timely/Public Hourly = One sample every hour

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 Table 25 through Table 29 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 (cont.)	NO2	CO	NMH
Stockton-University Park	PE		HC, PE	HC	PE	PE	
Tracy-Airport	RT			PE	PE		
Manteca			HC	HC			
Modesto-14th St	GB		PE	PE		PE	
Turlock	PE		PE	PE	PE		
Merced-M St			PE	PE			
Merced-Vierra	PE, HC		PE				
Madera-City	PE		PE	PE			
Madera-Pump Yard	GB				GB		GB
Tranquillity	PE		GB				
Fresno-Sky Park	PE				PE		
Clovis-Villa	HC		HC	HC	HC	PE	HC
Fresno-Pacific			PE				
Fresno-Drummond	PE			PE	HC		
Fresno-Foundry			HC		HC	HC	
Parlier	PE				PE		PE
Hanford-Irwin	PE		PE	PE	PE		
Corcoran-Patterson			PE	HC			
Visalia-W. Ashland Ave	PE		HC, PE	PE	PE		
Porterville	PE						
Shafter	GB, PE				PE		PE
Oildale	HC			SO			
Bakersfield-Golden / M St			PE	PE			
Bakersfield-Westwind					HC		
Bakersfield-California	GB, PE	PE, HC	PE	PE	PE		
Bakersfield-Muni	PE				PE	PE	PE
Bakersfield-Airport (Planz)		PE					
Edison	HC				PE		
Arvin-Di Giorgio	PE						
Maricopa	RT						

cont. – Continuous man. – Manual PE – Population Exposure HC – Highest Concentration
RT – Regional Transport GB – General/Background SO – Source impact
* Site Type information for the QA Collocated sites is provided in 21.
* 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 (cont.)	NO2	CO	NMH
Stockton-University Park	N		N	N	N	N	
Tracy-Airport	R			N	N		
Manteca			N	N			
Modesto-14th St	N		N	N		N	
Turlock	N		N	N	N		
Merced-M St			N	N			
Merced-Vierra	N		N				
Madera-City	N		N	N			
Madera-Pump Yard	U				U		U
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	U				U		U
Hanford-Irwin	N		N	N	N		
Corcoran-Patterson			N	N			
Visalia-W. Ashland Ave	N		N	N	N		
Porterville	N						
Shafter	N			N	N		N
Oildale	U			MD			
Bakersfield-Golden / M St			N	N			
Bakersfield-Westwind					MC		
Bakersfield-California	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 211.
* 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 (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-Vierra	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	NC, RS, TP			
Bakersfield-Westwind					NC, RS, TP		
Bakersfield-California	NC, RS, TP	NC, RS	RS, TP	NC, RS, TP	NC, RS, TP		
Bakersfield-Muni	NC,RS,TP				NC, RS, TP	NC,RS, TP	RS
Bakersfield-Airport (Planz)		NC, RS					
Edison	NC,RS,TP				NC, RS,TP		
Arvin-Di Giorgio	NC,RS,TP						
Bakersfield-Airport (Planz)		NC, RS					

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 211.

* 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 (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-Vierra	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			
Bakersfield-Golden / M St			Hourly	Hourly			
Bakersfield-Westwind					Hourly		
Bakersfield-California	Hourly	1:1	Hourly	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 = One sample in 3 days 1:6 = One sample in 6 days
* Current Sampling Frequency information for the QA Collocated sites is provided in Table 211.
* 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 2025 and 2026 to-date, along with planned changes to the District's air monitoring network are discussed below and provided in Table 30.

Meteorology Wind Parameters - District-operated Sites

The District completed the removal of cup anemometers that measure wind speed and wind direction from District-operated sites in 2025 and replaced them with sonic anemometers for measuring wind parameters using ultrasonic soundwaves.

Site Evaluations and Siting Criteria Reviews

The District is conducting evaluations of several monitoring sites to ensure that site configurations, spatial scale designations, and monitoring objectives documented in this Plan are consistent with applicable siting criteria under 40 CFR Part 58 Appendix D and Appendix E. These evaluations include review of roadway proximity, spatial representativeness, probe placement relative to nearby obstructions, and data comparability with neighboring sites. Where applicable, the District is coordinating with CARB and NPS monitoring teams to assess sites operated by those agencies within the District's monitoring network.

The following sites are currently under evaluation:

- Roadway proximity is being reviewed at Manteca (AQS ID: 06-077-2010), Modesto-14th St. (AQS ID: 06-099-0005), Fresno-Sierra Sky Park (AQS ID: 06-019-0242), and Bakersfield-Golden/M St. (AQS ID: 06-029-0010)
- Spatial scale designations are being reviewed at Fresno-Garland (AQS ID: 06-019-0011), Shafter (AQS ID: 06-029-6001), Maricopa (AQS ID: 06-029-0008), Bakersfield-Golden, and Bakersfield-California (AQS ID: 06-029-0014).
- Probe placement relative to the 10-meter dripline requirement is being assessed at Fresno-Garland (AQS ID: 06-019-0011) and Bakersfield-California.

Any site modifications, reclassifications, or documentation updates resulting from these evaluations will be reflected in future annual Monitoring Network Plans.

Stockton-University and Modesto-14th Street

CARB discontinued CO monitoring as of December 31, 2025.

Turlock

The District will continue to evaluate the potential to replace the current ozone FEM instrument with a Teledyne API Model 265 instrument.

Merced-Vierra

The District relocated air monitoring operations from the former Merced-Coffee site (AQS ID 06-047-0003) to the Merced-Vierra site (AQS ID 06-047-2024) following a lease termination at the previous location. PM2.5 and ozone monitoring are operational at Merced-Vierra, and EPA approved the relocation of SLAMS monitors to the new site in July 2024. Meteorological monitoring began on June 21, 2025, and the ozone analyzer transitioned from method code 087 to 199 on July 3, 2025. Following completion of the permanent site transition, NO/NOx/NO2 monitoring will open in AQS starting 1/1/2026.

Fresno-Sierra Sky Park

Vegetation growth to the south, southwest, and the southeast of the site has obstructed wind flow resulting in the site not meeting SLAMS siting requirements. As such, the District applies the SX qualifier code to gaseous data in the EPA AQS database to flag the siting issue. In 2022, the District cleared vegetation obstruction; however, it is a challenge to maintain the vegetation growth throughout the year, maintaining the reduction adequate to also satisfy the property owner and demonstrate criteria compliance annually. At this time District staff will continue with flagging data with “SX” for all criteria pollutants. The District is considering all options on how to meet all siting criteria for this monitoring location.

Fresno-Garland

CARB has successfully implemented PAMS monitoring at the Fresno-Garland NCore site through working with the U.S. EPA PAMS working group, Office of Air Quality Planning and Standards (Air Quality Assessment Division-EPA), and Region IX. CARB has implemented a continuous AutoGC VOC sampler, a true NO2 analyzer, and a carbonyl sampler that will remain active during PAMS season. CARB also implemented meteorological monitors at the site such as a UV radiation device, a mixing layer height ceilometer, a rain gauge, and a barometer.

The CO monitor at Fresno-Garland was documented as operating at an urban spatial scale of representativeness. Urban scale is not an applicable spatial scale designation

for CO monitoring under Appendix D of 40 CFR Part 58. The District will update the spatial scale designation for this monitor to Neighborhood in this network plan and will work with CARB to complete the update in the AQS site metadata.

Bakersfield-Airport (Planz)

CARB continues to evaluate options for relocating the PM2.5 monitor at the Bakersfield-Planz site due to site safety concerns at the current location. CARB's process includes opportunities for public review and comment. Separately, CARB and the District have identified concerns regarding the spatial scale of representativeness of PM2.5 monitoring at the current Planz location, including influences from nearby airport operations. The evaluation of the appropriate spatial scale designation for this site will be informed by the outcome of CARB's relocation process . Any changes to the monitoring network or site classifications will be reflected in future Air Monitoring Network Plans.

Bakersfield-Golden

In response to comments from EPA on the District's 2025 Annual Network Plan regarding roadway distance and traffic counts at the Golden monitoring site, the District is reviewing the spatial scale designation for the Golden PM2.5 monitor. In addition, comparisons of PM2.5 data with nearby monitoring sites indicate that concentrations at Golden are influenced by localized sources associated with the site's proximity to roadways, a freight rail line, and surrounding industrial land use activities. Based on this review, the District is evaluating redesignation of the Golden PM2.5 monitor from neighborhood scale to microscale under 40 CFR Part 58, Appendix E Section 2.5. This redesignation would more accurately reflect the spatial representativeness of the site and would not affect the region's ability to evaluate compliance with the PM2.5 NAAQS, as adequate neighborhood-scale monitoring coverage is maintained within the Bakersfield CBSA.

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	None; CARB discontinued CO monitoring 12/31/2025
Tracy-Airport	SJVAPCD	None
Manteca	SJVAPCD	Review roadway proximity and address siting criteria.
CBSA: Modesto	**County: Stanislaus**	
Site Name	**Operating Agency**	**Planned Changes**
Modesto-14th St	CARB	Review roadway proximity and address siting criteria; CARB discontinued CO monitoring 12/31/2025.
Turlock	SJVAPCD	Potential to replace the ozone analyzer with Teledyne API Model T265
CBSA: Merced	**County: Merced**	
Site Name	**Operating Agency**	**Planned Changes**
Merced-M St	SJVAPCD	None
Merced-Coffee / Vierra	SJVAPCD	Relocation of the meteorological parameters was completed in 2025. NO,NOx,NO2 parameters will become active in 2026.
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**
Fresno-Sky Park	SJVAPCD	Continuation of qualifier code on site gaseous data for siting criteria due to vegetative maintenance issues.

Table 30 – Summary of Proposed Changes to the Air Monitoring Network (cont'd)

Clovis-Villa	SJVAPCD	None
Fresno-Garland	CARB	PAMS monitoring successfully implemented and currently active. Review dripline distance requirements. Coordinate with CARB on CO scaling changes in AQS.
Fresno-Pacific	SJVAPCD	None
Fresno-Drummond	SJVAPCD	None
Fresno-Foundry (near-road)	SJVAPCD	None
Parlier	SJVAPCD	None
Tranquillity	SJVAPCD	None
Huron	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 Ave.	CARB	None
Porterville	SJVAPCD	None
CBSA: Bakersfield	**County: Kern (Valley Portion Only)**	
Site Name	**Operating Agency**	**Planned Changes**
Shafter	Shared	Review spatial scale and siting criteria.
Oildale	CARB	None
Bakersfield-Golden/M St.	SJVAPCD	Evaluate land use characteristics and nearby emissions sources to identify appropriate spatial scale of representativeness.
Bakersfield-Westwind (near-road)	SJVAPCD	None
Bakersfield-California	CARB	Review spatial scale and siting criteria. Review dripline distance requirements.
Bakersfield-Muni	SJVAPCD	None
Bakersfield-Airport (Planz)	CARB	CARB ongoing effort for relocating the PM2.5 monitor are in process, with public opportunities for review and comment. See CARB network plan for additional details.
Edison	CARB	None
Arvin-Di Giorgio	CARB	None
Maricopa	SJVAPCD	Review spatial scale and siting criteria.
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 2025 data on April 29, 2026. CARB is responsible for certifying data from all CARB-operated air monitoring sites. CARB certified its 2025 data on May 7, 2026. For information on CARB's data certification, see CARB's air monitoring network plan.[3]

[3] CARB air monitoring network plan webpage: http://www.arb.ca.gov/aqd/amnr/amnr.htm

ACRONYMS AND ABBREVIATIONS

AQI: Air Quality Index
AQS: EPA's 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
EJ: Environmental Justice
EPA: U.S. Environmental Protection Agency
FEM: Federal Equivalent Method
FRM: Federal Reference Method
MSA: Metropolitan statistical area
NAAQS: National Ambient Air Quality Standard
NCore: National Core
NMH: Non-Methane Hydrocarbons
NO: Nitrogen Oxide
NO_2: Nitrogen Dioxide
NOx: Oxides of Nitrogen
NOy: Reactive Nitrogen
NPS: National Park Service
O_3: Ozone
PAMS: Photochemical Assessment Monitoring Station
PM: Particulate Matter
PM2.5: Particulate Matter 2.5 microns or less in diameter
PM10: 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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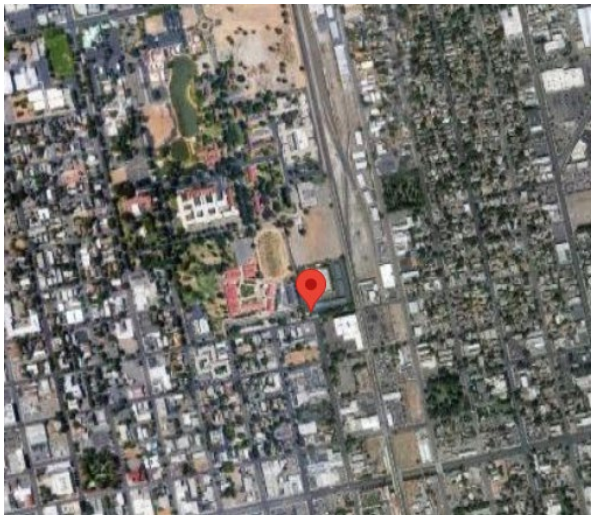
Stockton-University Park

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, PM2.5, and PM10 in an urban area. The site also monitors CO, NO2, toxics, and meteorology. CO monitoring was discontinued in December 2025 due to EPA action on CARB's 2024 CO SIP revision.

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):	3,600; 2020
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Stockton-Lodi

Traffic count for nearest cross road: Park St
Source: Traffic count estimated by City of Stockton Public Works Traffic Engineering Division



Manteca

The Manteca monitoring site is located in Manteca, CA and operated by the San Joaquin Valley Air Pollution Control District (District). It became operational in November 2010. The purpose of the site is to monitor representative concentrations of PM2.5 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

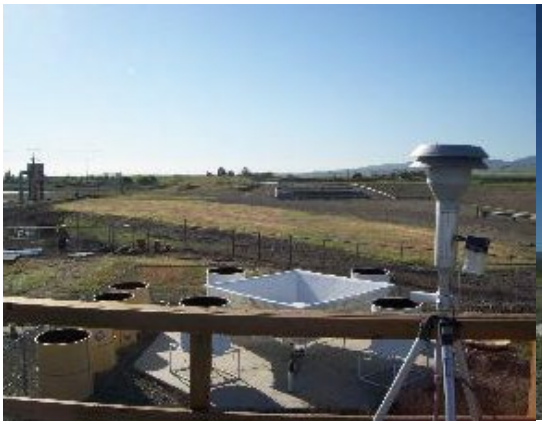
*Traffic count for nearest roads: Airport Way between Lathrop Rd and Hwy 120.
Source: San Joaquin Council of Governments, 2020 Monitoring and Conformance Report

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, PM2.5, 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

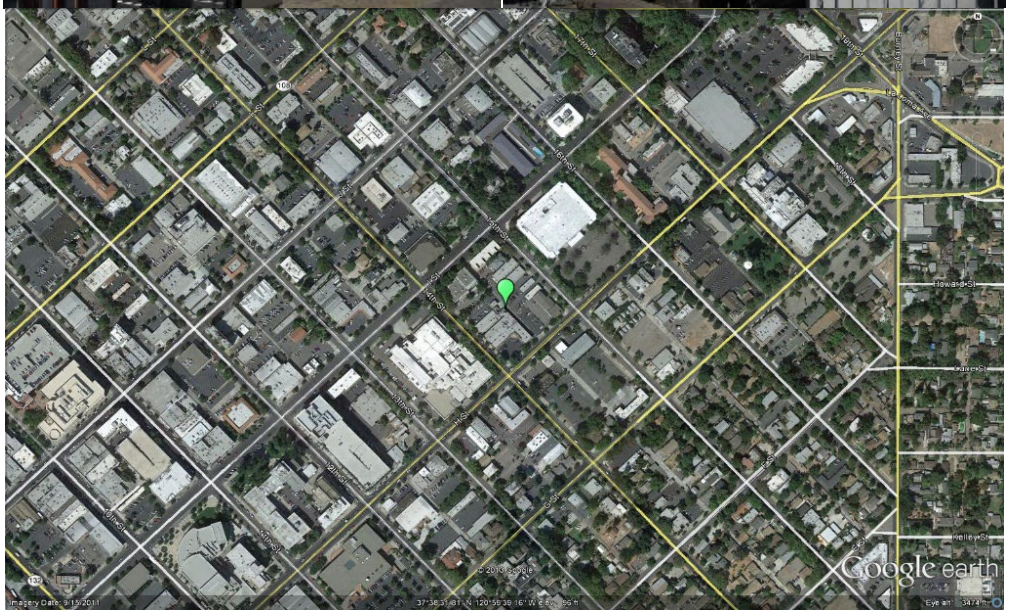


Modesto-14th St

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, PM2.5, and PM10 in local and upwind urban areas. The site also monitors CO, PM2.5 Speciation, and meteorology. CO monitoring was discontinued in December 2025 due to EPA action on CARB's 2024 CO SIP revision.

Site name:	Modesto-14th 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):	10,000; 2023
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Modesto

* Traffic count for nearest roads: estimated from Caltrans AADT GIS data for SR-108/132 near site

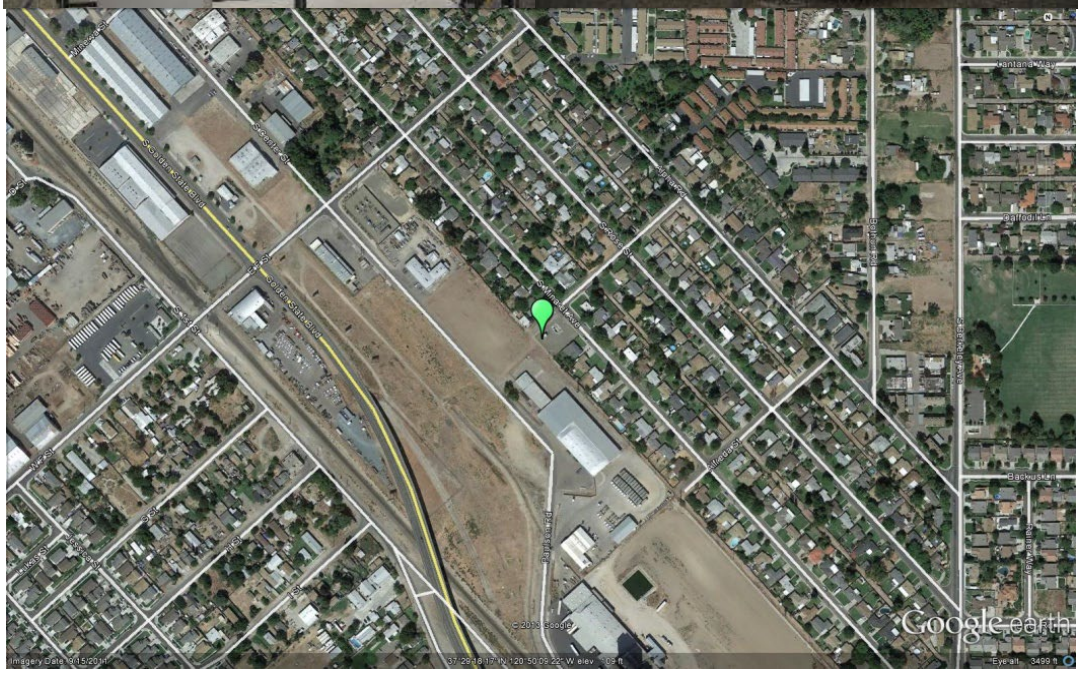


Turlock

The Turlock monitoring site is operated by the District and is located in Turlock, CA. It began operating in April 1992. The purpose of the site is to monitor representative concentrations of ozone, PM2.5, 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 District and is located in Merced, CA. It began operating in April 1999. The purpose of the site is to monitor representative concentrations of PM2.5 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; 2023*
Ground Cover:	Paved, gravel
Representative Statistical Area (CBSA):	Merced

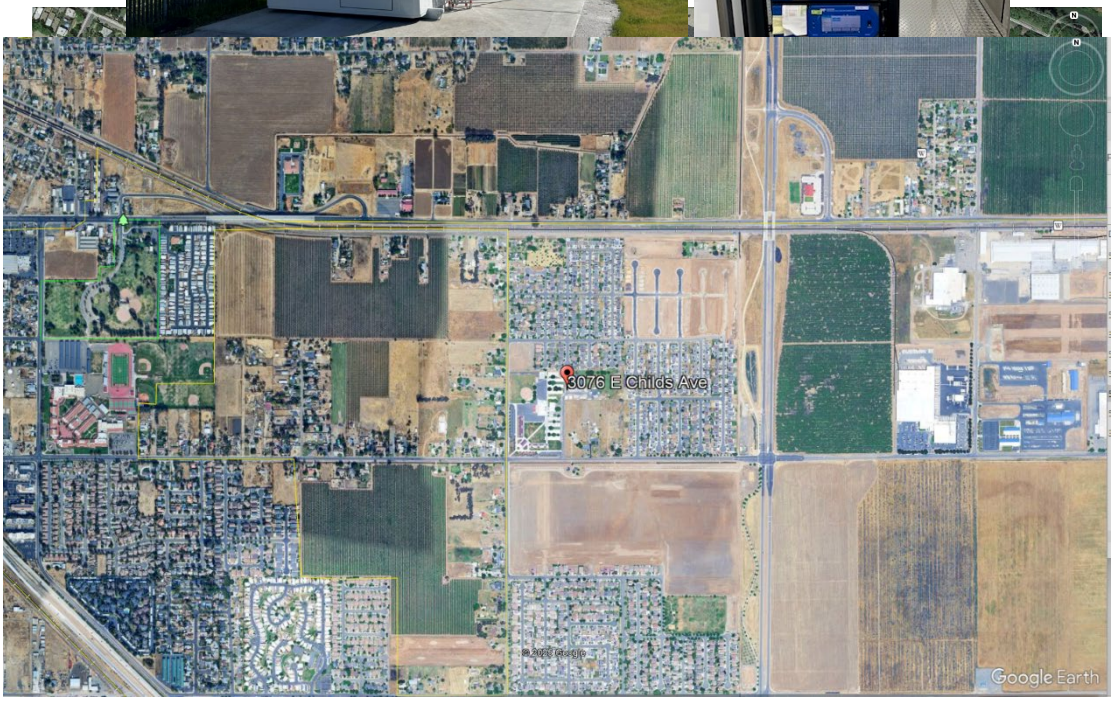
*Traffic count for nearest roads: R St / CA Route 99. Source: Caltrans 2023 AADT

Merced-Vierra

The Merced-Vierra monitoring site is operated by the District and is located in the Merced, CA. It began operating in January 2024. The purpose of the site is to monitor representative concentrations of ozone and PM2.5 responses from upwind urban areas. The District plans to add NO2 and meteorological parameters to the site in the future.

Site name:	Merced-Vierra
AQS ID:	06-047-2024
County:	Merced
Street Address:	3076 E. Childs Ave., Merced, CA 95341
Geographic Coordinates:	37.289732 N, -120.42971 W
Distance to road (meters):	223 m (S)
Traffic Count (AAD; Year):	42,500; 2023*
Ground Cover:	Vegetative, dirt and gravel
Representative Statistical Area (CBSA):	Merced

* Traffic count for nearest roads: Childs Avenue/Rte 99, Source: Caltrans 2023 AADT



Madera-City

The Madera-City monitoring site is operated by the District 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, PM2.5, and 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):	283; 2024*
Ground Cover:	Paved, dirt, and vegetative
Representative Statistical Area (CBSA):	Madera

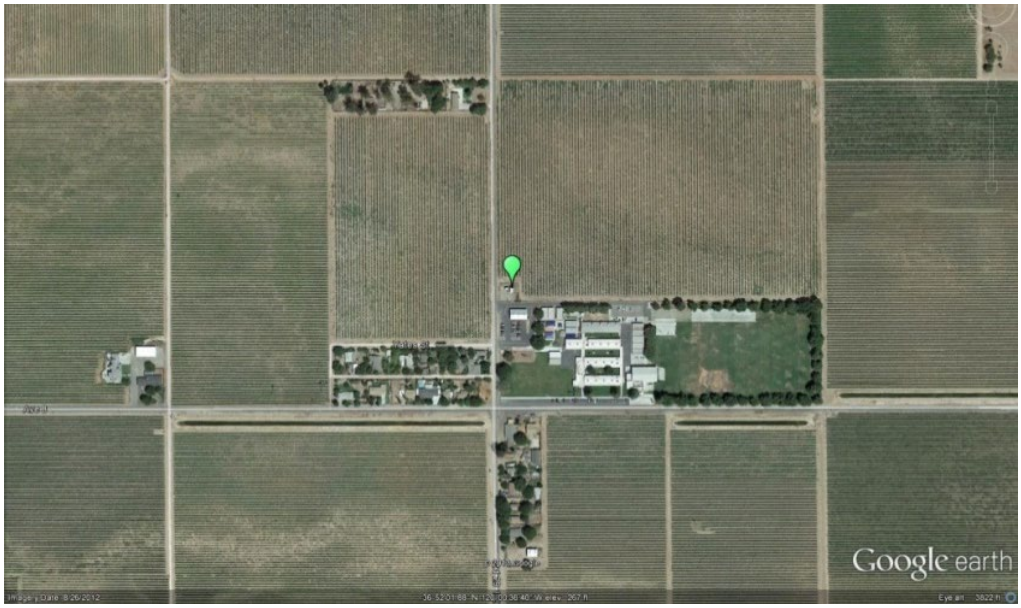
*Traffic count for nearest roads: Avenue14 west of Road 29, eastbound trips per hour in 24 hours.
Source: Madera County Traffic Monitoring Program 2024 Traffic Volumes Report.

Madera-Pump Yard

The Madera-Pump Yard monitoring site is operated by the District 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 is 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):	3,936; 2024*
Ground Cover:	Dirt, paved
Representative Statistical Area (CBSA):	Madera

*Traffic count for nearest roads: Avenue 7 west of CA Route 99, eastbound trips per hour in 24 hours.
Source: Madera County Transportation Commission 2024 Traffic Volumes Report.

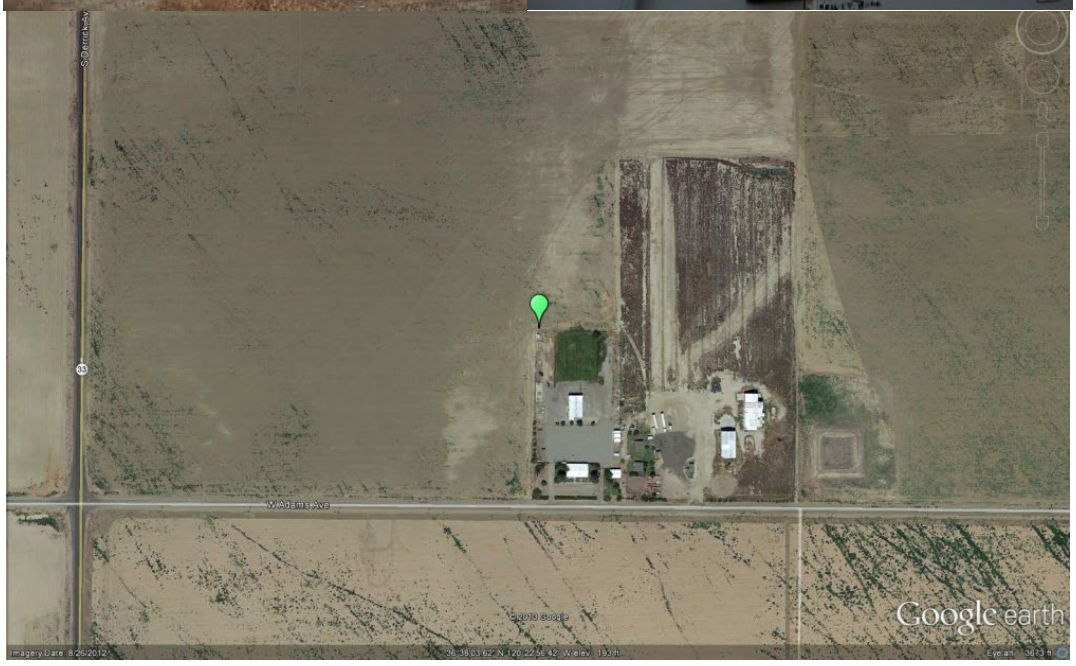


Tranquillity

The Tranquillity monitoring site is located in western Fresno County. It began operating in September 2009 and is operated by the District. 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):	1,450; 2023*
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 2023



Fresno-Sierra Sky Park

The Fresno-Sierra Sky Park monitoring site is operated by the District 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

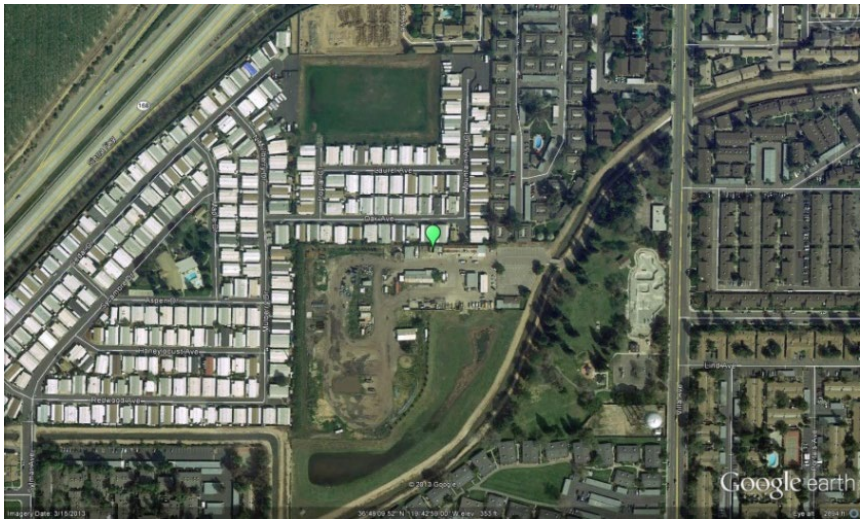
*Raw traffic count in a 24-hour period for nearest roads: Spruce Ave east of Milburn Ave
Source: Fresno COG Traffic Counts, 2007-2019 Kittelson & Associates, Inc.

Clovis-Villa

The Clovis-Villa monitoring site is operated by the District 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, intended to measure maximum ozone precursor emissions. The site monitors ozone, CO, NO2, NMH and speciated-VOC, and meteorology for the PAMS program. PM2.5 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):	13,248; 2017*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Fresno

*Combined ADT (northbound and southbound Villa Avenue between Barstow Avenue and Bullard Avenue).
Source: City of Clovis, Engineering Division, Traffic Information: Speed Limits and Traffic Counts Viewer
https://cloviswebgis.maps.arcgis.com/apps/webappviewer/index.html?id=d318daa852164de3ac4d3b5963875961

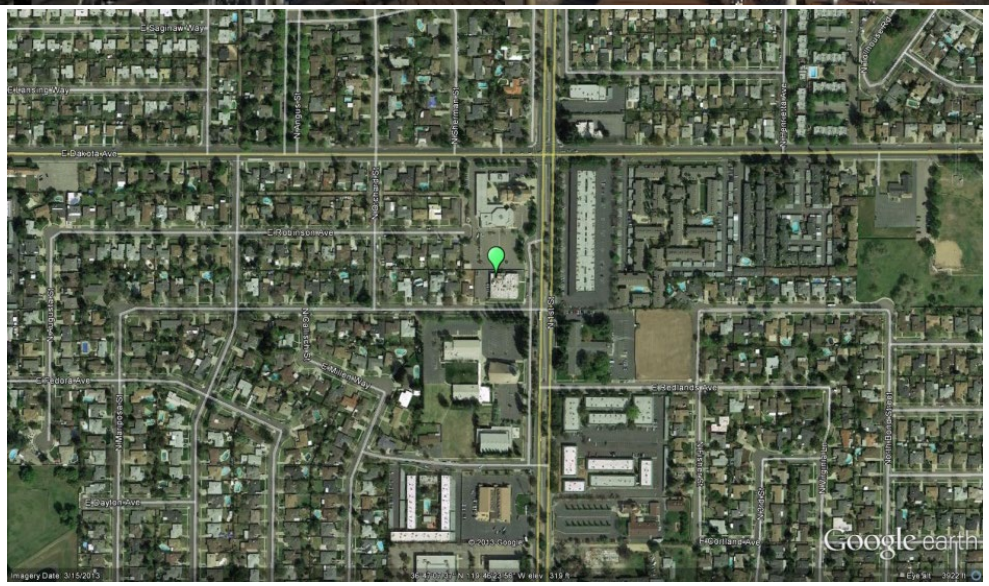


Fresno-Garland

The Fresno-Garland monitoring site is a National Core (NCore) site operated by CARB and is located in the Fresno, CA metropolitan area. It replaced the Fresno-First St. site and began operating in December 2011. The purpose of the site is to monitor representative concentrations of ozone, PM2.5, and PM10 in an urban area. The site also monitors PM10-2.5, PM2.5 Speciation, CO, NO2, NOy, 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):	10,745; 2018*
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 Street north of Dakota Avenue. Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2018. (latest available)



Fresno-Pacific

The Fresno-Pacific monitoring site is operated by the District and is located in the Fresno, CA metropolitan area. It began operating in January 2000. The purpose of the site is to monitor representative PM2.5 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

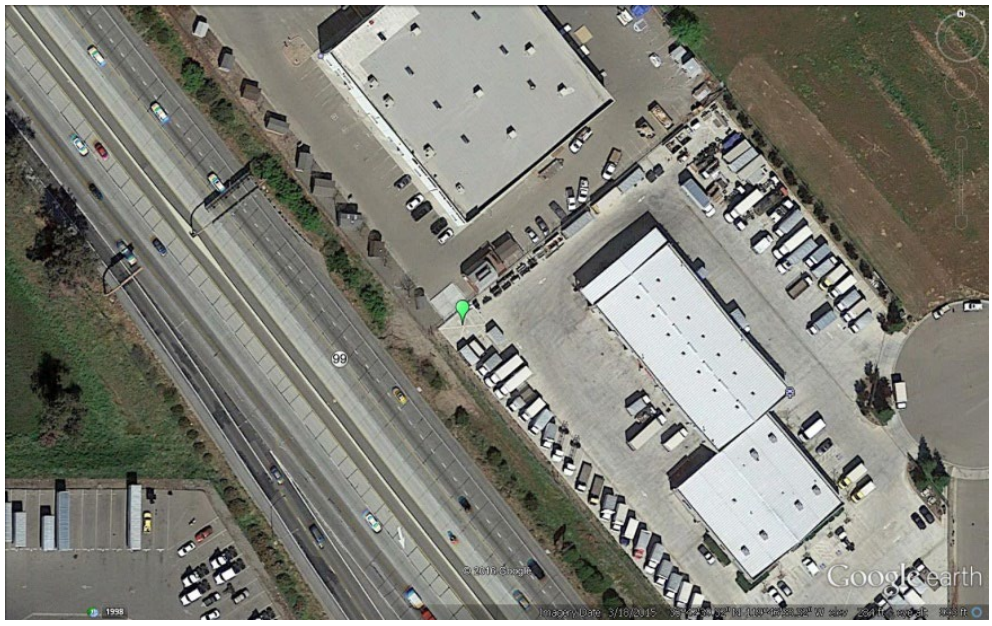
*Raw traffic count in a 24-hour period for nearest roads: Butler Ave/Winery Ave intersection
Source: Fresno COG Traffic Counts, 2007-2019 Kittelson & Associates, Inc.

Fresno-Foundry

The Fresno-Foundry near-road NO2 monitoring site is operated by the District 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. The site also monitors PM2.5, 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):	128,000; 2023*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Fresno

*Traffic count for nearest roads: CA Route 99 and Jensen Ave off-ramp. Source: Caltrans (2023)



Fresno-Drummond

The Fresno-Drummond monitoring site is operated by the District 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):	31,167; 2019*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Fresno

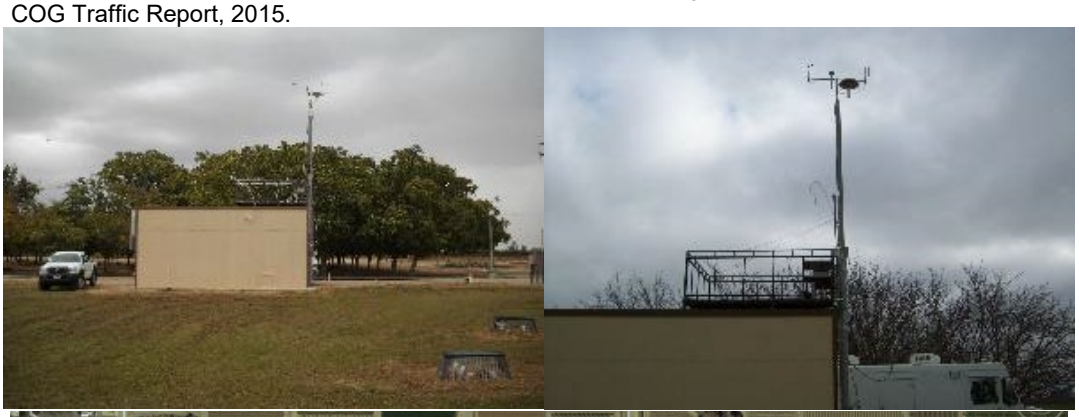
*Daily traffic count: Jensen Ave north of Maple Ave.
Source: Fresno Council of Governments, Planning Dept.

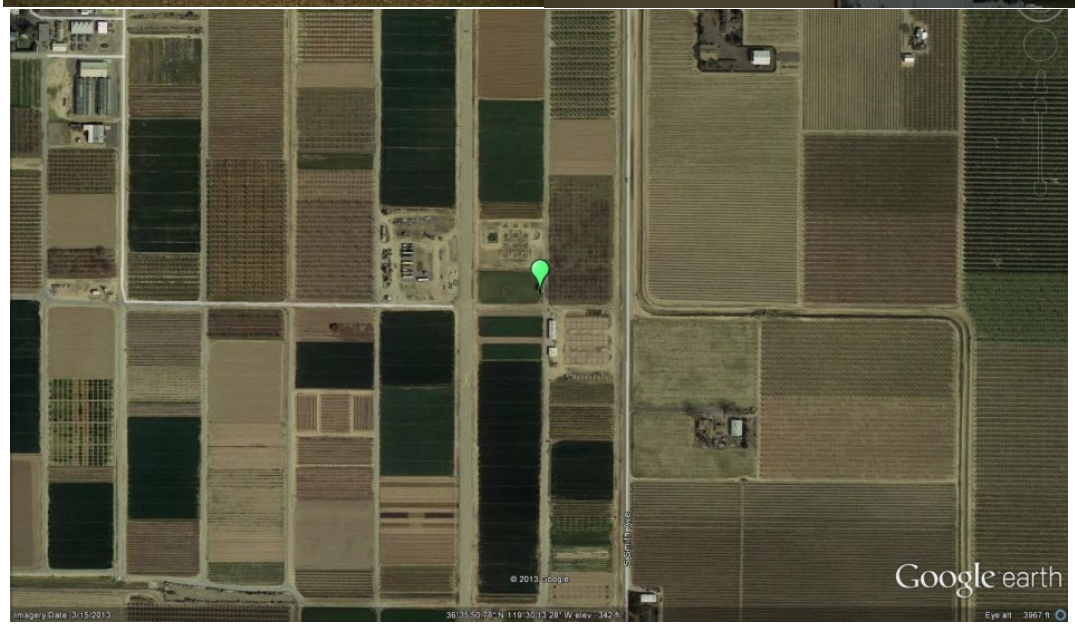
Parlier

The Parlier monitoring site is operated by the District 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):	8,950; 2015*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Fresno

*Raw traffic count in a 24-hour period for nearest roads: Manning Ave east of Smith. Source: Fresno COG Traffic Report, 2015.





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 District and was established in September 2009 in order to comply with Assembly Bill (AB) 841. This site monitors PM2.5 and meteorology.

Site name:	Huron
AQS ID:	06-019-2008
County:	Fresno
Street Address:	16875 4th St, Huron, CA 93234
Geographic Coordinates:	36.198672 N, -120.101096 W
Distance to road (meters):	100 m (north)
Traffic Count (AADT; Year):	5,000; 2023*
Ground Cover:	Paved, vegetative
Representative Statistical Area (CBSA):	Fresno

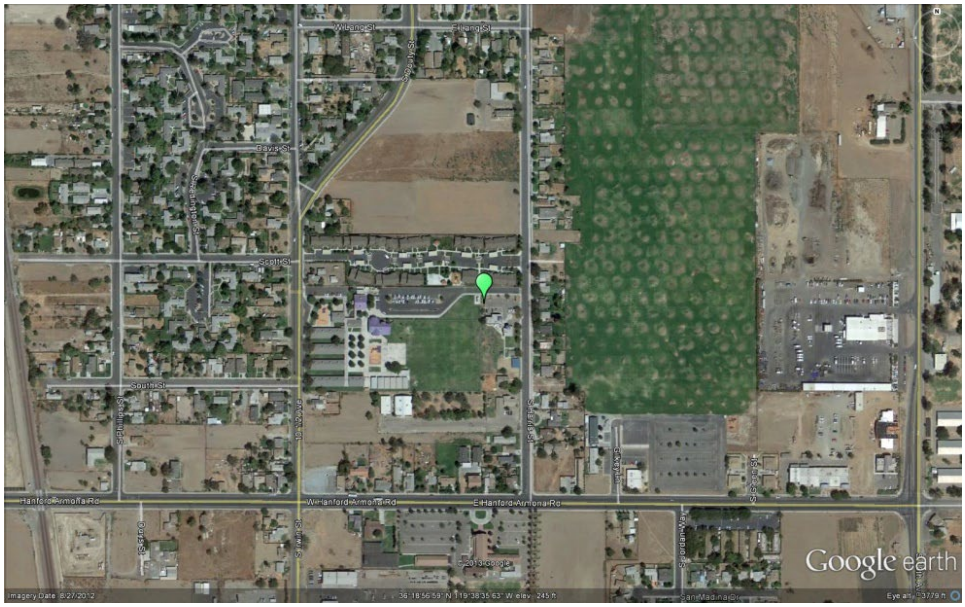
*Traffic count for nearest roads: CA Route 269 / CA Route 198. Source: Caltrans 2023

Hanford-Irwin

The Hanford-Irwin monitoring site is operated by the District 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, PM2.5, 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 - Traffic Counts Volume Summary 2019

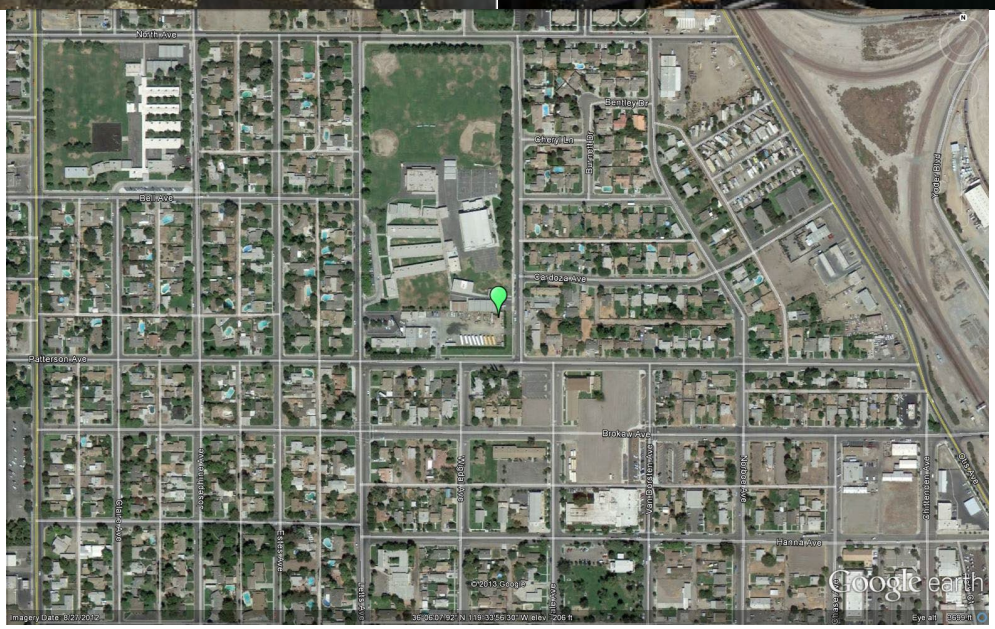


Corcoran-Patterson

The Corcoran-Patterson monitoring site is operated by the District 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 PM2.5. 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):	3,450; 2023*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Hanford – Corcoran

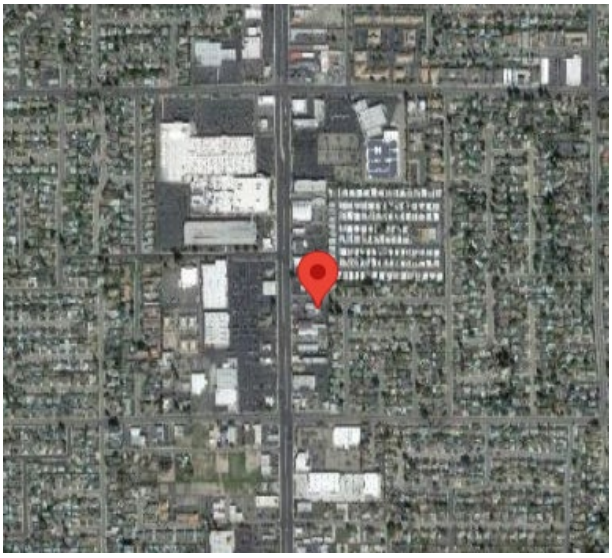
*Traffic count for nearest roads: Junction of CA Route 43 / CA Route 137. Source: Caltrans 2023.



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, PM2.5, and PM10 from upwind and nearby urban areas. The site also monitors NO2, and meteorology. The Visalia-W. Ashland Ave. site replaced the Visalia-Church St. site and began operating in January 2022.

Site name:	Visalia-Ashland Ave.
AQS ID:	06-107-2003
County:	Tulare
Street Address:	2005 West Ashland Ave., Suite G, Visalia CA 93277
Geographic Coordinates:	36.30815 N, -119.31290 W
Distance to road (meters):	25 m (west)
Traffic Count (AADT; Year):	26,000
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Visalia – Porterville



Porterville

The Porterville air-monitoring site became operational in March 2010, and is operated by the District. The purpose of this site is to monitor ozone, PM2.5, 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):	30,000; 2023*
Ground Cover:	Paved, vegetative
Representative Statistical Area (CBSA):	Visalia-Porterville

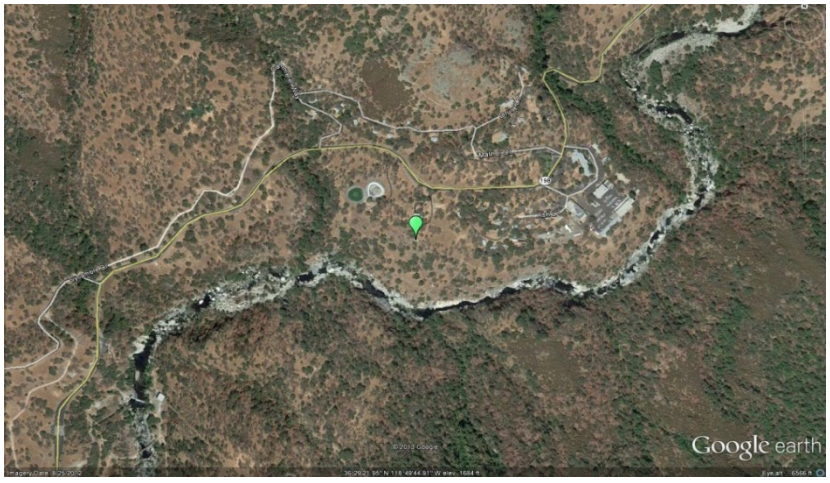
*Ahead AADT traffic count for nearest roads: Junction CA Route 190/CA Route 65. Source: Caltrans 2023.

Sequoia-Ash Mountain

The Ash Mountain monitoring station is located within Sequoia and Kings Canyon National Parks at the southern entrance of the Park at 1,500-feet elevation. The site is operated by the National Park Service. It began operating in July 1999, though the site has been relocated several times over the years. The site measures ozone concentrations in the foothills and also monitors PM2.5, and meteorology.

Site name:	Sequoia-Ash Mountain
AQS ID:	06-107-0009
County:	Tulare
Street Address:	Ash Mountain, Sequoia and Kings Canyon National Parks, 47050 Generals Hwy, Three Rivers, CA 93271
Geographic Coordinates:	36.4894 N, -118.8290 W
Distance to road (meters):	120 m (north)
Traffic Count (Back AADT; Year):	2,100; 2023*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Visalia – Porterville

*Traffic count for nearest roads: CA Route 198 / Sequoia National Park boundary.
Source: Caltrans 2023



Shafter

The Shafter monitoring site is operated by CARB and the District 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 upwind of Bakersfield in an area not 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):	3,195; 2025*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Bakersfield

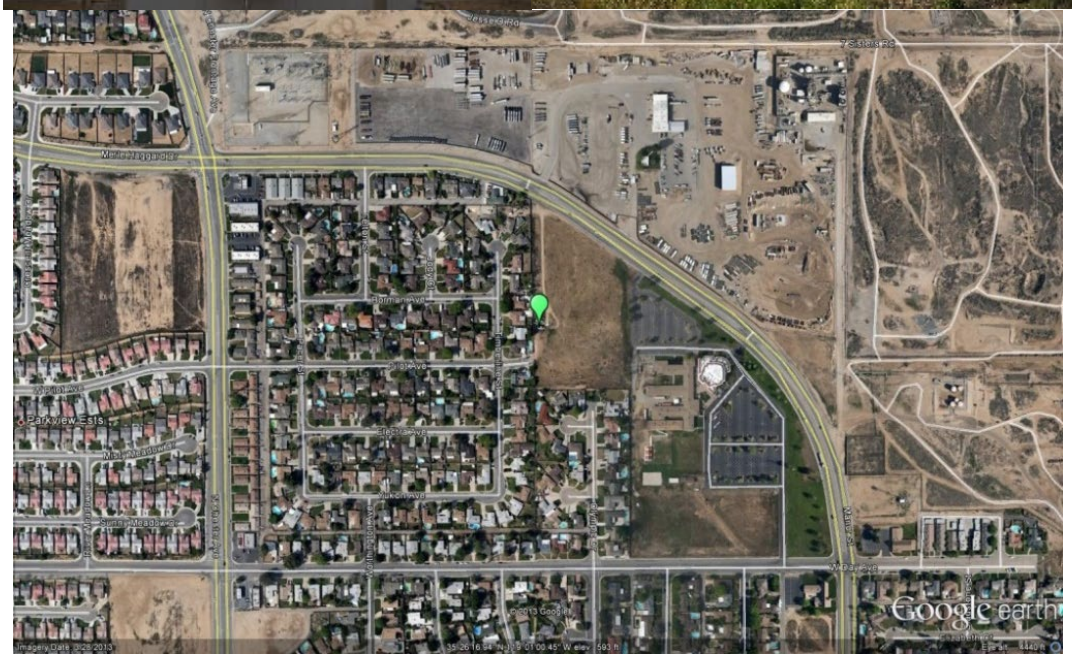
*Traffic count for nearest roads: Central Ave and Walker St. Source: Kern Council of Governments Traffic Counts Data System.

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):	9,358; 2025*
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. Traffic Counts Data System.

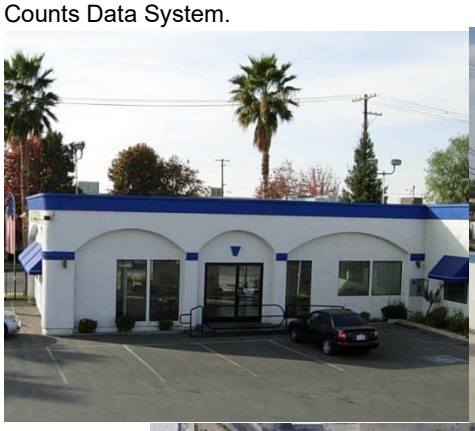


Bakersfield-Golden / M St

The Bakersfield-Golden / M St monitoring site is operated by the District and is located in the Bakersfield, CA metropolitan area. It began operating in 1994 but was moved to the current location on the same property in June 2014. The purpose of the site is to monitor representative concentrations of PM10 and PM2.5 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):	5,029; 2024*
Ground Cover:	Paved
Representative Statistical Area (CBSA):	Bakersfield

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



Bakersfield-Westwind

The Bakersfield-Westwind near-road NO2 monitoring site is operated by the District 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. 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):	116,000; 2023* 4,950; 2026**
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 (2023)

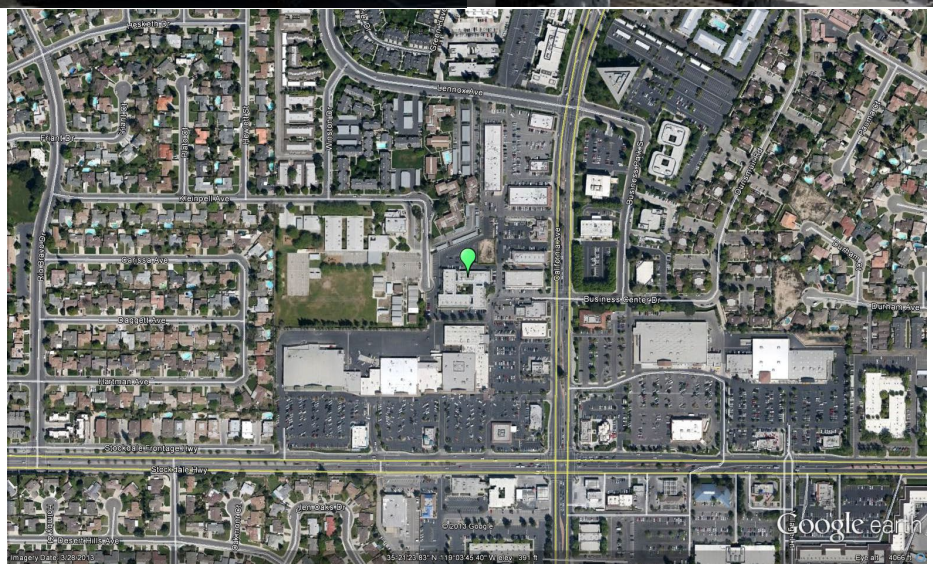
** Traffic count for Westwind Drive near the air monitoring station; Source: Kern Council of Governments Traffic Counts Data System.

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):	32,593; 2025*
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 Traffic Counts Data System.

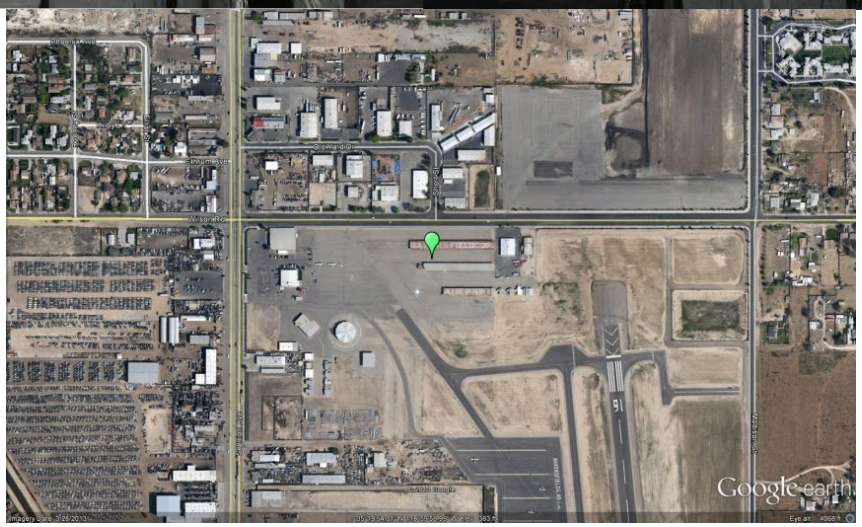


Bakersfield-Muni

The Bakersfield-Muni site is located in the Bakersfield, CA metropolitan area and is operated by the District. 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):	20,115; 2025* 4,919; 2024**
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 Counts Data System.
**Traffic count for road adjacent to monitoring station: Watts Dr. between S Union Ave and Short St
Source: Kern Council of Governments Traffic Counts Data System.



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 intended purpose of the site is to monitor representative concentrations of PM2.5 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):	17,339; 2025* 1,020; 2025**
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 Counts Data System.

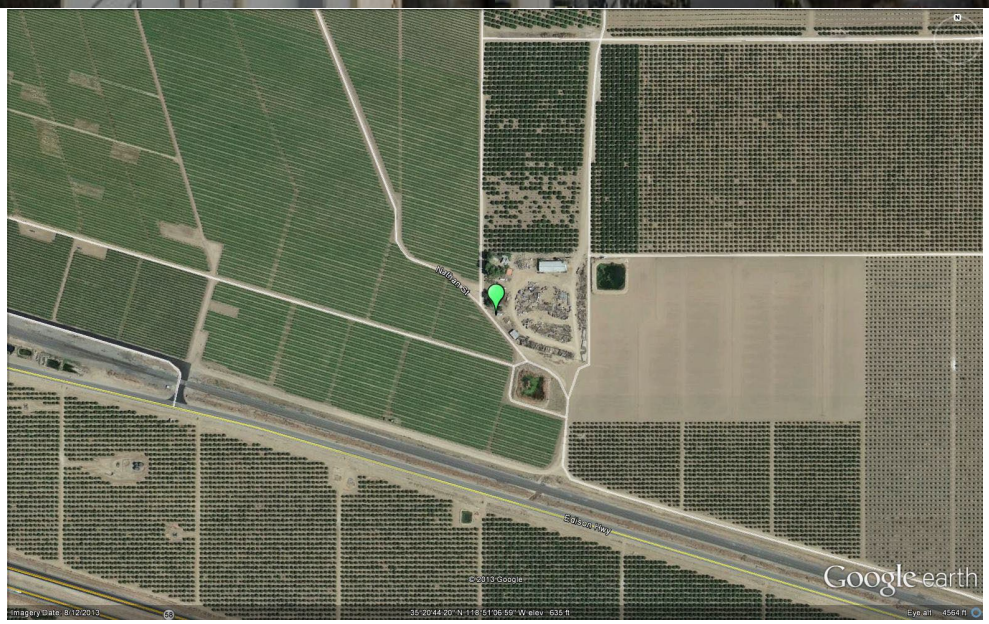
**Traffic count for monitoring station's street address E. Planz Rd. Source: Kern Council of Governments Traffic Counts Data System.

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):	2,836; 2024*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Bakersfield

*Traffic count for nearest roads: Edison Hwy and Comanche Dr.
Source: Kern Council of Governments Traffic Counts Data System.

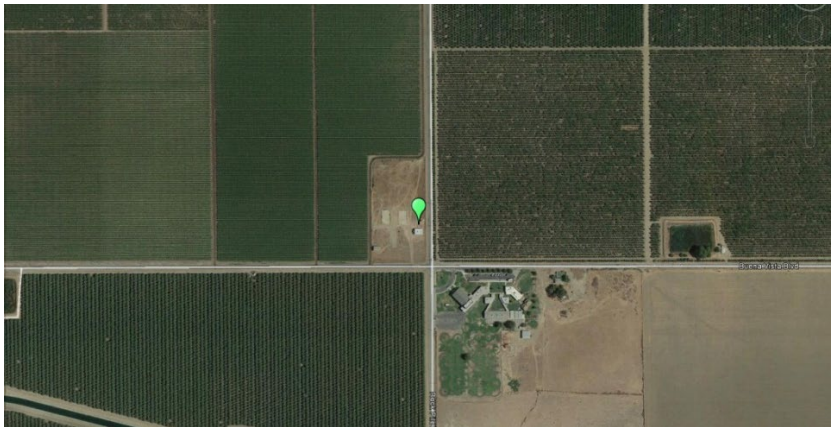


Arvin-Di Giorgio

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 is not currently operating at this station. The District and CARB will review resuming Type 3 PAMS monitoring at this site.

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):	581; 2024*
Ground Cover:	Dirt, vegetative
Representative Statistical Area (CBSA):	Bakersfield

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



Maricopa

The Maricopa monitoring site is operated by the District 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):	365; 2024*
Ground Cover:	Gravel, dirt, vegetative
Representative Statistical Area (CBSA):	Bakersfield

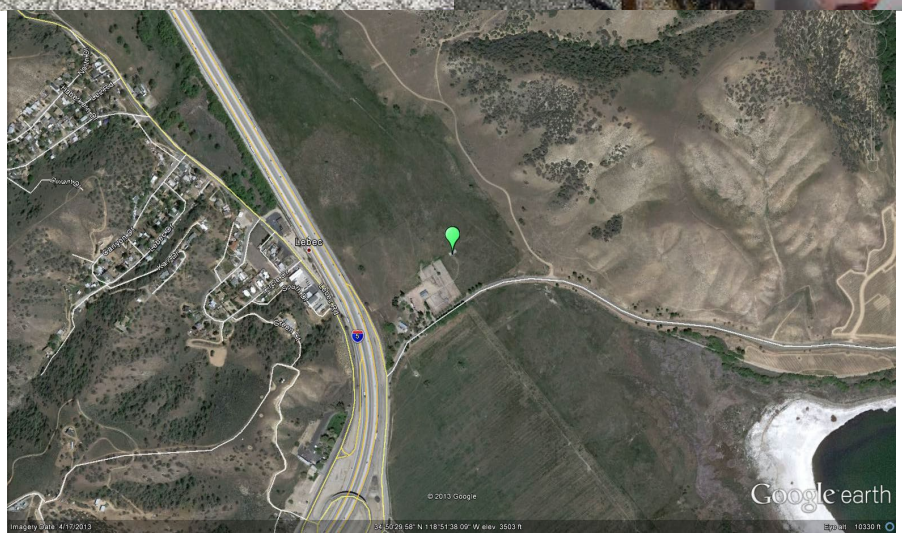
*Traffic count for nearest roads: Union St at California St. Source: Kern Council of Governments Traffic Counts Data System.

Lebec

In 2004, the Tejon Ranch established the Lebec monitoring station and the District assumed responsibility for this site as of January 2009. This site monitors PM2.5 and meteorology and allows the District to better-understand pollution impacts in the southern San Emigdio Mountains. PM2.5 from the site is used in the winter season to inform curtailment declarations for the District's residential wood burning program for the Greater Frazier Park Area.

Site name:	Lebec
AQS ID:	06-029-2009
County:	Kern
Street Address:	1275 Beartrap Rd, Lebec, CA 93243
Geographic Coordinates:	34.8415 N, -118.8610 W
Distance to road (meters):	300 m (west)
Traffic Count (AADT; Year):	525; 2022*
Ground Cover:	Gravel, vegetative
Representative Statistical Area (CBSA):	Bakersfield

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



Tribal Sites

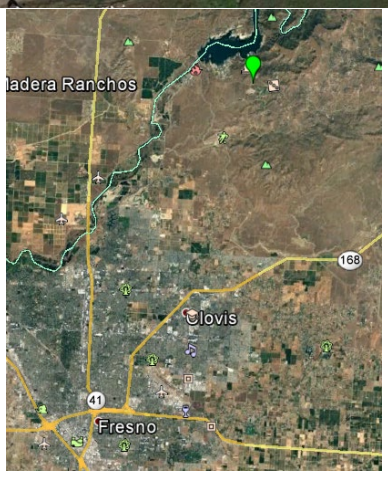
Tribal sites are operated under the Tribal Authority Rule, which is essential to tribal implementation of the federal Clean Air Act. Since tribal sites are not part of the District's jurisdiction, detailed site information for tribal monitors is not be provided in Appendix B of the District's Network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

Table Mountain

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, PM2.5, 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):	59,000; 2023*
Ground Cover:	Dirt
Representative Statistical Area (CBSA):	Fresno-Madera

*Traffic count for nearest roads: CA Route 41 and Friant Rd. Source: Caltrans 2023

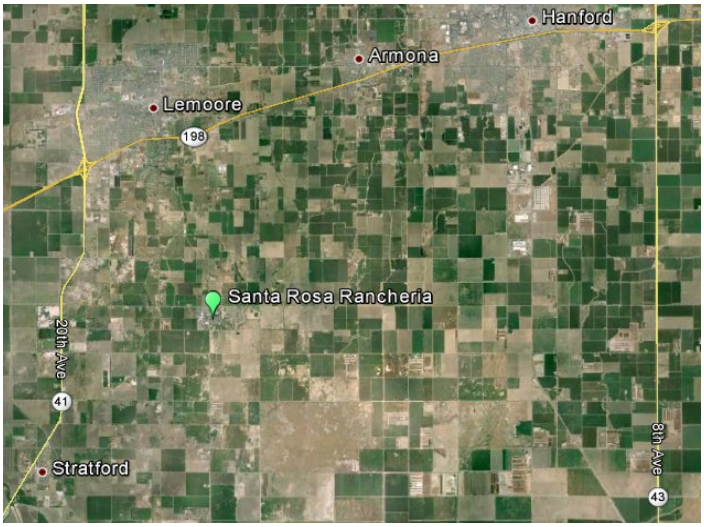


Santa Rosa Rancheria

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 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



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Appendix B:

Detailed Site Information

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List of Abbreviations

Site Type	
PE	Population Exposure
HC	Highest Concentration
RT	Regional Transport
GB	General/Background
SO	Source Oriented
WRI	Welfare Related Impacts
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 FEM, PM2.5 FEM, CO, NO_2, Toxics
Meteorological Parameters	Outdoor temperature, Relative humidity, Wind Speed, Wind Direction
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: Traffic count estimated by City of Stockton Public Works Traffic Engineering Division)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Stockton-University Park (1)						
Pollutant	**Ozone**	**CO**	**NO2**	**PM10 STP**	**PM2.5**	**Meteorology**
Parameter code	44201	42101	42602	81102	88101	Many
Spatial scale	N	N	N	N	N	R
Site type	PE	PE	PE	PE	PE	GB
Monitoring objective	NC	NC	NC	NC	NC	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	Other
Network affiliation	None	None	None	None	None	None
FRM/FEM/ARM/Other	FRM	FEM	FRM	FEM	FEM	Other
POC	1	3	2	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	Primary	Primary	Primary	Primary	N/A
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	N/A	N/A	N/A	N/A	Y	N/A
Instrument manufacturer and model	Teledyne API 400	Teledyne API 300 EU	Thermo 42iQ	Met One BAM 1020	Met One BAM 1020	Vaisala HMP-155 (OT/RH); RM Young 81000 (WS/WD/3DT)
Analysis method	UV	Instrumental	Chemiluminescence	Beta Attenuation	Beta Attenuation	N/A
Method code	87	593	074	122	170	N/A
Monitoring start date (MM/DD/YYYY)	11/05/2021	11/05/2021	11/05/2021	11/05/2021	12/07/2020	11/05/2021
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)	5.7	5.7	5.7	5.7	5.7	
Distance from supporting structure (vertical and	2.0 m	2.0 m	2.0 m	2.0 m	2.0 m	2.0 m

Stockton-University Park (1)						
Pollutant	**Ozone**	**CO**	**NO2**	**PM10 STP**	**PM2.5**	**Meteorology**
horizontal, if applicable, should be provided)						
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	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	No Obstructions
Distance from the drip line of closest tree(s)	>10	>10	>10	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Distance between 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	N/A	N/A	N/A
Residence time (seconds)	11.42	N/A	11.59	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 lo-vol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	No	N/A	N/A

Stockton-University Park (1)						
Pollutant	**Ozone**	**CO**	**NO2**	**PM10 STP**	**PM2.5**	**Meteorology**
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	N/A
Frequency of flow rate verification for manual PM samplers audit	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	Semi-Monthly	Semi-Monthly	N/A
Frequency of one-point QC check (gaseous)	Daily	Daily	Daily	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	2/13/25	N/A, CO monitoring discontinued as of 12/31/25	2/13/25	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	2/13/25; 8/28/25	2/13/25; 8/28/25	N/A
Changes planned within the next 18 months (Y/N)	N	Y – Discontinue CO monitoring; timing dependent on EPA action on CARB 2024 CO SIP Revision	N	N	N	N

Stockton-University Park (2)		
Pollutant	**Toxics**	**Toxics**
Parameter code	Many	Many
Spatial scale	N	N
Site type	PE	PE
Monitoring objective	RS, TP	RS, TP
Monitor type	Many	Many
Network affiliation	CA Air Toxics	CA Air Toxics
FRM/FEM/ARM/Other	Other	Other
POC	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
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A
Instrument manufacturer and model	Xontech 924	Met One T-SASS
Analysis method	Many	Many
Method code	Many	Many
Monitoring start date (MM/DD/YYYY)	1/1/2024	10/4/2024
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	1 in 12	1 in 12
Sampling season (MM/DD - MM/DD)	01/01 - 12/31	01/01 - 12/31
Probe/Inlet height above ground (meters)	6.8	6.8
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.0	2.0
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	No Obstructions	No Obstructions

Stockton-University Park (2)		
Pollutant	**Toxics**	**Toxics**
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	No Obstructions	No Obstructions
Distance from the drip line of closest tree(s)	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	N/A
Distance between collocated monitors (meters)	>2	>2
Unrestricted airflow (degrees)	360	360
Probe material (Teflon, etc.)	N/A	N/A
Residence time (seconds)	0	0
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)	N/A	N/A
Last Annual Performance Evaluation (gaseous)	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	2/23/2024, 10/2/2024	10/2/2024
Changes planned within the next 18 months (Y/N)	Y	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	
Spatial scale	R	R	N	N	R
Site type	RT	RT	PE	PE	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	N/A
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-Met One BX-598, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	UV	Beta-Attenuation	Beta-Attenuation	CL	
Method code	087	731	122	099	130
Monitoring start date (MM/DD/YYYY)	01/01/2006	09/27/2006	01/01/2021	01/01/2006	7/23/2025
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	Hourly	Hourly

Pollutant	Ozone	PM2.5	PM10	NO2	Meteorology
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	5.8 m	5.9 m	5.8 m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.0 m	2.0 m	2.1 m	2.0 m	10 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
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

Pollutant	Ozone	PM2.5	PM10	NO2	Meteorology
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)	8.84	N/A	N/A	9.51	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 lo-vol? If yes, list distance (meters) and instrument(s).	N/A	No	No	N/A	N/A
Pollutant	**Ozone**	**PM2.5**	**PM10**	**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	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)	11/17/2025	N/A	N/A	11/17/2025	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	5/13/2025, 11/17/2025	5/13/2025, 11/17/2025	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) Distance from monitoring station to edge of nearest traffic lane (Fishback Rd). ~390 m: Distance from monitoring station to nearest road with available traffic counts (Airport Way between Lathrop Rd and Hwy 120)
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	
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	N/A
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-Met One BX-598, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Beta Attenuation	Beta Attenuation	Beta Attenuation	
Method code	170	122	122	130
Monitoring start date (MM/DD/YYYY)	09/12/2019	09/12/2019	09/12/2019	6/27/2025
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)	4.7m	4.6m	4.6m	9 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

Manteca				
Pollutant	**PM2.5**	**PM10 LC**	**PM10 STP**	**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
Distance from the drip line of closest tree(s)	23.5 m	28 m	28 m	24.1 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 within 2m of the hivol? If yes, list distance (meters) and instrument(s).	N/A	N/A	N/A	N/A

Manteca				
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)	5/13/2025, 10/30/2025	5/13/2025, 10/30/2025	5/13/2025, 10/30/2025	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 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	10,000 / 2023 (estimated from Caltrans AADT GIS data for SR-108/132 near site and roadway classification)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Modesto-14th St (1)			
Pollutant	**Ozone**	**PM10 STP**	**PM2.5**
Parameter code	44201	81102	88101
Spatial scale	N	N	N
Site type	PE	PE	PE
Monitoring objective	NC	NC	NC
Monitor type	SLAMS	SLAMS	SLAMS
Network affiliation	None	None	None
FRM/FEM/ARM/Other	FRM	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".)	Primary	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	12/7/2020
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

Modesto-14th St (1)			
Pollutant	**Ozone**	**PM10 STP**	**PM2.5**
Residence time (seconds)	9.7	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)	10/23/25	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	5/15/25, 10/23/25	5/15/25, 10/23/25
Changes planned within the next 18 months (Y/N)	N	N	N

Modesto-14th 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	RS, TP
Monitor type	SLAMS	SLAMS	Other
Network affiliation	CSN Supplemental	None	None
FRM/FEM/ARM/Other	Other	FEM	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	Primary	N/A
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)	1:6	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
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	1 (Met tower)	None	None

Modesto-14th St (2)			
Pollutant	**PM2.5 Speciation**	**CO**	**Meteorology**
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	N/A, CO monitoring discontinued as of 12/31/25	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	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	10/23/25; CO monitoring discontinued as of 12/31/25	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	Y – Discontinue CO monitoring; timing dependent on EPA action on CARB 2024 CO SIP Revision	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

Turlock					
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	PE	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	N/A	N/A
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- Met One 598B, WDV- RM Young 92000, WSV- RM Young 92000 OTP – RM Young 92000
Analysis method	UV	Beta Attenuation	Beta Attenuation	Chem.	Many
Method code	087	170	122	099	130
Monitoring start date (MM/DD/YYYY)	04/01/2000	09/14/2006	02/09/2022	04/01/2000	BP, OT, WS, WD – 5/23/2025
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)	5.3 m	5.4 m	5.5 m	5.5 m	8.8 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.7 m	1.8 m	1.9 m	1.7 m	8.8 m

Turlock					
Pollutant	**Ozone**	**PM2.5**	**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	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	19.0 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)	7.65	N/A	N/A	8.96	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 lo-vol? If yes, list distance (meters) and instrument(s).	N/A	No	No	N/A	N/A

Turlock					
Pollutant	**Ozone**	**PM2.5**	**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	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)	10/20/2025	N/A	N/A	10/20/2025	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	5/5/2025; 10/20/2025	5/5/2025; 10/20/2025	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	51,000/2023 (Traffic count for nearest roads: R Street/Rte 99, Source: Caltrans 2023 AADT)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved, gravel

Merced-M St			
Pollutant	**PM10 STP / LC**	**PM2.5**	**Meteorology**
Parameter code	81102 / 85101	88101	Many
Spatial scale	N	N	N
Site type	PE	PE	HC, PE
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC, RS, TP
Monitor type	SLAMS	SLAMS	SLAMS
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	None	None	None
FRM/FEM/ARM/Other	FEM	FEM	Other
POC	3	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	N/A
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	N/A	Y	N/A
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	ITP- Met One 598B, WDV- RM Young 92000, WSV- RM Young 92000 OTP – RM Young 92000
Analysis method	Beta Attenuation	Beta Attenuation	Many
Method code	122	170	130
Monitoring start date (MM/DD/YYYY)	03/04/2022	03/04/2022	01/01/2024
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	N/A
Probe height (meters)	9.2 m	9.3 m	9.2 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8 m*	1.9 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
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)	30 m	30 m	30 m
Distance to furnace or incinerator flue (meters)	46.5 m	46 m	46 m

Merced-M St			
Pollutant	**PM10 STP / LC**	**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)	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
Frequency of one-point QC check for gaseous instruments	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
Frequency of flow rate verification for automated PM analyzers (routine checks)	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).	No	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
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	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)	5/15/2025, 10/29/2025	5/15/2025, 10/29/2025	N/A
Changes planned within the next 18 months (Y/N)	N	N	N

Site Name	Merced-Vierra
AQS ID (XX-XXX-XXXX)	06-047-2024
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	01/01/2024
Pollutant Parameters	Ozone, PM2.5 FEM
Meteorological Parameters	Wind speed, wind direction, outdoor temperature
Address	3076 E. Childs Ave., Merced, CA 95341
GPS Coordinates (decimal degrees)	37.289732 N, -120.42971 W
Distance to roadways (meters)	223 m (S)
Traffic Count/Year	42,500/2023 (Traffic count for nearest roads: Childs Avenue/Rte 99, Source: Caltrans 2023 AADT)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Vegetative, dirt and gravel

Merced-Vierra				
Pollutant	**Ozone**	**PM2.5**	**NO2**	**Meteorology**
Parameter code	44201	88101		Many
Spatial scale	N	N		N
Site type	HC, PE	PE		HC, PE
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP		NC, RS, TP
Monitor type	SLAMS	SLAMS		SLAMS
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".)	N/A	Primary		N/A
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- Met One 598B, WDV- RM Young 92000, WSV- RM Young 92000 OTP – RM Young 92000
Analysis method	UV	Beta Attenuation		Many
Method code	087	170		130
Monitoring start date (MM/DD/YYYY)	01/01/2024	01/01/2024		N/A
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)	4.4m	4.64m		9.1 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.9m	2.1m		9.1 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)	137.5 m	136.5 m		N/A
Distance from the drip line of closest tree(s)	55m	53m		N/A

Merced-Vierra				
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
Pollutant	**Ozone**	**PM2.5**	**NO2**	**Meteorology**
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)	11.04	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 lovol? 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)	10/25/2024	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	4/29/2024, 10/25/2024		N/A
Changes planned within the next 18 months (Y/N)	N	N	Y – Parameter will resume at the replacement Vierra site in 2026	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	283/2024 (Traffic count for nearest roads: Avenue 14 west of Road 29, westbound trips per hour in 24 hours. Source: Madera County Transportation Commission 2024 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	
Spatial scale	N	N	N	N	N
Site type	PE	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	FEM	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	N/A
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-Met One BX-598, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Chem	Beta Attenuation	Beta Attenuation	Beta Attenuation	
Method code	199	170	122	122	130
Monitoring start date (MM/DD/YYYY)	12/01/2020	09/20/2019	09/20/2019	09/20/2019	5/16/2025
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)	5.1m	5 m	4.9 m	4.9 m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.0m	1.9 m	1.8 m	1.8 m	10 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
Distance from the drip line of closest tree(s)	14.2m	15.5 m	13.6m	13.6m	14.5 m
Distance to furnace or incinerator flue (meters)	50m	48m	50m	50m	N/A

Madera-City					
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)	9.34	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)	10/28/2025	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	5/7/2025, 10/28/2025	5/7/2025, 10/28/2025	5/7/2025, 10/28/2025	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 2025, the SJVAPCD was contracted with Enthalpy Analytical: 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
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	3,936/2024 (Traffic count for nearest roads: Avenue 7 west of Rte 99, westbound trips per hour in 24 hours. Source: Madera County Transportation Commission 2024 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	U	U	N	U	R
Site type	GB	GB	PE	GB	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	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	N/A
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-Met One BX-598, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Chem.	Chem	GC	GC	
Method code	199	099	126	011	130
Monitoring start date (MM/DD/YYYY)	07/01/1997	07/01/1997	07/01/1997	07/01/1997	06/07/2025
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	6.1 m	5.8 m	11.5 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.9 m	1.9 m	2.2 m	1.9 m	11.5 m
Distance from obstructions on roof. Include horizontal distance + vertical	N/A	N/A	N/A	N/A	N/A

Madera-Pump Yard					
Pollutant	**Ozone**	**NO2**	**Speciated VOC**	**NMH**	**Meteorology**
height above probe for obstructions nearby. (meters)					
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)	53 m	53 m	53 m	53 m	54 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)	12.88	13.29	9.71	13.53	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
For low volume PM instruments (flow rate < 200 liters/minute), is any PM instrument within 1 m of the lovol? If	N/A	N/A	N/A	N/A	N/A

Madera-Pump Yard					
Pollutant	**Ozone**	**NO2**	**Speciated VOC**	**NMH**	**Meteorology**
yes, list distance (meters) and instrument(s).					
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)	11/18/2025	11/18/2025	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	1,450/2023 Raw traffic count for nearest roads: Adams Avenue and Route 33 (S. Derrick Avenue) Source: Caltrans 2023
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	GB	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	N/A
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	N/A	Y	N/A
Instrument manufacturer and model	Teledyne T265	Met One BAM 1020	ITP-Met One BX-598, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	UV	Beta attenuation	Many
Method code	199	170	130
Monitoring start date (MM/DD/YYYY)	6/18/2024	10/30/2009	BP - 11/1/2024; OT, WS, WD - 10/16/2024
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	N/A	N/A	N/A

Tranquillity			
Pollutant	**Ozone**	**PM2.5**	**Meteorology**
height above probe for obstructions nearby. (meters)			
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	78.5m	76.6m	76.2m
Distance from the drip line of closest tree(s)	60.0m	61.5m	63.0m
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)	355	355	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)	9.39	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 lovol? If yes, list distance (meters) and instrument(s).	N/A	No	N/A

Tranquillity			
Pollutant	**Ozone**	**PM2.5**	**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
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	10/27/2025	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	5/6/2025, 10/27/2025	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	7252 N Blythe Ave., Fresno, CA 93722
GPS Coordinates (decimal degrees)	36.8405 N, -119.8740 W
Distance to roadways (meters)	12 m: Distance from monitoring station to edge of nearest traffic lane (W. Chenault Avenue). ~342 m: Distance from monitoring station to nearest road with available traffic counts (Spruce Avenue east of Milburn Avenue)
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	
Spatial scale	N	N	N
Site type	PE	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	FEM	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	N/A
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-Met One BX-598, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Chem.	Chem	
Method code	199	099	130
Monitoring start date (MM/DD/YYYY)	07/01/1986	07/01/1986	1/21/2025
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

Pollutant	Ozone	NO2	Meteorology
Probe height (meters)	4.3m	4.3m	9m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8m	1.8m	9m
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
Distance from the drip line of closest tree(s)	15.7m	15.7m	16.3m
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/NO2/NOy, SO2, O3; 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/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.87	9.12	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
Pollutant	**Ozone**	**NO2**	**Meteorology**

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 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)	2/6/2025	2/6/2025	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)	Y – Efforts to remove the vegetation obstruction expected to result in discontinuing the use of the “SX” (“Does Not Meet Siting Criteria”) quality assurance qualifier code.	Y – Efforts to remove the vegetation obstruction expected to result in discontinuing the use of the “SX” (“Does Not Meet Siting Criteria”) quality assurance qualifier code.	Y, adding Sonic Anemometer and Efforts to remove the vegetation obstruction expected to result in discontinuing the use of the “SX” (“Does Not Meet Siting Criteria”) quality assurance qualifier code.

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 2024, the SJVAPCD was contracted with Enthalpy Analytical: 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 FEM, PM2.5 FEM, 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	13,248; 2017* (Combined ADT (northbound and southbound Villa Avenue between Barstow Avenue and Bullard Avenue). Source: City of Clovis, Engineering Division, Traffic Information: Speed Limits and Traffic Counts Viewer	
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	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	FEM	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)	6.2 m	5.9 m	6.3 m	6.3 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2 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
Distance from obstructions not on roof. Include horizontal distance + vertical	N/A	N/A	N/A	N/A

Clovis-Villa (1)				
Pollutant	**Ozone**	**PM2.5**	**PM10 LC**	**PM10 STP**
height above probe for obstructions nearby. (meters)				
Distance from the drip line of closest tree(s)	65.4 m	66 m	66.7 m	66.7 m
Distance to furnace or incinerator flue (meters)	16 m	16.6 m	17.3 m	17.3 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)	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)	6.91	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	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
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

Clovis-Villa (1)				
Pollutant	**Ozone**	**PM2.5**	**PM10 LC**	**PM10 STP**
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)	2/5/2025	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	2/5/2025 8/21/2025	2/5/2025, 8/21/2025	2/5/2025, 8/21/2025
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	
Spatial scale	N	N	N	N	N
Site type	PE	HC	PE	HC	PE
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	N/A
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-Met One BX-598, OT, BP, RH, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	IR	Chem.	GC / UV Absorption	Flame Ionization	
Method code	554	099	177 / 202	011	130
Monitoring start date (MM/DD/YYYY)	01/01/1990	01/01/2016	01/01/1990	01/01/1990	BP, RH, OT, WS, WD - 2/1/2025
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)	6.2 m	6.2 m	5.9 m	6.2 m	10 m

Clovis-Villa (2)					
Pollutant	**CO**	**NO_2**	**Speciated VOC**	**NMH**	**Meteorology**
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2 m	2 m	1.8 m	2 m	10 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)	65.4 m	65.4 m	37 m	65.4 m	67 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)	6.44	7.15	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 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
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
Frequency of one-point QC check (gaseous)	Daily	Daily	N/A	Daily	N/A

Clovis-Villa (2)					
Pollutant	**CO**	**NO_2**	**Speciated VOC**	**NMH**	**Meteorology**
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (MM/DD/YYYY)	2/5/2025	2/5/2025	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 FEM, PM2.5 FEM, PM2.5 FRM, PM10-2.5 FEM, PM2.5 Speciation (STN), CO, NO_2, NOy, SO_2, Toxics
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	10,745/2018 (Raw traffic count in a 24-hour period: First Street north of Dakota Avenue. Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2018. (latest available))
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

	Fresno-Garland (1)						
Pollutant	**Ozone**	**CO**	**NO2**	**NO2**	**SO2**	**NOy**	**Toxics**
Parameter code	44201	42101	42602	42602	42401	42600	Many

	Fresno-Garland (1)						
Pollutant	**Ozone**	**CO**	**NO2**	**NO2**	**SO2**	**NOy**	**Toxics**
Spatial scale	U	N	U	U	U	U	N
Site type	PE	PE	PE	PE	PE	PE	PE
Basic monitoring objective(s)	NC	NC	NC	NC	NC	NC	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	NCore	NCore	NCore	PAMS	NCore	NCore	NCore
FRM/FEM/ARM/Other	FEM	FRM	FRM	FRM	FEM	Other	Other
POC	1	3	3	2	3	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	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	N/A
Instrument manufacturer and model	Teledyne API 400	Teledyne API T300	Thermo 421Q	Teledyne API 200UP	Thermo 43IQ	Instrumental	Xontech 924
Analysis method	UV	UV	UV	UV	UV	Chem. Teledyne API 200EU/501	Many
Method code	087	593	574	200	560	699	Many
Monitoring start date (MM/DD/YYYY)	12/23/2011	01/18/2012	02/1/2012	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	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	01/01 – 12/31
Probe/Inlet height above ground (meters)	6.8	6.8	6.8	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	2.8	N/A	2.8
Distance from obstructions on roof. Include horizontal distance	None	None	None	None	None	None	None

	Fresno-Garland (1)						
Pollutant	**Ozone**	**CO**	**NO2**	**NO2**	**SO2**	**NOy**	**Toxics**
+ vertical height above probe for obstructions nearby. (meters)							
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	None	None	None	None	None	None	None
Distance from the drip line of closest tree(s)	None	None	None	None	None	None	None
Distance to furnace or incinerator flue (meters)	None	None	None	None	None	None	None
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360	360	360	360	360	360	360
Probe material (Teflon, etc.)	Teflon	Teflon	Teflon	Teflon	Teflon	Teflon	Teflon
Residence time (seconds)	12.6	7.3	6.0	6.3	17.9	< 20 seconds	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	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	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	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	5 Times/Week
Last Annual Performance Evaluation (gaseous)	2/11/26	2/11/26	2/11/26	2/11/26	2/11/26	Not audited by CARB-QAS	2/22/24

	Fresno-Garland (1)						
Pollutant	**Ozone**	**CO**	**NO2**	**NO2**	**SO2**	**NOy**	**Toxics**
Last two semi-annual flow rate audits for PM monitors	N/A	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	N

Fresno-Garland (2)				
Pollutant	**PM2.5**	**PM10 STP / LC**	**PM2.5**	**PM10-2.5**
Parameter code	88101	81102 / 85101	88502	86101
Spatial scale	N	N	N	N
Site type	PE	PE	PE	GB
Basic monitoring objective(s)	NC	NC	NC	NC
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/Thermo 2025i	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)	1/1/2012	1/1/2012	1/1/2012	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 / 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 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
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	6/13/25, 12/17/25	10/17/25, 12/23/25	4/9/2025, 10/17/2025	-
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	N/A
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

Pollutant	PM2.5 Speciation	PM2.5 Speciation	PM2.5 Speciation	Meteorology
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	11	9	None	None
Distance from the drip line of closest tree(s)	11	9	N/A	None
Distance to furnace or incinerator flue (meters)	None	None	None	None
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 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
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	2/22/24	Per CARB update, URGs were not audited.	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	**PM2.5**	**Meteorology**
Parameter code	88101	Many
Spatial scale	N	N
Site type	PE	PE
Basic monitoring objective(s)	NC,RS, TP	NC, RS
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	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
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	Y	N/A
Instrument manufacturer and model	Met One BAM 1020	ITP- Met One 598B, WDV- RM Young 92000, WSV- RM Young 92000 OTP – RM Young 92000
Analysis method	Beta Attenuation	Many
Method code	170	130
Monitoring start date (MM/DD/YYYY)	3/11/2022	01/01/2024
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)	11.3 m	11.3 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.9 m	2.9 m
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)	53.4 m NW 5.1 m above vertical	N/A
Distance from the drip line of closest tree(s)	36 N	36.5 N

Fresno-Pacific		
Pollutant	**PM2.5**	**Meteorology**
Distance to furnace or incinerator flue (meters)	None	None
Distance between monitors fulfilling a QA collocation requirement (meters).	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or 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)	Aluminum	N/A
Residence time for reactive gases $NO/NO_2/NO_y$, SO_2, O_3; PAMS: VOCs, Carbonyls (seconds)	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	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, including Pb samplers (routine checks)	N/A	N/A
Frequency of flow rate verification for automated PM analyzers (routine checks)	Monthly	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters (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)	2/11/2025, 8/20/2025	N/A
Changes planned within the next 18 months (Y/N)	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	31,167; 2019 (Daily traffic count: Jensen Ave north of Maple Ave. Source: Fresno Council of Governments, Planning Dept)
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	
Spatial scale	N	N	N	R
Site type	PE	PE	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	FEM	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	N/A
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-Met One 10998, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Chem.	Beta Attenuation	Chem.	
Method code	199	122	099	130
Monitoring start date (MM/DD/YYYY)	05/01/2017	01/01/2022	03/01/2017	BP, OT, WS, WD - 5/22/2025
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	9.8 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
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)	36.1 m (south)	34.8 m	36.1	36.2 m

Fresno-Drummond				
Pollutant	**Ozone**	**PM10 STP / LC**	**NO_2**	**Meteorology**
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)	10.48	N/A	10.45	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
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	2/11/2025	N/A	2/11/2025	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	2/11/2025; 8/20/2025	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	128,000/2023 (Rte 99 and Jensen Avenue off-ramp, Source: Caltrans 2023)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Fresno-Foundry				
Pollutant	**PM2.5**	**CO**	**NO_2**	**Meteorology**
Parameter code	88101	42101	42602	
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	N/A
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	Y	N/A	N/A	N/A
Instrument manufacturer and model	Met One BAM 1020	Thermo 48i-TLE	Teledyne T500U	ITP-Met One BX-598, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Beta Attenuation	IR	CL	
Method code	170	554	212	130
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	5.08 m	5.08 m	5.3 m

Pollutant	PM2.5	CO	NO_2	Meteorology
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.2 m	2.2 m	2.2 m	3.1 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
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	27.3 m H (north), 5 m V 37m H (east), 2.5 m V	27.3 m H (north), 5 m V 37m H (east), 2.5 m V	27.3 m H (north), 5 m V 37m H (east), 2.5 m V	26.3 m H (north), 4.1 m V 37m H (east), 4.1 m V
Distance from the drip line of closest tree(s)	25.0 m	22.8 m	22.8 m	22.8
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	12.99	11.69	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

Pollutant	PM2.5	CO	NO_2	Meteorology
Frequency of flow rate verification for automated PM analyzers (routine checks)	Bi-weekly	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
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	None	None	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)	8/20/2025	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 2024, the SJVAPCD was contracted with Enthalpy Analytical: 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	8,950/2015 (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: Manning Ave east of Smith. Source: Fresno COG Traffic Report, 2015.
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Dirt, vegetation

Parlier					
Pollutant	**Ozone**	**NO2**	**Speciated VOC**	**NMH**	**Meteorology**
Parameter code	44201	42602	Many	43102	
Spatial scale	U	U	N	U	R
Site type	PE	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	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	N/A
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-Met One 10998, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Chemiluminescence	CChem.	GC	GC	
Method code	199	099	126	011	130
Monitoring start date (MM/DD/YYYY)	06/01/1983	06/01/1983	06/01/1983	06/01/1983	BP, RH, WD, WS, OT - 9/16/2025; SR – 6/7/1995
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

Pollutant	Ozone	NO2	Speciated VOC	NMH	Meteorology
Probe height (meters)	6.3 m	6.3 m	5.7 m	6.3 m	8.6 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.95 m	2.95 m	2.72 m	2.95 m	8.6 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 horiz. 4.7 m vert. (pole to SE)	33.9 m horiz. 4.7 m vert.	33.9 m horiz. 4.7 m vert.	33.9 m horiz. 5.3 vert.	31.9 m horiz. 2.4 m vert.
Distance from the drip line of closest tree(s)	330 m (NE)	330 m (NE)	330 m (NE)	330 m (NE)	330 m (NE)
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)	10.75	10.08	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 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)	10/15/2025	10/15/2025	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 4th St, Huron, CA 93234
GPS Coordinates (decimal degrees)	36.2363 N, -119.7656 W
Distance to roadways (meters)	100 m (north)
Traffic Count/Year	5,000/2023(Traffic count for nearest roads: Rte 269/Rte 198, Source: Caltrans 2023)
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

Pollutant	PM2.5	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 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 lovol? 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)	5/6/2025, 10/20/2025	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 - Traffic Counts Volume Summary 2017)
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	
Spatial scale	N	N	N	N
Site type	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	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	N/A
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-Met One 10998, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Chem	Mass Monitor w/VSCC, BETA Attenuation	CL	
Method code	199	170	099	130
Monitoring start date (MM/DD/YYYY)	1/1/2021	8/20/2020	02/25/2010	5/15/2025
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)	4.8m	4.6 m	4.8m	9.7 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.93m	2.0m	1.93m	9.7 m

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	21.8m V, 2.5 m H	22.0 m V, 2.5 m H	N/A
Distance from the drip line of closest tree(s)	21.5m	18.7 m	21.5m	19.0 m
Distance to furnace or incinerator flue (meters)	27.0m	25.7m	27.0m	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)	10.41	N/A	10.70	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)	10/21/2025	N/A	10/21/2025	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	5/14/2025, 10/21/2025	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)	4.5m	4.5m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.9m	1.9m
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)	21.8m V, 2.5m H	21.8m V, 2.5 m H
Distance from the drip line of closest tree(s)	18.7 m	18.7 m
Distance to furnace or incinerator flue (meters)	25.7m	25.7m
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 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 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)	5/14/2025, 10/21/2025	5/14/2025, 10/21/2025
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	3,450/2023 (Traffic count for nearest roads: JCT. Rte 43/Rte 137, Source: Caltrans 2023.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Corcoran-Patterson				
Pollutant	**PM2.5**	**PM10 LC**	**PM10 STP**	**Meteorology**
Parameter code	88101	85101	81102	
Spatial scale	N	N	N	N
Site type	PE	HC	HC	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	N/A
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-Met One 10998, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Beta Attenuation	Beta Attenuation	Beta Attenuation	
Method code	170	122	122	130
Monitoring start date (MM/DD/YYYY)	01/13/2021	01/01/2021	01/01/2021	10/17/2024
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)	6.4m	6.3m	6.3m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.1 m	2.0 m	2.0 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)	92.3 m H, 1.5 m V	90.5 m H, 1.5 m V	90.5 m H, 1.5 m V	90.5 m H 0.7 m V
Distance from the drip line of closest tree(s)	47m E,	46.2m E,	46.2m E,	48m E,
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)	5/5/2025, 10/13/2025	5/5/2025, 10/13/2025	5/5/2025, 10/13/2025	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, PM2.5 Speciation (CSN)
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	65 m (west)
Traffic Count/Year	26,000
Ground Cover	Paved

Visalia-W. Ashland Avenue (1)						
Pollutant	**Ozone**	**NO_2**	**PM10 STP / LC**	**PM2.5**	**PM2.5 Speciation**	**Meteorology**
Parameter code	44201	42602	81102 / 85101	88101	88102	Many
Spatial scale	N	N	N	N	N	R
Site type	PE	PE	PE	HC, PE	PE	GB
Basic monitoring objective(s)	NC	NC	NC	NC	RS	RS, TP
Monitor type	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s), if applicable (a	None	None	None	None	CSN Supplemental	None

monitor may have none, one, or multiple)						
FRM/FEM/ARM/Other	FEM	FRM	FEM	FEM	Other	Other
POC	1	1	5	3	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	N/A
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	Thermo 42 IQ	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 / LC**	**PM2.5**	**PM2.5 Speciation**	**Meteorology**
Monitoring start date (MM/DD/YYYY)	1/13/2022	02/04/2022	02/15/2022	01/13/23	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)	11.3	11.3	6.3	6.5	9.5	11.9

Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.1	2.1	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

Pollutant	**Ozone**	**NO2**	**PM10 STP / LC**	**PM2.5**	**PM2.5 Speciation**	**Meteorology**
Distance from the drip line of closest tree(s)	25	25	20	20	20	None
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)	12.9	12.7	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	N/A	N/A	No	No	No	N/A

Pollutant	Ozone	NO2	PM10 STP / LC	PM2.5	PM2.5 Speciation	Meteorology
lovol? If yes, list distance (meters) and instrument(s).						
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
Frequency of one-point QC check (gaseous)	5x/week	5x/week	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	11/19/25	11/19/25	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	5/14/25, 11/19/25	5/14/25, 11/19/25	11/21/24	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	30,000/2023 (Ahead AADT traffic count for nearest roads: Junction SR 190/SR 65, Source: Caltrans 2023)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved, vegetative

Porterville			
Pollutant	**Ozone**	**PM2.5**	**Meteorology**
Parameter code	44201	88502	
Spatial scale	N	N	N
Site type	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

Porterville			
Pollutant	**Ozone**	**PM2.5**	**Meteorology**
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	N/A
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	N/A	N	N/A
Instrument manufacturer and model	Teledyne T265	Met One BAM 1020	ITP-Met One BX-598, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Chem	Beta Attenuation	
Method code	199	731	130
Monitoring start date (MM/DD/YYYY)	04/26/2024	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)	4.32 m	4.32 m	9 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8 m	1.8 m	9 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)	27.8 m N, 43 m E	28 m N, 43 m E	N/A
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	N/A	N/A

Porterville			
Pollutant	**Ozone**	**PM2.5**	**Meteorology**
Residence time for reactive gases NO/NO_2/NO_y, SO_2, O_3; PAMS: VOCs, Carbonyls (seconds)	10.69	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 lovol? 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)	10/14/2025	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	5/6/2025, 10/14/2025	N/A
Changes planned within the next 18 months (Y/N)	No upcoming changes.	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	2,100 / 2023 (Traffic count for nearest roads: Rte 198 / Sequoia National Park boundary, Source: Caltrans AADT 2023)
Ground Cover	Dirt, vegetative

Sequoia-Ash Mountain			
Pollutant	**Ozone**	**PM2.5**	**Meteorology**
Parameter code	44201	88101	Many
Spatial scale	R	R	R
Site type	GB, WRI	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	None	None
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	N/A
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	N/A	N	N/A
Instrument manufacturer and model	Thermo TECO 49i, 49C	Met One BAM 1020	All in One (AIO) by Vaisala (WXT536)
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	1.6 m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	6 m above the highest obstruction on the shelter roof, which is the railing, and approximately 5m to the south of the shelter	1.5 m (Best available information.)	6 m above the highest obstruction on the shelter roof, which is the railing, and approximately 5m to the south of the shelter
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	5 m (Best available information.)	N/A	5 m (Best available information.)
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)	10.8 m horizontal distance, approximate 3 m protrusion over the probe	N/A	10.8 m horizontal distance, approximate 3 m protrusion over the probe

Pollutant	Ozone	PM2.5	Meteorology
Distance from the drip line of closest tree(s)	5 - 10 m (Best available information. NPS does not have the capacity to go to site and re-measure.)	5 - 10 m (Best available information. NPS does not have the capacity to go to site and re-measure.)	5 - 10 m (Best available information. NPS does not have the capacity to go to site and re-measure.)
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
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	Every other day	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)	12/11/2025	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	4/23/2025, 12/10/2025	N/A
Changes planned within the next 18 months (Y/N)	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, NO2; Meteorology	SJVAPCD: Speciated VOC, NMH
Analytical Lab (i.e. weigh lab, toxics lab, other)	In 2025, the SJVAPCD was contracted with Enthalpy Analytical: Speciated VOC	
Reporting Agency	CARB: Ozone, NO2; Meteorology	SJVAPCD: Speciated VOC, NMH
Site Start Date	1/1/1989	
Pollutant Parameters	Ozone, NO2, 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	3,195; 2025 (Central Ave and Walker St. Source: Kern Council of Governments Traffic Counts Data System.)	
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved	

Shafter					
Pollutant	**Ozone**	**NO_2**	**Speciated VOC**	**NMH**	**Meteorology**
Parameter code	**Ozone**	**NO_2**	Many	43102	Many
Spatial scale	44201	42602	N	N	R
Site type	N	N	HC	PE	GB
Basic monitoring objective(s)	GB,PE	PE	RS	RS	RS, TP
Monitor type	NC, RS, TP	NC, RS, TP	Other	Other	Other
Network affiliation(s), if applicable (a monitor may have none, one, or multiple)	SLAMS	SLAMS	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	N/A
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)	7.2	7.2	7.2 m	7.2 m	10 m

Pollutant	Ozone	NO_2	Speciated VOC	NMH	Meteorology
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.2	2.2	2.4	2.4	10 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)	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	17m N	15m N	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)	16.8	18.4	2.79	14.38	N/A
Frequency of one-point QC check for gaseous instruments	5 days/week	5 days/week	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
Pollutant	**Ozone**	**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
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)	7/30/25	7/30/25	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	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	9,358; 2025 (Traffic count for roads: Manor St. near the air monitoring station. Source: Kern Council of Governments. Traffic Counts Data System)
Ground Cover	Dirt, vegetative

Oildale			
Pollutant	**Ozone**	**PM10 STP / LC**	**Meteorology**
Parameter code	44201	81102	Many
Spatial scale	U	MD	U
Site type	HC	PE	GB
Basic monitoring objective(s)	NC	NC	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	N/A
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)	10 m and 5 m	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 collocated 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)	7.4	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
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	Bi-Monthly	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	N/A	N/A
Last Annual Performance Evaluation (gaseous)	9/5/25	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	3/25/2025, 9/5/2025	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	5,029/2024 (Traffic count for nearest roads: 30th St. at Golden State Ave., Source: Kern Council of Governments Traffic Counts Data System.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Paved

Bakersfield-Golden/M St			
Pollutant	**PM10 LC / STP**	**PM2.5**	**Meteorology**
Parameter code	81102	88101	Many
Spatial scale	N	N	N
Site type	PE	PE	PE
Basic monitoring objective(s)	NC, RS, TP	NC, RS, TP	NC, RS
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	3	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	N/A
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	N/A	Y	N/A
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	ITP- Met One 598B, WDV- RM Young 92000, WSV- RM Young 92000 OTP – RM Young 92000
Analysis method	Beta Attenuation	Beta Attenuation	Many
Method code	122	170	130
Monitoring start date (MM/DD/YYYY)	1/20/2022	01/20/2022	01/01/2024
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)	6.9 m	7.0 m	7.0 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	1.8 m	1.9 m	1.9 m

Pollutant	PM10 LC / STP	PM2.5	Meteorology
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
Distance from the drip line of closest tree(s)	12 m WSW	11.5 m WSW	11.3 m WSW
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/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	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
Frequency of flow rate verification for automated PM analyzers (routine checks)	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).	No	No	N/A

Pollutant	PM10 LC / STP	PM2.5	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).	No	No	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
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	3/26/2025, 9/4/2025	3/26/2025, 9/4/2025	N/A
Changes planned within the next 18 months (Y/N)	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 FEM, 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	32,593 / 2025 (Traffic count for roads: California Ave between Stockdale Hwy and Business Center Dr., Source: Kern Council of Governments.) Traffic Counts Data System
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	GB	PE	PE	PE
Basic monitoring objective(s)	NC	NC	NC	NC
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 T400	Met One BAM 1020	Thermo Model 2025i	Thermo Model 2025i
Analysis method	UV	Beta Attenuation	Sequential Air Gravimetric Sampler w/VSCC	Sequential Air Gravimetric Sampler w/VSCC
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)	None	None	None	None
Distance from the drip line of closest tree(s)	>10m	>10m	>10m	>10m
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	3.5	>2	1.4
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 lovol? 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)	9/3/25	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	9/3/25, 12/2/25	3/25/25, 9/3/25	3/25/25, 9/3/25
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	PE	PE
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	CSN STN	CSN STN
FRM/FEM/ARM/Other	Non-FEM	Other	Other	Other
POC	3	5 and 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”.)	Supplementary	Primary & QA Collocated (POC 5); QA Collocated (POC 6)	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	1:6	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)	None	None	None	None
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	3/25/25, 9/3/25	Per CARB, the URGs were not audited.	3/25/25, 9/3/25	3/25/25, 9/3/25
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	GB
Basic monitoring objective(s)	NC	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	N/A
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	Thermo 42 IQ	Xontech 924	Xontech 924	Vaisala HMP-155 (OT/RH) RM Young 81000 (WS/WD/3DT)
Analysis method	CL	Many	Many	Many
Method code	074	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 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
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)	9/3/25, 12/2/2025	3/20/24, 9/4/24	3/20/24, 9/4/24	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)	N	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	116,000; 2023* Traffic count for road adjacent to monitoring station: CA Route 99 and JCT. RTE 58 West / JCT. RTE. 178 East Source: Caltrans (2023) 4950; 2026** Westwind Drive near the air monitoring station. Source: Kern Council of Governments Traffic Counts Data System
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	N/A
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	N/A	N/A
Instrument manufacturer and model	Teledyne T500U	ITP-Met One BX-598, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	CAPS (Cavity Attenuated Phase Shift Spectroscopy)	Many
Method code	212	130
Monitoring start date (MM/DD/YYYY)	01/01/2019	05/13/2025
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)	5.6m	4.801
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.07m	1.9m
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)	7.7 m H, 14.8 m V	7.4 m H, 14.8 m V
Distance from the drip line of closest tree(s)	31.3 m	26.7 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
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)	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	N/A
Residence time for reactive gases $NO/NO_2/NO_y$, SO_2, O_3; PAMS: VOCs, Carbonyls (seconds)	6.70	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)	none	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-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	17,339 / 2025 (Traffic count for nearest cross street): S. Union Ave between E. Planz Rd and E White Lane Source: Kern Council of Governments Traffic Counts Data System 1,020 / 2025 (Traffic count for monitoring station's street address) Source: Kern Council of Governments Traffic Counts Data System
Ground Cover	Paved

Bakersfield-Airport (Planz)	
Pollutant	**PM2.5**
Parameter code	88101
Spatial scale	N
Site type	PE
Basic monitoring objective(s)	NC
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	Thermo 2025i
Analysis method	Gravimetric
Method code	145
Monitoring start date (MM/DD/YYYY)	02/18/2000
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)	0
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)	>10m
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	Monthly
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	3/25/25, 9/3/25
Changes planned within the next 18 months (Y/N)	Y

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 2024, the SJVAPCD was contracted with Enthalpy Analytical: 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
Address	2000 South Union Ave., Bakersfield, CA 93307
GPS Coordinates (decimal degrees)	35.3313 N, -119.0000 W
Distance to roadways (meters)	65m (North)
Traffic Count/Year	20,115 / 2025 (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 Counts Data System 4,919 / 2025 (Traffic count for road adjacent to monitoring station: Watts Dr between S Union Ave and Short St. Source: Kern Council of Governments Traffic Counts Data System
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	PE	PE	PE	PE	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	FEM	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	N/A
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	TeledyneT200	Entech 1900	Synspec Alpha 115	ITP-Met One BX-598, RH, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Chemiluminescence	Non-dispersive IR	Chem.	GC / UV Absorption	Flame Ionization	Many
Method code	199	554	099	177 / 202	011	130
Monitoring start date (MM/DD/YYYY)	06/01/2012	07/01/2012	07/01/2012	06/01/2012	10/01/2012	01/29/2025
Required sampling frequency (e.g. 1:3 excluding exceptional events/1:1 including exceptional events)	Hourly	Hourly	Hourly	1:3	Hourly	Hourly
Pollutant	**Ozone**	**CO**	**NO_2**	**Speciated VOC**	**NMH**	**Meteorology**
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	6.0 m	6.0 m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.1 m	2.1 m	2.1 m	2.1 m	2.1 m	10 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	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)	80m (North)	80m (North)	80m (North)	80m (North)	80m (North)	83.8m (North)
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	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	Teflon/Pyrex with Borosilicate	Stainless Steel	Teflon/Pyrex with Borosilicate	N/A

Pollutant	Ozone	CO	NO2	Speciated VOC	NMH	Meteorology
Residence time for reactive gases NO/NO_2/NO_y, SO_2, O_3; PAMS: VOCs, Carbonyls (seconds)	13.18	13.65	13.29	4	13.40	N/A
Frequency of one-point QC check for gaseous instruments	Daily	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	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 lovol?	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)	9/4/2025	9/4/2025	9/4/2025	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	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	2,836/2020 (Traffic count for nearest roads: Edison Hwy. and Comanche Dr., Source: Kern Council of Governments) Traffic Counts Data System
Ground Cover	Dirt, vegetative

Edison			
Pollutant	**Ozone**	**NO2**	**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	N/A
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	Thermo 42 IQ	RM Young 81000, Vaisala HMP 155
Analysis method	UV	CL	Many
Method code	087	074	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 m	16.1 m	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)	4.3	4.6	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	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)	7/29/25	7/29/25	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	581 / 2024 (Traffic count for Buena Vista Blvd east of Tejon Hwy., Source: Kern Council of GovernmentsTraffic Counts Data System)
Ground Cover	Dirt, vegetative

Arvin-Di Giorgio		
Pollutant	**Ozone**	**Meteorology**
Parameter code	44201	Many
Spatial scale	N	R
Site type	PE	GB
Monitor objective	NC	RS, TP
Monitor type	SLAMS	SLAMS (WD, WS), Other (OT, RH)
Network affiliation	Unofficial PAMS	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	N/A
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)	N/A	N/A
Instrument manufacturer and model	Teledyne API T400	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 m	18.5 m
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)	9.0	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)	10/21/25	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)	Y	

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	365/2024 (Traffic count for nearest roads: Union St. at California St., Source: Kern Council of Governments Traffic Counts Data System.)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)	Gravel, dirt, vegetative

Maricopa		
Pollutant	**Ozone**	**Meteorology**
Parameter code	44201	Many
N	N	N
Site type	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	N/A
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-Met One BX-598, RH, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
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)	4.8m	10 m
Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	2.0 m	10 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)	24 m	None
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)	7.62	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)	7/31/2025	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	525/2022 (Traffic count for nearest roads: Lebec Rd near Interstate 5, Source: Kern Council of Governments Traffic Counts Data System.)
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	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	ITP-Met One BX-598, RH, OT, BP, WD, & WS-Sonic 92000 Response One Weather Transmitter
Analysis method	Beta Attenuation	Many
Method code	731	Many
Monitoring start date (MM/DD/YYYY)	01/27/2009	OT, WS, WD - 5/22/2025
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)	4.7 m	4.7 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)	54m	57m
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)	4/24/2025, 10/21/2025	N/A
Changes planned within the next 18 months (Y/N)	N	N

APPENDIX C:

CARB's 2025 Enhanced Monitoring Plan

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California Air Resources Board
Air Quality Planning and Science Division
Air Quality Analysis Section

2025 Enhanced Monitoring Plan

Prepared for:
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

June 2025

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Introduction

I. Background

On October 1, 2015, the U.S. Environmental Protection Agency (U.S. EPA) revised the federal 8-hour average ozone standard from 0.075 parts per million (ppm) to 0.070 ppm. At the same time, U.S. EPA also revised monitoring requirements for the Photochemical Assessment Monitoring Station (PAMS) network and added the requirements for ozone nonattainment areas classified as Moderate or above to prepare an Enhanced Monitoring Plan (EMP).

As specified in 40 code of federal regulations (CFR) part 58, Appendix D, Section 5(a), "State and local agencies are required to collect and report PAMS measurements at each NCore site … located in a CBSA with a population of 1,000,000 or more, based on the latest census figures." The National Core (NCore) network is, as the name suggests, a core array of monitoring stations, covering all 50 states, which measures a set of federally defined pollutants. Core-Based Statistical Areas (CBSAs), generally represent the more populated city areas within the U.S. and tend to be the areas with the highest ozone precursor emissions and ozone concentrations, which make them suitable for use in ozone monitoring network design. By combining the PAMS network with the NCore network, as well as limiting them to areas with a large population, U.S. EPA is providing monitoring agencies in areas with multiple PAMS with a potential mechanism to save resources through the consolidation of monitoring activities at NCore sites. A further description of the NCore and PAMS networks, monitoring requirements, and future plans are included in the following NCore Monitoring Sites and PAMS sections, respectively.

The EMP must be prepared by each state with ozone nonattainment areas that have been classified as Moderate or above for the federal 8-hour average ozone standard.[1] The California Air Resources Board (CARB) is responsible for submitting the EMP for the entire state, including the South Coast, San Diego, and Bay Area Primary Quality Assurance Organizations (PQAO) and all air districts within the CARB PQAO that submit their own annual network plans and/or 5-year monitoring network assessments.

[1] U.S. EPA Ozone Designation and Classification Information. *https://www.epa.gov/green-book/ozone-designation-and-classification-information*

Federal monitoring regulations under 40 CFR part 58, Appendix D, Section 5(h) require the EMP to include monitoring activities deemed important to understanding the ozone problems in each state. Such activities may include, but are not limited to, the following:

1. Additional ozone monitors beyond the minimum required under paragraph 4.1 of Appendix D,
2. Additional nitrogen oxides (NO_x) or total reactive nitrogen (NO_Y) monitors beyond those required under 4.3 of Appendix D,
3. Additional speciated volatile organic compounds (VOCs) measurements including data gathered during different periods other than that required under paragraph 5(g), or locations other than those required under paragraph 5(a) of Appendix D, and
4. Enhanced upper air measurements of meteorology or pollution concentrations.

II. Summary of Federal 8-Hour Ozone Designations and Classifications

The U.S. EPA has promulgated three federal ozone standards based on an 8-hour average: the 1997 standard of 0.08 ppm; the 2008 standard of 0.075 ppm; and the 2015 standard of 0.070 ppm. With each standard, the U.S. EPA designated various areas of California as nonattainment and classified each area based on the magnitude of the ozone concentrations above the standard. Table 1 contains a listing of all the California nonattainment areas for each standard and the associated classifications.

For the 0.08 ppm ozone standard, 15 areas were designated as nonattainment and 12 of them were classified as Moderate or above. Additionally, 3 areas were classified as Marginal, the lowest classification level possible, since they were close to meeting the standard.

For the 0.075 ppm ozone standard, 16 areas were designated as nonattainment and 11 of them were classified as Moderate or above. The remaining 5 areas were classified as Marginal.

Lastly, for the 0.070 ppm ozone standard, 19 areas were designated as nonattainment, but only 10 of them were classified as Moderate or above and the remaining 9 were classified as Marginal. While more areas were designated nonattainment than for either of the previous two standards, the threshold of 0.070 ppm was the lowest federal 8-hour standard ever and about half of the areas were classified at the lowest level of Marginal. Also, two of the “new” nonattainment areas were the result of the Central and Southern Mountain County nonattainment areas

being split into individual counties. Two other nonattainment areas are localized, higher elevation mountain top areas with no population or emission sources. All of this indicates that the number of high ozone concentration nonattainment areas is steadily decreasing.

California's diligent and persistent efforts to reduce ozone concentrations across the State are evident in the decreasing number of nonattainment areas above the Moderate classification level, despite the standards becoming more stringent over time and very large increases in California's overall population and vehicle miles traveled.

Table 1: Moderate and Above Ozone Nonattainment Areas

Nonattainment Area	**Classification**		
	1997 Standard (0.08 ppm)[2]	**2008 Standard (0.075 ppm)[3]**	**2015 Standard (0.070 ppm)[4]**
Central Mountain Counties (Amador & Calaveras Counties)	Moderate[5]	-	-
Amador County	-	Attainment/Unclassifiable	Marginal[6]
Calaveras County	-	Marginal	Marginal[7]
Imperial County	Moderate[8]	Moderate	Marginal[9]
Kern County (Eastern Kern)	Moderate[5]	Severe 15	Serious[10]
Los Angeles-San Bernardino Counties (Western Mojave Desert)	Severe 15	Severe 15	Severe 15
Los Angeles-South Coast Air Basin	Extreme	Extreme	Extreme
Nevada County (Western Part)	Moderate[5]	Serious[7]	Serious
Riverside County (Coachella Valley)	Extreme	Extreme	Severe 15[11]
Sacramento Metropolitan Area	Severe 15	Severe 15[12]	Serious[13]
San Diego County	Maintenance - Moderate	Severe 15	Severe 15
San Joaquin Valley	Extreme	Extreme	Extreme
Southern Mountain Counties (Mariposa & Tuolumne Counties)	Moderate[5]	-	-
Mariposa County	-	Moderate[14]	Moderate[15]
Tuolumne County	-	Attainment/Unclassifiable	Marginal[7]
Ventura County	Serious[5]	Serious[7]	Serious

[2] U.S. EPA Green Book 8-Hour (1997) Ozone Area Information, *https://www.epa.gov/green-book/green-book-8-hour-ozone-1997-area-information-naaqs-revoked*

[3] U.S. EPA Green Book 8-Hour (2008) Ozone Area Information, *https://www.epa.gov/green-book/green-book-8-hour-ozone-2008-area-information*

[4] U.S. EPA Green Book 8-Hour (2015) Ozone Area Information, *https://www.epa.gov/green-book/green-book-8-hour-ozone-2015-area-information*

[5] Federal Register, Determinations of Attainment for the 1997 8-Hour Ozone Standard for Central Mountain Counties, Kern County (Eastern Kern), Nevada County (Western Part), Southern Mountain Counties, and Ventura County, *2012-29013 (77 FR 71551)*

[6] Federal Register, Determinations of Attainment for the 2015 8-Hour Ozone Standard for Amador County, *2022-20460 (87 FR 60897)*

[7] Federal Register, Determinations of Attainment for the 2008 8-hour ozone standard for Nevada County (Western part) and Ventura County; and for the 2015 8-hour ozone standard for Calaveras County, and Tuolumne County, *2022-22192 (87 FR 63698)*

[8] Federal Register, Determination of Attainment of the 1997 8-Hour Ozone Standard for Imperial County, *E9-22933 (74 FR 48495),*

[9] Federal Register, Determination of Attainment but for International Emissions for the 2015 8-Hour Ozone Standard for Imperial County, *2022-22276 (87 FR 63701)*

[10] At the time of this writing, Kern County (Eastern Kern) 2015 standard is Serious, but a request to the EPA has been made to bump up to Severe 15

[11] At the time of this writing, Riverside County (Coachella Valley) 2015 standard is Severe, but a request to the EPA has been made to bump up to Extreme

[12] Federal Register, Determination of Attainment for the 2008 8-Hour Ozone Standard for the Sacramento Metropolitan Area, *2025-04791 (90 FR 13316)*

[13] At the time of this writing, the Sacramento Metropolitan Area's 2015 standard is Serious, but a request to the EPA has been made to bump up to Severe 15

[14] Federal Register, Determination of Attainment for the 2008 8-Hour Ozone Standard for Mariposa County, *2016-30477 (81 FR 93624)*

[15] Federal Register, Determination of Attainment by the Attainment Date; California; Mariposa County; 2015 8-Hour Ozone National Ambient Air Quality Standards, *2025-09999 (90 FR 23501)*

III. Timelines

The EMP shall be reassessed and approved as part of the 5-year network assessments required under 40 CFR 58.10(d). As a result, CARB is submitting this EMP in conjunction with the 5-year monitoring network assessment that is due by July 1, 2025.

NCore Monitoring Sites

The NCore[16] monitoring site network was specifically designed to include long-term sites which measure a wide range of pollutants and produce data that are comparable across the U.S. This type of network provides data that are useful for a variety of purposes such as evaluating air quality trends, assessing regional and national model performance, and analyzing the formation, distribution, and transport of ozone and ozone precursors. With these broad applications in mind, the regulations also recommend placing NCore sites "away from direct emission sources that could substantially impact the ability to detect area-wide concentrations." Below is a discussion of California's NCore network.

I. California's NCore Network

NCore monitoring regulations under 40 CFR 58, Appendix D, Section 3, require that every state must operate at least one NCore site. However, states such as California, which have many metropolitan areas with ozone concentrations above the federal standards and are likely to be separated by complex terrain and long distances, are required to operate at least one to two additional NCore sites. The regulations also suggest that "NCore locations should be leveraged with other multipollutant air monitoring sites including PAMS, National Air Toxics Trends Stations (NATTS), Clean Air Status and Trends Network (CASTNET) sites, and Speciation Trends Network (STN) sites." This concept is consistent with the new PAMS monitoring regulations.

California not only meets the minimum requirement for two to three NCore sites statewide, but it exceeds the minimum with a total of seven sites (listed in Table 2) that are all essential for assessing pollutants across the vastly different air basins throughout the state. Six of the sites are in the largest metropolitan areas of the State and in most of the areas with the highest ozone concentrations. The seventh site is

[16] U.S. EPA NCore Monitoring Network *https://www.epa.gov/amtic/ncore-monitoring-network#sites*

located in the Great Basin, on the east side of the Sierra Nevada mountains, in a remote area that experiences limited impacts from major populated areas of California. Figure 1 shows all of the NCore monitoring locations within the various ozone nonattainment areas, designated moderate and above for any of the ozone standards, and Table 2 lists the NCore sites and PAMS in California.

The six NCore sites in the Sacramento, South Coast, Bay Area, San Diego, and San Joaquin Valley areas are required to operate PAMS since they are located in CBSAs with populations exceeding 1,000,000 people. The NCore sites in Sacramento, South Coast and San Diego already have PAMS operating at them, so only minor changes, if any, are needed to comply with the requirements in NCore Monitoring Requirements subsection. The Bay Area NCore site does not have PAMS measurements; however, the Bay Area Air Quality Management District (BAAQMD) has received a waiver from U.S. EPA to satisfy the PAMS monitoring requirements with the Livermore site instead of implementing PAMS at the San Jose-Jackson NCore site. Lastly, the NCore site operated by CARB in the San Joaquin Valley is in Fresno County, which only recently had a population that exceeds 1,000,000 people. The NCore site has two years to implement PAMS measurements, once the population of the area exceeded 1,000,000 and the PAMS at the Fresno NCore site will be active in June 2025.

The BAAQMD will be required to operate PAMS at the NCore site, or an alternate location. However, the BAAQMD is not required to prepare an EMP due to a nonattainment area classification of Marginal. The NCore site in the Great Basin is located in an attainment area and is not within a CBSA, so PAMS will not be required at that site, nor does the area need to prepare an EMP.

II. Monitoring Requirements

NCore sites are required to monitor for the following parameters:

1. $PM_{2.5}$ particle mass using continuous and integrated/filter-based samplers
2. Speciated $PM_{2.5}$
3. PM10-2.5 particle mass
4. Ozone
5. Sulfur dioxide (SO_2)
6. Carbon monoxide (CO)
7. Nitrogen oxide (NO) and total reactive nitrogen (NO_Y)
8. Wind speed
9. Wind direction
10. Relative humidity
11. Ambient temperature

All NCore sites in California sample for all of the above listed parameters.

III. Future Plans

At this time, none of the air districts operating NCore sites, nor CARB, intend to make any changes to the NCore locations in the near future. The only anticipated changes will involve implementing the new PAMS requirements at NCore sites or EPA-approved alternate locations, which may include the addition or removal of monitoring equipment and sampling methods for certain pollutants and meteorological parameters to meet regulatory and air monitoring program needs.

Figure 1: Federal Ozone Nonattainment Areas designated Moderate and Above, for any of the ozone standards

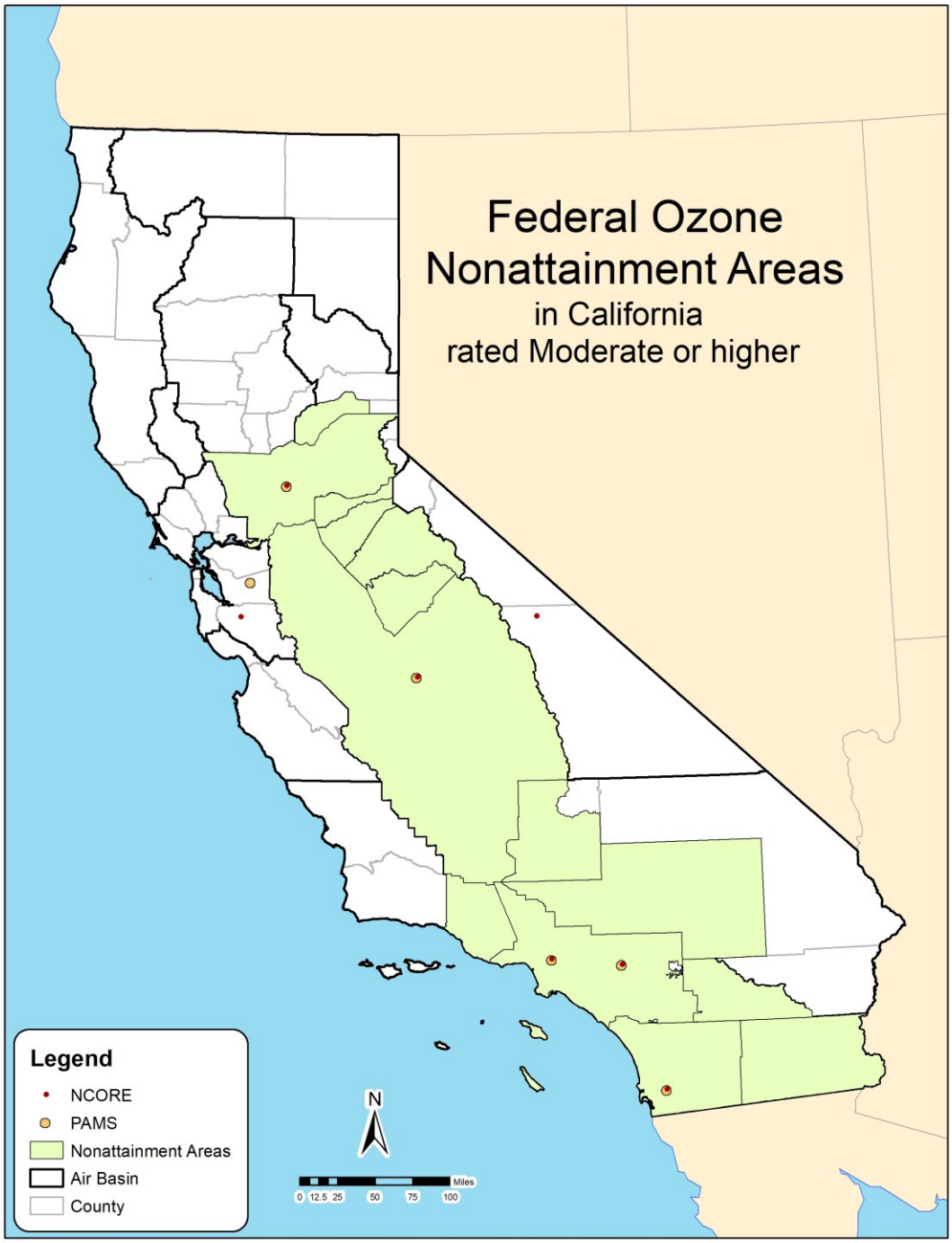


Table 2: NCore[17] Sites and PAMS[18] in California

Air District	County	Site	NCORE	PAMS
Bay Area	Santa Clara	San Jose - Jackson	X	
Bay Area	Alameda	Livermore		X
Great Basin Unified	Inyo	White Mountain Research Center	X	
Sacramento Metro	Sacramento	Sacramento-Del Paso Manor	X	X
San Diego	San Diego	El Cajon - Lexington Elementary School	X	X
San Joaquin Valley	Fresno	Fresno - Garland	X	X*
South Coast	Los Angeles	Los Angeles-North Main Street	X	X
South Coast	Riverside	Rubidoux	X	X

* PAMS measurements will be active in June 2025

PAMS

I. California's PAMS Network

There are six PAMS operating across California in six different counties, as shown above in Figure 1 and listed in Table 2. CARB and four different air districts are responsible for operating the six stations: CARB operates the Fresno-Garland site within the San Joaquin Valley; the Bay Area Air Quality Management District (BAAQMD), operates one site; the Sacramento Metropolitan Air Quality Management District (SMAQMD), operates one site; the San Diego County Air Pollution Control District (SDCAPCD), operates one site; and the South Coast Air Quality Management District (SCAQMD), operates two sites.

Four of the five districts (SMAQMD, BAAQMD, SCAQMD, and SDCAPCD) were required to implement PAMS monitoring due to the magnitude and spatial extent of ozone in the various areas of California relative to previous and current federal ozone standards and the population within each CBSA. The BAAQMD has operated two unofficial PAMS that were not required in the past. One of these sites, Livermore, will be the required PAMS. It was approved by U.S. EPA as an alternate location to the San Jose-Jackson NCore site per 40 CFR 58, Appendix D, 5(c). While the District will continue to operate the San Ramon site as resources allow, it will not be part of the

[17] U.S. EPA NCore Monitoring Network *https://www.epa.gov/amtic/ncore-monitoring-network#sites*
[18] U.S. EPA Photochemical Assessment Monitoring Stations (PAMS) *https://www.epa.gov/amtic/photochemical-assessment-monitoring-stations-pams*

BAAQMD's required PAMS network. The BAAQMD's "2024 Air Monitoring Network Plan" contains a more thorough description of the District's PAMS network and includes the waiver request and U.S. EPA approval letters.

The purpose of the PAMS is to help develop a deeper understanding of ozone precursor sources and ozone formation processes within major high ozone concentration areas. The PAMS requirement is that PAMS be operated at NCore sites in CBSA's with a population of 1,000,000 or more. As noted in California's NCore Network section, five of the six NCore sites that are required to operate PAMS currently have PAMS equipment in-place or a waiver to perform PAMS monitoring at an alternate location. The sixth location, in Fresno County, the PAMS will be active in 2025.

II. Monitoring Requirements

As specified in 40 CFR 58, Appendix D, Section 5(b), PAMS monitoring sites must measure the following parameters:

1. Hourly averaged speciated volatile organic compounds (VOC)
2. Three 8-hour averaged carbonyl samples per day on a 1-in-3 day schedule, or hourly averaged formaldehyde
3. Hourly averaged ozone
4. Hourly averaged nitrogen oxide (NO), true nitrogen dioxide (NO_2), and total reactive nitrogen (NO_y)
5. Hourly averaged ambient temperature
6. Hourly vector-averaged wind direction
7. Hourly vector-averaged wind speed
8. Hourly averaged atmospheric pressure
9. Hourly averaged relative humidity
10. Hourly precipitation
11. Hourly averaged mixing height
12. Hourly averaged solar radiation
13. Hourly averaged ultraviolet radiation

To measure the mixing height for item 11, in the past, most air districts have operated radar wind profilers and Radio Acoustic Sounding Systems (RASS). However, those systems are large, require frequent maintenance, and are costly to procure and operate; therefore, ceilometers are currently operated at most NCore sites to meet the requirement.

III. Current and Future Plans

Following the 2020 U.S. census, Fresno, CA became a Core Based Statistical Area with a population of over one million, requiring the creation of a Photochemical Assessment Monitoring Station (PAMS) program in the area according to 40 CFR, Part 58, Appendix D. In addition, CARB was required to establish the PAMS program as part of the agency's existing State Implementation Plan and the added importance of ozone monitoring in nonattainment areas classified as serious, severe, or extreme. The main objective of the program to be operated at the existing Fresno-Garland NCore monitoring site is to develop a database of ozone precursors and meteorological measurements to support ozone model development and track the trends of important ozone precursor concentrations.

The program's implementation is currently undertaking a phased approach. The instruments arriving at CARB are subjected to acceptance testing, siting, and deployment for data collection in stages. The volatile organic carbons, carbonyl species, total precipitation, and mixing layer height instruments have already been placed in service, with the remainder of the required instruments deployed as they become available. Carbonyl sampling will be performed only during the June-August peak season; however, the planned operation of all the other instruments is expected to occur year-round.

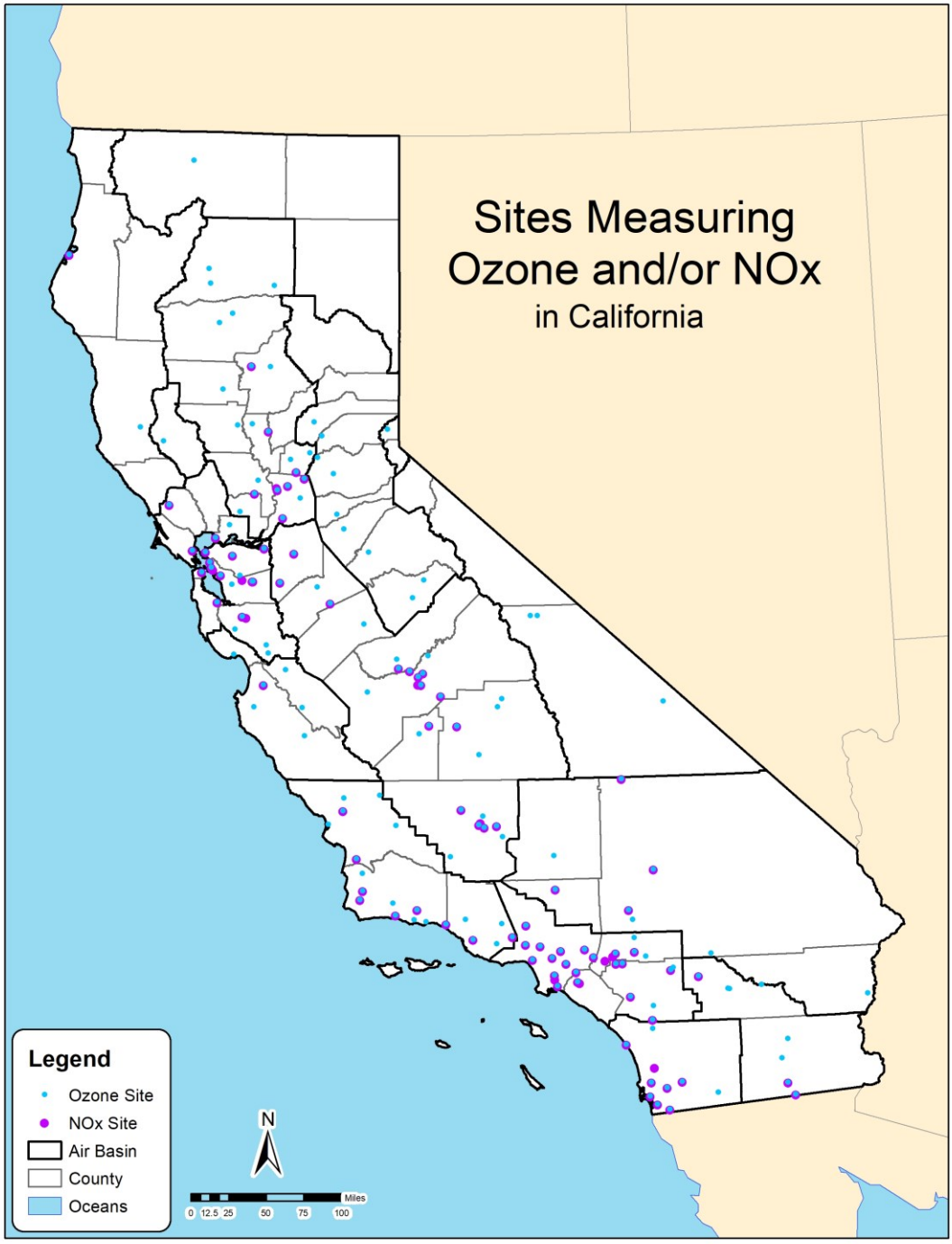
Based on regulatory requirements for operating PAMS, the Fresno County PAMS site is active as of June 2025; no other PAMS will need to be added. CARB and the districts assess the network adequacy on a regular basis and if new PAMS are deemed necessary to fill gaps in understanding, then new sites will be established.

Moderate and Above Nonattainment Areas

California has one of the most extensive air monitoring networks in the world that has been built up over several decades. Some of the key reasons for this large, multi-faceted network are the State's desire to fully understand sources of emissions, pollutant formation processes, and transport mechanisms so that regulations and programs can be established to protect the health of the people and ultimately bring all nonattainment areas into attainment for each of the National Ambient Air Quality Standards (NAAQS). To accomplish these goals for ozone across such a vast area with complex terrain and numerous localized meteorological patterns requires much more than the minimum number of ozone and ozone precursor monitors than is required in federal regulations under 40 CFR 58, Appendix D, Section 4.

Table 18 and Table 19, in the Appendix, contain a listing of 160+ ozone monitors and nearly 100 NO_x monitors currently operating in California. Figure 2 is a map showing the location of all the ozone and NO_x monitoring sites. This massive network is needed to help CARB and local air districts understand ozone concentrations within each nonattainment area and verify that ozone concentrations continue to meet the ozone NAAQS in attainment areas. Because of the size of the network and the wide range of pollutants measured, recent network assessments generally agree that most areas of the State with ozone concerns are adequately monitored and that there is limited need for additional monitoring activities.

Figure 2: Ozone and NOx Monitoring Sites in California



* The ozone monitoring site at Sequoia Natl Park-Lower Kaweah closed on November 5, 2024, and is not expected to resume operations. The site is still on the map as it was operational most of 2024.

Below is a discussion for each ozone nonattainment area in California that has been classified as Moderate or above for any of the federal 8-hour average ozone

standards. Each section evaluates whether or not additional monitoring of ozone, ozone precursors, or meteorological parameters is needed to further the understanding of ozone formation within the nonattainment areas and transport between all areas of the State.

I. Amador County

The Amador County nonattainment area is included in this EMP because of the designation classification of Moderate for the 1997 federal 8-hour ozone standard. Classifications for each of the ozone standards are listed in Table 3.

Table 3: Amador County ozone standards classifications

1997 Standard (0.08 ppm)*	**2008 Standard (0.075 ppm)**	**2015 Standard (0.070 ppm)**
Moderate[19]	Attainment/Unclassifiable	Marginal[20]

* Note: For the 1997 standard, Amador County and Calaveras County were combined into the Central Mountain Counties nonattainment area

Ozone concentrations in Amador County are overwhelmingly the result of transport from neighboring, more severe nonattainment areas to the west and northwest; therefore, implementing a more extensive network of ozone and ozone precursor monitors would not provide significant additional information.

CARB operates one monitoring station in the nonattainment area, Jackson-Clinton Road, and this location continues to meet the needs of monitoring the highest ozone concentrations and population exposure.

Ozone air quality continues to improve in the nonattainment area, due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation, and U.S. EPA has already made the determination of attainment for the area for all three standards. No

[19] Federal Register, Determinations of Attainment for the 1997 8-Hour Ozone Standard for Central Mountain Counties, Kern County (Eastern Kern), Nevada County (Western Part), Southern Mountain Counties, and Ventura County, *2012-29013 (77 FR 71551)*

[20] Federal Register, Determinations of Attainment for the 2015 8-Hour Ozone Standard for Amador County, *2022-20460 (87 FR 60897)*

additional ozone or ozone precursor monitoring is planned or needed for the Amador County nonattainment area at this time.

II. Calaveras County

The Calaveras County nonattainment area is included in this EMP because of the designation classification of Moderate for the 1997 federal 8-hour ozone standard. Classifications for each of the ozone standards are listed in Table 4.

Table 4: Calaveras County ozone standards classifications

1997 Standard (0.08 ppm)*	2008 Standard (0.075 ppm)	2015 Standard (0.070 ppm)
Moderate[21]	Marginal	Marginal[22]

* Note: For the 1997 standard, Amador County and Calaveras County were combined into the Central Mountain Counties nonattainment area

Ozone concentrations in Calaveras County are overwhelmingly the result of transport from neighboring, more severe nonattainment areas to the west and northwest; therefore, implementing a more extensive network of ozone and ozone precursor monitors would not provide significant additional information.

CARB operates one monitoring station in the nonattainment area, San Andreas-Gold Strike Road, and this location continues to meet the needs of monitoring the highest ozone concentrations and population exposure.

Ozone air quality continues to improve in the nonattainment area, due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation and U.S. EPA has already made the determination of attainment for the area for all three standards. No additional ozone or ozone precursor monitoring is planned or needed for the Calaveras County nonattainment area at this time.

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[21] Federal Register, Determinations of Attainment for the 1997 8-Hour Ozone Standard for Central Mountain Counties, Kern County (Eastern Kern), Nevada County (Western Part), Southern Mountain Counties, and Ventura County, *2012-29013 (77 FR 71551)*

[22] Federal Register, Determinations of Attainment for the 2008 8-hour ozone standard for Nevada County (Western part) and Ventura County; and for the 2015 8-hour ozone standard for Calaveras County, and Tuolumne County, *2022-22192 (87 FR 63698)*

III. Imperial County

The Imperial County nonattainment area is included in this EMP because of the designation to a classification of Moderate for the 1997 and 2008 federal 8-hour ozone standards. Classifications for each of the ozone standards are listed in Table 5.

Table 5: Imperial County ozone standards classifications

1997 Standard (0.08 ppm)	**2008 Standard (0.075 ppm)**	**2015 Standard (0.070 ppm)**
Moderate[23]	Moderate	Marginal[24]

The Imperial County Air Pollution Control District operates three monitoring sites for ozone and ozone precursors and CARB operates one site in the nonattainment area. These four locations continue to meet the needs of monitoring the highest ozone concentrations, population exposure, and transport into the nonattainment area from south of the U.S.-Mexico border and, to a much lesser extent, from nonattainment areas within California to the west and north of the area.

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

IV. Kern County (Eastern Kern)

The Eastern Kern portion of Kern County has been designated as a nonattainment area for all three federal 8-hour ozone standards and the classifications are listed in Table 6.

[23] Federal Register, Determination of Attainment of the 1997 8-Hour Ozone Standard for Imperial County, *E9-22933 (74 FR 48495),*
[24] Federal Register, Determination of Attainment but for International Emissions for the 2015 8-Hour Ozone Standard for Imperial County, *2022-22276 (87 FR 63701)*

Table 6: Eastern Kern ozone standards classifications

1997 Standard (0.08 ppm)	2008 Standard (0.075 ppm)	2015 Standard (0.070 ppm)
Moderate[25]	Severe 15	Serious[26]

Ozone concentrations in the Eastern Kern nonattainment area are overwhelmingly the result of transport from neighboring extreme nonattainment areas to the west and south. CARB operates one monitoring station in the nonattainment area, Mojave-Pat Avenue, this location is positioned well to measure the highest ozone concentrations and assess population exposure in the central portion of the area. CARB is currently assessing locations for an additional ozone monitoring station within the Eastern Kern ozone nonattainment area.

Even though there is limited ambient, ground-level pollutant monitoring and some difficulty proportioning the contribution of transported ozone into the Eastern Kern region from neighboring nonattainment areas, these factors are not critical for reducing ozone in the region because ozone concentrations in Eastern Kern are transport-dominated, rather than locally generated. While additional understanding of ozone transport mechanisms and paths including ozone monitoring along the transport paths to the west and south could potentially be beneficial, ozone concentrations are expected to continue to gradually decrease in Eastern Kern due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation in upwind nonattainment areas.

V. Los Angeles-San Bernardino Counties (Western Mojave Desert)

The Western Mojave Desert has been designated as a nonattainment area for all three federal 8-hour ozone standards and the classifications are listed in Table 7.

[25] Federal Register, Determinations of Attainment for the 1997 8-Hour Ozone Standard for Central Mountain Counties, Kern County (Eastern Kern), Nevada County (Western Part), Southern Mountain Counties, and Ventura County, *2012-29013 (77 FR 71551)*

[26] At the time of this writing, Eastern Kern's 2015 standard is Serious, but a request to the EPA has been made to bump up to Severe 15

Table 7: Western Mojave Desert ozone standards classifications

1997 Standard (0.08 ppm)	2008 Standard (0.075 ppm)	2015 Standard (0.070 ppm)
Severe 15	Severe 15	Severe 15

Ozone concentrations in the Western Mojave Desert are overwhelmingly the result of transport from the extreme nonattainment areas to the north and southwest; therefore, implementing a more extensive network of ozone and ozone precursor monitors is not necessary for understanding why ozone concentrations are high in the Western Mojave Desert nonattainment area. Additional air quality and meteorological monitoring could help with evaluating the spatial variation and extent of ozone within the area; assist with developing a better understanding of pollution transport mechanisms; and support modeling, but the current ozone monitoring network appears to be adequate for monitoring the highest ozone concentrations and evaluating population exposure. The District had an ozone monitoring site, Phelan-Beekley Road and Phelan Road, this site was discontinued in November 2023. To date, a suitable nearby alternative site location has not been confirmed. However, the District has presented replacement and/or substitution sites to the U.S. EPA, which as of yet, haven't been approved.

Despite the severe ozone classification, maximum 8-hour ozone concentrations and the number of exceedances continue to decline in the nonattainment area due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation. Aside from the relocation of the Phelan-Beekley and Phelan Road ozone site, no additional ozone or ozone precursor monitoring is planned for the Western Mojave Desert nonattainment area at this time.

VI. Los Angeles-South Coast Air Basin

The South Coast Air Basin (SoCAB) has been designated as a nonattainment area for all three federal 8-hour ozone standards and the classifications are listed in Table 8.

Table 8: South Coast Air Basin ozone standards classifications

1997 Standard (0.08 ppm)	2008 Standard (0.075 ppm)	2015 Standard (0.070 ppm)
Extreme	Extreme	Extreme

Ozone concentrations in the SoCAB are generally the result of local emissions and ozone formation and intra-regional transport. Ozone and ozone precursor monitoring has occurred in the SoCAB for many decades, providing an extensive data record for assessing air quality trends throughout the large area. In addition, the network of monitors greatly exceeds minimum requirements, and the thorough spatial coverage of the network allows ozone concentrations to be monitored in all of the various zones within the SoCAB.

South Coast Air Quality Management District (South Coast AQMD) operates two NCore and two PAMS sites to aid in the understanding of ozone formation processes and transport within the nonattainment area. To collect important mixing height data, South Coast AQMD operates ceilometers at the Los Angeles-North Hollywood and Rubidioux sites.

The U.S. EPA approved a waiver request to use precipitation measurements from National Weather Service, Federal Aviation Administration, the University of Southern California, and Riverside Municipal Airport locations to meet that monitoring requirement.

Overall, no additional monitoring sites are needed within the South Coast Air Basin nonattainment area at this time to meet regulatory requirements or increase understanding of ozone formation and transport within the area.

VII. Mariposa County

The Mariposa County nonattainment area is included in this EMP because of the designation classification of Moderate for all three federal 8-hour ozone standards. Classifications for each of the ozone standards are listed in Table 9.

Table 9: Mariposa County ozone standards classifications

1997 Standard (0.08 ppm)*	2008 Standard (0.075 ppm)	2015 Standard (0.070 ppm)
Moderate[27]	Moderate[28]	Moderate[29]

* Note: For the 1997 standard, Mariposa County and Tuolumne County were combined into the Southern Mountain Counties nonattainment area

Ozone concentrations in Mariposa County are overwhelmingly the result of transport from neighboring nonattainment areas to the west; therefore, implementing a more extensive network of ozone and ozone precursor monitors would not provide significant additional information. CARB operates one of two monitoring sites in the nonattainment area, Jerseydale, while the National Park Service operates the other site. The two locations continue to meet the needs of monitoring the highest ozone concentrations and population exposure across the area.

Ozone air quality continues to improve in the nonattainment area, due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation. The U.S. EPA has made the determination of attainment for the area the 1997 and 2008 standards and has proposed to determine that the Mariposa County nonattainment area attained the 2015 ozone NAAQS by the August 3, 2024 attainment date.[29] No additional ozone or ozone precursor monitoring is planned or needed for the Mariposa County nonattainment area at this time.

VIII. Nevada County (Western Part)

Western Nevada County has been designated as a nonattainment area for all three federal 8-hour ozone standards and the classifications are listed in Table 10.

[27] Federal Register, Determinations of Attainment for the 1997 8-Hour Ozone Standard for Central Mountain Counties, Kern County (Eastern Kern), Nevada County (Western Part), Southern Mountain Counties, and Ventura County, *2012-29013 (77 FR 71551)*

[28] Federal Register, Determination of Attainment for the 2008 8-Hour Ozone Standard for Mariposa County, *2016-30477 (81 FR 93624)*

[29] Federal Register, Determination of Attainment by the Attainment Date; California; Mariposa County; 2015 8-Hour Ozone National Ambient Air Quality Standards, *2025-09999 (90 FR 23501)*

Table 10: Western Nevada County ozone standards classifications

1997 Standard (0.08 ppm)	2008 Standard (0.075 ppm)	2015 Standard (0.070 ppm)
Moderate[30]	Serious[31]	Serious

Ozone concentrations in Western Nevada County are overwhelmingly the result of transport from neighboring nonattainment areas to the southwest; therefore, implementing a more extensive network of ozone and ozone precursor monitors is not specifically needed to understand why there are high concentrations in the area. However, having enough monitors to understand the spatial extent of ozone, transport patterns, population exposure in various communities in a nonattainment area classified as Moderate or above is critical.

The Northern Sierra Air Quality Management District (NSAQMD) operates the only functioning monitoring site in the nonattainment area (Grass Valley-Litton Building) and this location meets the needs of monitoring the highest ozone concentrations and population exposure in the largest city. CARB also had an ozone monitoring site, White Cloud Mountain, east of the NSAQMD site which operated through 2015, but due to numerous site-related problems, the site has not been able to collect any data since that time and will not be able to return to the location due to site modifications by the property owner. CARB is in the process of developing a monitoring location in Nevada City with a planned start date in the Fall of 2025. The site will provide additional data to better understand the ozone issues within this Moderate/Serious nonattainment area previously covered by the White Cloud Mountain monitoring site.

Ozone air quality had improved in the nonattainment area, due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation. However, recent years have seen ozone concentrations remain flat or even begin to increase slightly;

[30] Federal Register, Determinations of Attainment for the 1997 8-Hour Ozone Standard for Central Mountain Counties, Kern County (Eastern Kern), Nevada County (Western Part), Southern Mountain Counties, and Ventura County, *2012-29013 (77 FR 71551)*

[31] Federal Register, Determinations of Attainment for the 2008 8-hour ozone standard for Nevada County (Western part) and Ventura County; and for the 2015 8-hour ozone standard for Calaveras County, and Tuolumne County, *2022-22192 (87 FR 63698)*

therefore, one additional ozone monitor would be beneficial for the Western Nevada County nonattainment area.

IX. Riverside County (Coachella Valley)

The Coachella Valley has been designated as a nonattainment area for all three federal 8-hour ozone standards and the classifications are listed in Table 11.

Table 11: Coachella Valley ozone standards classifications

1997 Standard (0.08 ppm)	2008 Standard (0.075 ppm)	2015 Standard (0.070 ppm)
Extreme	Extreme	Severe 15[32]

Ozone concentrations in the Coachella Valley are overwhelmingly the result of transport from neighboring South Coast Air Basin nonattainment area to the west; therefore, implementing a more extensive network of ozone and ozone precursor monitors would not provide significant additional information.

The South Coast AQMD operates two ozone monitoring sites in the nonattainment area, Indio and Palms Springs, while the National Park Service operates one site in Joshua Tree National Park. The three locations continue to meet the needs of monitoring the highest ozone concentrations and population exposure across the area.

Ozone air quality continues to improve in the nonattainment area, due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation. No additional ozone or ozone precursor monitoring is planned for the Coachella Valley nonattainment area at this time.

X. Sacramento Metropolitan Area

The Sacramento Metropolitan Area has been designated as a nonattainment area for all three federal 8-hour ozone standards and the classifications are listed in Table 12.

[32] At the time of this writing, Riverside County (Coachella Valley) 2015 standard is Severe, but a request to the EPA has been made to bump up to Extreme

Table 12: Sacramento Metropolitan ozone standards classifications

1997 Standard (0.08 ppm)	2008 Standard (0.075 ppm)	2015 Standard (0.070 ppm)
Severe 15	Severe 15[33]	Serious[34]

Ozone concentrations in the Sacramento Metropolitan Area are largely derived from local emissions and formation and the transport of the ozone throughout the region is driven by local wind flow patterns and constrained by the terrain. The Sacramento Metropolitan Air Quality Management District (SMAQMD), along with CARB, the Yolo-Solano Air Quality Management District, and the Placer County Air Pollution Control District operate 15 ozone monitoring sites across the area and many of those include ozone precursor monitoring. The nonattainment area also includes the southern portion of Sutter County, under the jurisdiction of the Feather River Air Quality Management District, but no ozone monitoring is conducted in this small region. The Sacramento Metropolitan Area monitoring network has very good spatial coverage, captures high concentrations during all typical, summertime weather patterns, and has long data records for assessing trends. All of these factors contribute to a thorough understanding of ozone formation within, and transport into and through, the nonattainment area.

The SMAQMD operates one NCore and PAMS site both at Del Paso Manor. To meet the PAMS requirements, the SMAQMD added hourly VOC measurements to the NCore site and will operate a ceilometer at the Elk Grove site through a waiver obtained from U.S. EPA. To offset the added demands at the NCore site and save staff time and resources, the SMAQMD discontinued speciated VOC measurements at the Elk Grove and Folsom PAMS as well as reactive oxides of nitrogen at the Folsom PAMS. However, all other PAMS parameters will continue to be monitored.

Ozone air quality continues to improve in the nonattainment area, due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation. No additional ozone or

[33] Federal Register, Determination of Attainment for the 2008 8-Hour Ozone Standard for the Sacramento Metropolitan Area, *2025-04791 (90 FR 13316)*

[34] At the time of this writing, the Sacramento Metropolitan Area's 2015 standard is Serious, but a request to the EPA has been made to bump up to Severe 15

ozone precursor monitoring is planned for the Sacramento Metropolitan nonattainment area at this time.

XI. San Diego County

San Diego County has been designated as a nonattainment area for all three federal 8-hour ozone standards and the classifications are listed in Table 13.

Table 13: San Diego County ozone standards classifications

1997 Standard (0.08 ppm)	**2008 Standard (0.075 ppm)**	**2015 Standard (0.070 ppm)**
Maintenance - Moderate	Severe 15	Severe 15

The SDCAPCD operates ozone, ozone precursor, and meteorological monitors throughout the nonattainment area and is adequately able to capture the highest concentrations, evaluate transport mechanisms, and assess ozone concentrations and population exposure in most of the majorly populated areas.

Additionally, the District has operated one PAMS within the nonattainment area, at the El Cajon-Lexington site to understand ozone formation and transport near the center of the main metropolitan area. To meet the PAMS monitoring requirements, the SDCAPCD plans to monitor all parameters at the Lexington NCore site.

Ozone air quality continues to improve in San Diego County, due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation. No additional ozone or ozone precursor monitoring is planned for the San Diego County nonattainment area at this time.

XII. San Joaquin Valley

The San Joaquin Valley has been designated as a nonattainment area for all three federal 8-hour ozone standards and the classifications are listed in Table 14.

Table 14: San Joaquin Valley ozone standards classifications

1997 Standard (0.08 ppm)	2008 Standard (0.075 ppm)	2015 Standard (0.070 ppm)
Extreme	Extreme	Extreme

Due to the severity of the ozone concentrations in the San Joaquin Valley, the San Joaquin Valley Air Pollution Control District (SJVAPCD) operates six enhanced ozone monitoring sites within the nonattainment area to help increase understanding of ozone formation and transport in the Valley, these sites are listed in Table 15. These sites are located in and around the two cities with the highest ozone concentrations, with three sites in the Fresno area (in addition to the CARB operated site, listed in Table 2) and three sites in the Bakersfield area (all SJVAPCD operated sites are listed in Table 15). Each area has had three sites to account for the previous PAMS types: upwind, maximum ozone concentration, and downwind. In January 2024 updates to the Arvin-DiGiorgio site were completed, it was updated to a container and is secured with steel fencing and cameras. The SJVAPCD intends to continue operating all the enhance ozone monitoring sites to provide long-term data records for the wide range of parameters collected at each site.

Table 15: Enhanced Ozone Monitoring Sites operated by the San Joaquin Valley APCD

County	Site
Fresno	Parlier
Fresno	Clovis-N Villa Avenue
Kern	Shafter-Walker Street
Kern	Arvin-Di Giorgio*
Kern	Bakersfield-Municipal Airport
Madera	Madera-Pump Yard

*The Arvin-Di Giorgio station is not currently operating as a PAMS; SJVAPCD will coordinate with CARB (site-owner) as a part of the consideration for expanding the station to serve as a down-wind PAMS site.

CARB operates the NCore monitoring site (Fresno-Garland) within the San Joaquin Valley nonattainment area. While some PAMS equipment has already been installed and is operational, additional components are still being implemented. Previously, the site was not required to install full PAMS monitoring capabilities because the CBSA population had not yet reached 1,000,000. However, the CBSA population has

recently exceeded this threshold. CARB has been working to add all required PAMS elements at the Fresno-Garland NCore site, and the full PAMS will be active in 2025.

Ozone air quality continues to improve in the nonattainment area due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation; therefore, no additional ozone or ozone precursor monitoring, beyond special studies and research projects, is planned for the San Joaquin Valley nonattainment area at this time.

XIII. Tuolumne County

The Tuolumne County nonattainment area is included in this EMP because of the designation classification of Moderate for the 1997 federal 8-hour ozone standard. Classifications for each of the ozone standards are listed in Table 16.

Table 16: Tuolumne County ozone standards classifications

1997 Standard (0.08 ppm)*	**2008 Standard (0.075 ppm)**	**2015 Standard (0.070 ppm)**
Moderate[35]	Attainment/Unclassifiable	Marginal[36]

* Note: For the 1997 standard, Mariposa County and Tuolumne County were combined into the Southern Mountain Counties nonattainment area

Ozone concentrations in Tuolumne County are overwhelmingly the result of transport from neighboring nonattainment areas to the west/northwest; therefore, implementing a more extensive network of ozone and ozone precursor monitors would likely not provide significant additional information.

CARB operates one monitoring site in the nonattainment area, Sonora-Barretta Street, and this location continues to meet the needs of monitoring the highest ozone concentrations and population exposure. This monitoring site may need to be moved within the next few years due to the property owner indicating a desire to either sell or re-develop the land. Should a re-location be necessary, any new monitoring

[35] Federal Register, Determinations of Attainment for the 1997 8-Hour Ozone Standard for Central Mountain Counties, Kern County (Eastern Kern), Nevada County (Western Part), Southern Mountain Counties, and Ventura County, *2012-29013 (77 FR 71551)*

[36] Federal Register, Determinations of Attainment for the 2008 8-hour ozone standard for Nevada County (Western part) and Ventura County; and for the 2015 8-hour ozone standard for Calaveras County, and Tuolumne County, *2022-22192 (87 FR 63698)*

location would be sited with the intent to maintain a continuous data record, meaning the new location would need to have a similar elevation, exposure to the same wind flow patterns, and limited impact from local emissions.

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

XIV. Ventura County

Ventura County has been designated as a nonattainment area for all three federal 8-hour ozone standards and the classifications are listed in Table 17.

Table 17: Ventura County ozone standards classifications

1997 Standard (0.08 ppm)	**2008 Standard (0.075 ppm)**	**2015 Standard (0.070 ppm)**
Serious[37]	Serious[38]	Serious

High ozone concentrations are limited to inland valleys and are the result of local emissions in some areas and a combination of local emissions and transport of ozone and ozone precursors from an extreme nonattainment area to the east. The Ventura County Air Pollution Control District (VCAPCD) operates five ozone monitors. The five monitors continue to meet the needs of monitoring the highest ozone concentrations and population exposure across the area.

Ozone air quality continues to improve in the nonattainment area, due to the implementation of District and State programs designed to reduce local and statewide ozone precursor emissions and ozone formation. No additional ozone or

[37] Federal Register, Determinations of Attainment for the 1997 8-Hour Ozone Standard for Central Mountain Counties, Kern County (Eastern Kern), Nevada County (Western Part), Southern Mountain Counties, and Ventura County, *2012-29013 (77 FR 71551)*

[38] Federal Register, Determinations of Attainment for the 2008 8-hour ozone standard for Nevada County (Western part) and Ventura County; and for the 2015 8-hour ozone standard for Calaveras County, and Tuolumne County, *2022-22192 (87 FR 63698)*

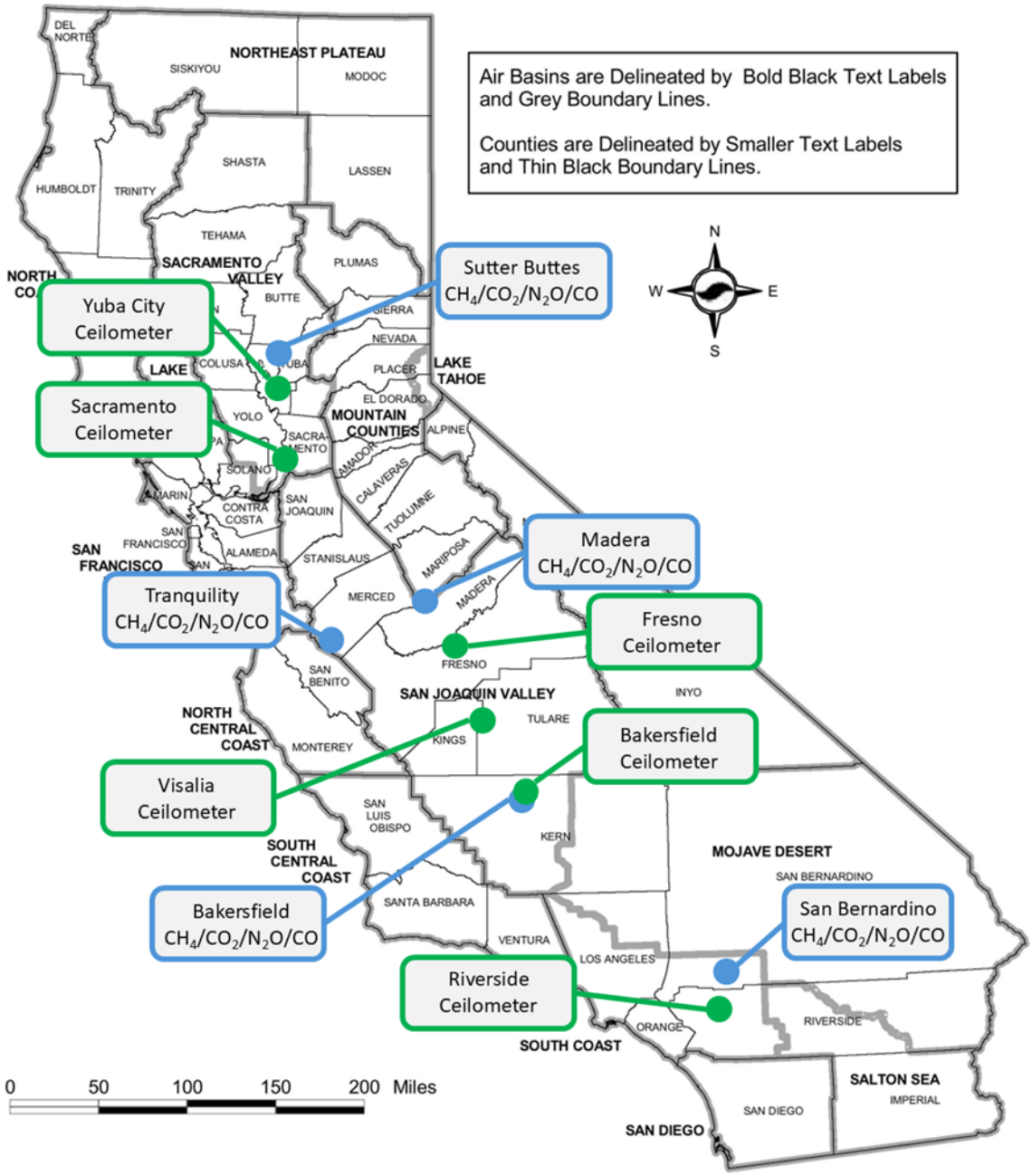
ozone precursor monitoring is planned or needed for the Ventura County nonattainment area at this time.

Special Studies

I. Additional Upper Air and VOC Speciation Measurements in California

Currently, the CARB GHG monitoring network consists of five stations equipped with state-of-the-art instruments to measure methane, carbon dioxide, nitrous oxide, and carbon monoxide. CARB also maintains six locations equipped with ceilometers to measure planetary boundary layer heights (PBLH), which are used for improving predictions of GHG emissions, ozone and secondary aerosol formation, and meteorological modeling. The stations are located throughout the State as shown in Figure 3. Throughout the coming year, CARB plans to pare back the GHG network due to resource constraints.

Figure 3: Map of GHG and Ceilometer Network. Blue labels indicate stations with GHG monitoring; green labels indicate sites with ceilometers



II. Recent Research Projects Funded by CARB

In addition to routine measurements, CARB has funded various research projects to help better understand ozone formation and transport in California.

CARB and the National Oceanic and Atmospheric Administration (NOAA) led a large-scale field campaign in California in summer 2021, titled *Re-evaluating the Chemistry of Air Pollutants in California* (RECAP-CA). This campaign integrated airborne measurements, stationary air monitoring and mobile measurements over a two-month period in the South Coast Air Basin (SoCAB) and the San Joaquin Valley Air Basin (SJVAB). The primary objective of RECAP-CA was to characterize the chemical, temporal, and spatial variability of emissions and atmospheric chemistry in California.

The airborne measurement was conducted by the University of California Berkeley (UCB) to observe the NO_x and VOC flux over SoCAB and SJVAB. This study validated the emission inventory[39,40] and emphasis on the significant role of temperature and biogenic VOC emission on ozone formation.[41]

NOAA conducted surface-level stationary monitoring and mobile measurement to measure various air pollutants, such as ozone, NO_x and VOCs, in the SoCAB. The comprehensive VOC measurements from this study identified multiple anthropogenic sources of VOCs. A series of publications arising from the work evaluated the emissions inventory and regional air quality models, emphasizing the complexity of the strategy needed for air pollution reduction in densely populated areas[42,43].

CARB also sponsored two research contracts to University of California Davis (UCD) to investigate the ozone sensitivity to perturbations of NO_x and VOCs using mobile smog chambers. The first contract supported a year-long measurement in Sacramento, CA in 2020, which mapped ozone chemical regimes across California[44]. The second contract supported ozone sensitivity measurements during RECAP-CA campaign to analyze the spatial and seasonal variability of ozone chemical regimes in both ground sites during RECAP-CA (Pasadena and Redlands). Together, these

[39] *ACP - Measurement report: Airborne measurements of NOx fluxes over Los Angeles during the RECAP-CA 2021 campaign*
[40] *ACP - Volatile organic compound fluxes in the agricultural San Joaquin Valley – spatial distribution, source attribution, and inventory comparison*
[41] *Temperature-dependent emissions dominate aerosol and ozone formation in Los Angeles | Science*
[42] *ACP - A better representation of volatile organic compound chemistry in WRF-Chem and its impact on ozone over Los Angeles*
[43] *ACP - Urban ozone formation and sensitivities to volatile chemical products, cooking emissions, and NOx upwind of and within two Los Angeles Basin cities*
[44] *ACP - Direct measurements of ozone response to emissions perturbations in California*

evaluate the air quality model of ozone chemistry and offer insights into the potential emission control strategies.[45,46]

Additionally, as part of RECAP-CA, CARB staff stationed two mobile research platforms offering real-time measurement of VOCs and various air pollutants in the SoCAB. This effort supported several publications on sources of VOCs, sensitivity of ozone formation, and potential emission control strategies.[47,48]

Beyond RECAP-CA campaign, CARB sponsored a research contract to collect vertical and horizontal distributions of VOCs over SoCAB and the SJVAB to improve the understanding of the ozone and VOC pollution in these regions, as part of the Fire Influence on Regional to Global Environments and Air Quality (FIREX-AQ) campaign. CARB staff utilized the collected data to publish findings on the composition and reactivity of VOCs in SoCAB and the SJVAB.[49] This work highlighted the importance of an improved understanding of oxygenated VOCs and biogenic VOCs emissions to better estimate the ozone abundance in California.

CARB staff has maintained long-term formaldehyde monitoring in Fresno since 2019, tracking diurnal, seasonal, and annual variabilities. This study will improve our understanding of the ozone sensitivity to ambient VOC and NO_x. This project has evolving objectives, which includes evaluation of ozone climate penalties.

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[45] *Ozone Sensitivity to NOx and VOC During RECAP-CA: Implication for Emissions Control Strategies | ACS ES&T Air*

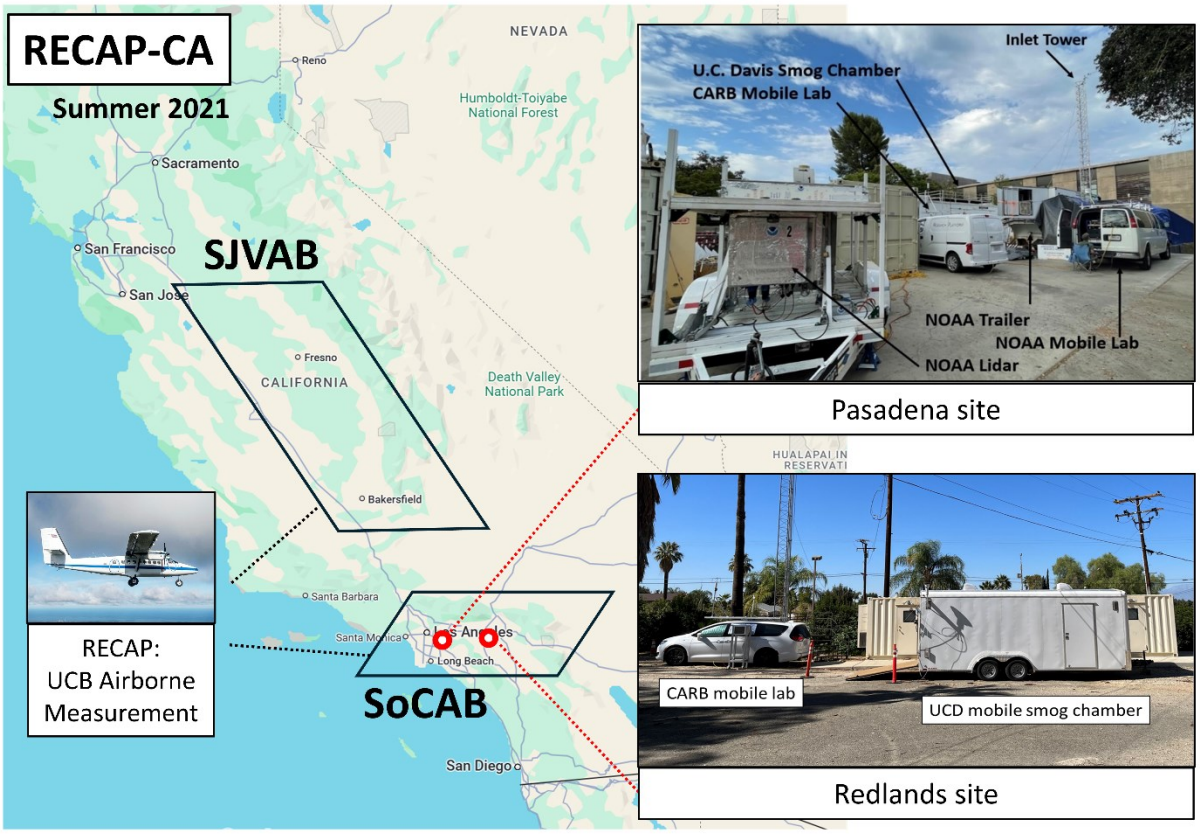
[46] *Source apportionment of Volatile Organic Compounds (VOCs) in the South Coast Air Basin (SoCAB) During RECAP-CA - ScienceDirect*

[47] *Ozone Sensitivity to NOx and VOC During RECAP-CA: Implication for Emissions Control Strategies | ACS ES&T Air*

[48] *Source apportionment of Volatile Organic Compounds (VOCs) in the South Coast Air Basin (SoCAB) During RECAP-CA - ScienceDirect*

[49] *ACP - Composition and reactivity of volatile organic compounds in the South Coast Air Basin and San Joaquin Valley of California*

Figure 4: Map of RECAP-CA field campaign during summer 2021 in California.



III. AB 617 Community Air Monitoring

In 2017, California began its Community Air Protection Program in response to the passage of Assembly Bill (AB) 617. For the AB 617 monitoring networks across California, ambient concentrations are collected for a variety of pollutants including PM2.5, PM10, BC, CO, NO, NO2, ozone, SO2, H2S, and CH4. Air toxics are also monitored at a number of sites in some communities. As California moves forward with AB 617 community-scale monitoring, there has been increased stationary monitoring with FEMs (criteria pollutants) and non-FEMs (e.g., BC and H2S), expanded air sensor network monitoring, as well as mobile monitoring. The numbers of air toxics (e.g., pesticides, BTEX, and VOCs) monitoring equipment and sites have also increased. The air districts also lead monitoring in response to episodic emissions events (e.g., odor complaints and fugitive emissions). In addition to formal recommendations by air districts, CARB continues to receive ongoing community self-nominations from residents and local community-based organizations across the

state. Recognizing these self-nominations, CARB actively seeks ways to support these communities. Since the inception of the AB 617 program, CARB has maintained a list of 64 nominated communities that have not been formally selected under the program. CARB remains committed to prioritizing additional support for these impacted communities - where possible - to help improve air quality across the state.

Additionally, included in AB 617 is a provision for grants to community-based organizations and California Native American Tribes for technical assistance and to support their efforts in this process. Started in 2018, CARB's Community Air Grants Program has supported more than 80 projects to set up or expand the monitoring networks in some AB 617 communities, as well as many other disadvantaged and low-income communities, primarily using air sensors. More information on community monitoring and AB 617 can be found in CARB's Annual Network Plan: 2025 Annual Monitoring Network Report for 26 Air Districts.

Conclusion

All of the nonattainment areas in California meet or exceed minimum monitoring requirements for ozone and have done so for decades, which has enabled air districts and CARB staff to develop a thorough understanding of ozone formation and transport across the State. There are a few areas of California, namely the Eastern Kern and the Western Nevada County nonattainment areas, where additional monitoring could provide some additional understanding and supplement the existing monitor in each area by providing continuous data records when there are operational problems and more spatial coverage during high ozone concentration periods.

CARB intends to revise this EMP, as necessary, or as part of the 5-year network assessment that will be prepared again in 2030.

Appendix

Table 18: Ozone Monitoring Sites in California

Site Name	AQS ID	Air Basin	County
Death Valley Natl Monument	060270101	GBV	Inyo
Bishop-Line	060270002	GBV	Inyo
Bishop Tribe EMO-50 Tu Su Lane	060271023	GBV	Inyo
Lakeport-S. Main Street	060333002	LC	Lake
Tahoe City-221 Fairway Drive	060611004	LT	Placer
Echo Summit	060170012	MC	El Dorado
Jerseydale - 6440 Jerseydale	060430006	MC	Mariposa
Colfax-City Hall	060610004	MC	Placer
Jackson-Clinton Road	060050002	MC	Amador
San Andreas-Gold Strike Road	060090001	MC	Calaveras
Placerville-Canal Street	060172004	MC	El Dorado
Grass Valley-Litton Building	060570005	MC	Nevada
Sonora-Barretta Street	061090005	MC	Tuolumne
Yosemite Natl Park-Turtleback Dome	060430003	MC	Mariposa
Cool-Highway 193	060170020	MC	El Dorado
Trona-Athol and Telegraph	060711234	MD	San Bernardino
Blythe-445 West Murphy Street	060659003	MD	Riverside
Hesperia-Olive Street	060714001	MD	San Bernardino
Lancaster-Fairgrounds	060379035	MD	Los Angeles

Site Name	AQS ID	Air Basin	County
Joshua Tree-National Monument	060719002	MD	San Bernardino
Victorville-14306 Park Avenue	060710306	MD	San Bernardino
Mojave-Pat Avenue	060290020	MD	Kern
Barstow	060710001	MD	San Bernardino
Eureka-Jacobs	060231004	NC	Humboldt
Ukiah-E Gobbi Street	060450008	NC	Mendocino
Hollister-Fairview Road	060690002	NCC	San Benito
Santa Cruz-2544 Soquel Avenue	060870007	NCC	Santa Cruz
Carmel Valley-Ford Road	060530002	NCC	Monterey
King City-415 Pearl Street	060530008	NCC	Monterey
Pinnacles National Monument	060690003	NCC	San Benito
Salinas-#3	060531003	NCC	Monterey
Yreka-Foothill Drive	060932001	NEP	Siskiyou
Glendora-Laurel	060370016	SC	Los Angeles
North Hollywood	060374010	SC	Los Angeles
Redlands-Dearborn	060714003	SC	San Bernardino
West Los Angeles-VA Hospital	060370113	SC	Los Angeles
Reseda	060371201	SC	Los Angeles
Pomona	060371701	SC	Los Angeles
Banning Airport	060650012	SC	Riverside
San Bernardino-4th Street	060719004	SC	San Bernardino
Long Beach-Signal Hill	060374009	SC	Los Angeles

Site Name	AQS ID	Air Basin	County
Santa Clarita	060376012	SC	Los Angeles
Temecula-Techanga Tribe	060650009	SC	Riverside
Pasadena-S Wilson Avenue	060372005	SC	Los Angeles
Fontana-Arrow Highway	060712002	SC	San Bernardino
Pico Rivera-4144 San Gabriel	060371602	SC	Los Angeles
AMS-Morongo Boneyard	060651016	SC	Riverside
Riverside-Rubidoux	060658001	SC	Riverside
Lake Elsinore-W Flint Street	060659001	SC	Riverside
Crestline	060710005	SC	San Bernardino
Anaheim-Pampas Lane	060590007	SC	Orange
Mira Loma Van Buren	060658005	SC	Riverside
Los Angeles-North Main Street	060371103	SC	Los Angeles
La Habra	060595001	SC	Orange
Compton-700 North Bullis Road	060371302	SC	Los Angeles
Winchester-33700 Borel Road	060650016	SC	Riverside
Paso Robles-Santa Fe Avenue	060790005	SCC	San Luis Obispo
Lompoc-S H Street	060832004	SCC	Santa Barbara
Goleta-Fairview	060832011	SCC	Santa Barbara
Ojai-Ojai Avenue	061111004	SCC	Ventura
Santa Barbara-700 East Canon Perdido	060830011	SCC	Santa Barbara
Carrisa Plains School	060798006	SCC	San Luis Obispo

Site Name	AQS ID	Air Basin	County
Paradise Road-Los Padres National Forest	060831014	SCC	Santa Barbara
El Rio-Rio Mesa School #2	061113001	SCC	Ventura
Morro Bay-Kings Avenue	060793003	SCC	San Luis Obispo
Las Flores Canyon #1	060831025	SCC	Santa Barbara
Thousand Oaks-Moorpark Road	061110007	SCC	Ventura
Simi Valley-Cochran Street	061112002	SCC	Ventura
Santa Maria-Orcutt Rd	060831009	SCC	Santa Barbara
Nipomo-Regional Park	060794002	SCC	San Luis Obispo
Santa Ynez-Airport Road	060833001	SCC	Santa Barbara
Piru-3301 Pacific Avenue	061110009	SCC	Ventura
Lompoc-HSandP	060831013	SCC	Santa Barbara
Atascadero-Lift Station #5	060798002	SCC	San Luis Obispo
Red Hills	060798005	SCC	San Luis Obispo
Carpinteria-Gobernador Road	060831021	SCC	Santa Barbara
Alpine-Victoria Drive	060731006	SD	San Diego
Pala Airpad	060731201	SD	San Diego
San Diego-Kearny Villa Road	060731016	SD	San Diego
La Posta Band Mission-Crestwood Road	060731011	SD	San Diego
San Diego - Sherman Elementary School	060731026	SD	San Diego
Camp Pendleton	060731008	SD	San Diego

Site Name	AQS ID	Air Basin	County
La Posta Band of Indians	060739991	SD	San Diego
Chula Vista	060730001	SD	San Diego
Otay Mesa-Donovan	060731014	SD	San Diego
El Cajon-Lexington Elementary School	060731022	SD	San Diego
Hayward-La Mesa	060012001	SFB	Alameda
San Pablo-Rumrill Blvd	060131004	SFB	Contra Costa
Oakland-9925 International Blvd	060010009	SFB	Alameda
Concord-2975 Treat Blvd	060130002	SFB	Contra Costa
San Rafael	060410001	SFB	Marin
Sebastopol-103 Morris Street	060970004	SFB	Sonoma
Livermore-793 Rincon Avenue	060010007	SFB	Alameda
Los Gatos	060851001	SFB	Santa Clara
Oakland-West	060010011	SFB	Alameda
San Ramon-9885 Alcosta Bl	060132007	SFB	Contra Costa
San Martin-Murphy Avenue	060852006	SFB	Santa Clara
Bethel Island Road	060131002	SFB	Contra Costa
Vallejo-304 Tuolumne Street	060950004	SFB	Solano
Berkeley-Aquatic Park	060010013	SFB	Alameda
Fairfield-Chadbourne Road	060950005	SFB	Solano
Livermore Portola	060010016	SFB	Alameda
San Francisco-Arkansas Street	060750005	SFB	San Francisco

Site Name	AQS ID	Air Basin	County
Redwood City	060811001	SFB	San Mateo
Gilroy-9th Street	060850002	SFB	Santa Clara
San Jose-Jackson Street	060850005	SFB	Santa Clara
Bakersfield-5558 California Avenue	060290014	SJV	Kern
Clovis-N Villa Avenue	060195001	SJV	Fresno
Sequoia and Kings Canyon Natl Park	061070009	SJV	Tulare
Madera-28261 Avenue 14	060392010	SJV	Madera
Fresno-Sierra Skypark #2	060190242	SJV	Fresno
Hanford-S Irwin Street	060311004	SJV	Kings
Sequoia Natl Park-Lower Kaweah	061070006	SJV	Tulare
Tranquility-32650 West Adams Avenue	060192009	SJV	Fresno
Fresno-Garland	060190011	SJV	Fresno
Table Mountain	060190500	SJV	Fresno
Stockton-University Park	060771003	SJV	San Joaquin
Parlier	060194001	SJV	Fresno
Maricopa-Stanislaus Street	060290008	SJV	Kern
Madera-Pump Yard	060390004	SJV	Madera
Modesto-14th Street	060990005	SJV	Stanislaus
Tracy-Airport	060773005	SJV	San Joaquin
Arvin-Di Giorgio	060295002	SJV	Kern
Porterville-1839 Newcomb Street	061072010	SJV	Tulare

Site Name	AQS ID	Air Basin	County
Bakersfield-Municipal Airport	060292012	SJV	Kern
Merced-Vierra	060472024	SJV	Merced
Fresno-Drummond Street	060190007	SJV	Fresno
Edison	060290007	SJV	Kern
Oildale-3311 Manor Street	060290232	SJV	Kern
Shafter-Walker Street	060296001	SJV	Kern
Visalia-W. Ashland Avenue	061072003	SJV	Tulare
Turlock-S Minaret Street	060990006	SJV	Stanislaus
Santa Rosa Rancheria-17225 Jersey	060310500	SJV	Kings
Niland-English Road	060254004	SS	Imperial
Indio-Amistad High School	060652007	SS	Riverside
Calexico-Ethel Street	060250005	SS	Imperial
Joshua Tree NP-Cottonwood #2	060650010	SS	Riverside
Indio-29 Palms Reservation	060650500	SS	Riverside
El Centro-9th Street	060251003	SS	Imperial
Westmorland-W 1st Street	060254003	SS	Imperial
Palm Springs-Fire Station	060655001	SS	Riverside
Colusa-Sunrise Blvd	060111002	SV	Colusa
Sacramento-T Street	060670010	SV	Sacramento
Yuba City-Almond Street	061010003	SV	Sutter
Chico-East Avenue	060070008	SV	Butte
Red Bluff-1834 Walnut Street	061030007	SV	Tehama

Site Name	AQS ID	Air Basin	County
Auburn-11645 Atwood Road	060610003	SV	Placer
Lassen Volcanic Natl Park-Manzanita Lake	060893003	SV	Shasta
Vacaville-Ulatis Drive	060953003	SV	Solano
Folsom-Natoma Street	060670012	SV	Sacramento
Davis-UCD Campus	061130004	SV	Yolo
Elk Grove-Bruceville Road	060670011	SV	Sacramento
Sloughhouse	060675003	SV	Sacramento
Redding-Health Dept Roof	060890004	SV	Shasta
Sutter Buttes-S Butte	061010004	SV	Sutter
Tuscan Butte	061030004	SV	Tehama
Willows-720 N Colusa Street	060210003	SV	Glenn
Shasta Lake-13791 Lake Blvd	060890009	SV	Shasta
Sacramento-Del Paso Manor	060670006	SV	Sacramento
Woodland-Gibson Road	061131003	SV	Yolo
Paradise-Clark	060072003	SV	Butte
Roseville-N Sunrise Blvd	060610006	SV	Placer
Lincoln-2885 Moore Road	060612003	SV	Placer

Air Basins: GBV=Great Basin Valley; LC=Lake County; LT=Lake Tahoe; MC=Mountain Counties; MD=Mojave Desert; NC=North Coast; NCC=North Central Coast; NEP=Northeast Plateau; SC=South Coast; SCC=South Central Coast; SD=San Diego; SFB=San Francisco Bay; SJV=San Joaquin Valley; SS=Salton Sea; SV=Sacramento Valley

Table 19: NO_x Monitoring Sites in California

Site Name	AQS ID	Air Basin	County
Lancaster-Fairgrounds	060379035	MD	Los Angeles
Victorville-14306 Park Avenue	060710306	MD	San Bernardino
Trona-Athol and Telegraph	060711234	MD	San Bernardino
Barstow	060710001	MD	San Bernardino
Eureka-Jacobs	060231004	NC	Humboldt
Salinas-#3	060531003	NCC	Monterey
Los Angeles-North Main Street	060371103	SC	Los Angeles
Reseda	060371201	SC	Los Angeles
Long Beach-Route 710 Near Road	060374008	SC	Los Angeles
Ontario-Route 60 Near Road	060710027	SC	San Bernardino
Riverside-Rubidoux	060658001	SC	Riverside
Pomona	060371701	SC	Los Angeles
Lake Elsinore-W Flint Street	060659001	SC	Riverside
Fontana-Arrow Highway	060712002	SC	San Bernardino
North Hollywood	060374010	SC	Los Angeles
Ontario-NW Corner I-10 and Etiwanda Ave	060710026	SC	San Bernardino
Pico Rivera-4144 San Gabriel	060371602	SC	Los Angeles
Santa Clarita	060376012	SC	Los Angeles
Long Beach-Signal Hill	060374009	SC	Los Angeles
Anaheim-812 W Vermont Street	060590008	SC	Orange

Site Name	AQS ID	Air Basin	County
Glendora-Laurel	060370016	SC	Los Angeles
West Los Angeles-VA Hospital	060370113	SC	Los Angeles
La Habra	060595001	SC	Orange
Banning Airport	060650012	SC	Riverside
San Bernardino-4th Street	060719004	SC	San Bernardino
Compton-700 North Bullis Road	060371302	SC	Los Angeles
Temecula-Techanga Tribe	060650009	SC	Riverside
Mira Loma Van Buren	060658005	SC	Riverside
Pasadena-S Wilson Avenue	060372005	SC	Los Angeles
Anaheim-Pampas Lane	060590007	SC	Orange
Lompoc-S H Street	060832004	SCC	Santa Barbara
Las Flores Canyon #1	060831025	SCC	Santa Barbara
Atascadero-Lift Station #5	060798002	SCC	San Luis Obispo
Simi Valley-Cochran Street	061112002	SCC	Ventura
Carpinteria-Gobernador Road	060831021	SCC	Santa Barbara
Lompoc-HSandP	060831013	SCC	Santa Barbara
El Rio-Rio Mesa School #2	061113001	SCC	Ventura
Paradise Road-Los Padres National Forest	060831014	SCC	Santa Barbara
Nipomo-Regional Park	060794002	SCC	San Luis Obispo
Otay Mesa-Donovan	060731014	SD	San Diego
Camp Pendleton	060731008	SD	San Diego

Site Name	AQS ID	Air Basin	County
San Diego - Sherman Elementary School	060731026	SD	San Diego
El Cajon-Lexington Elementary School	060731022	SD	San Diego
San Ysidro-Fire Station #29	060731025	SD	San Diego
San Diego-Kearny Villa Road	060731016	SD	San Diego
San Diego-11403 Rancho Carmel Dr	060731017	SD	San Diego
Alpine-Victoria Drive	060731006	SD	San Diego
Chula Vista	060730001	SD	San Diego
Redwood City	060811001	SFB	San Mateo
Oakland-Laney College	060010012	SFB	Alameda
Pleasanton-Owens Ct	060010015	SFB	Alameda
San Rafael	060410001	SFB	Marin
Livermore Portola	060010016	SFB	Alameda
Concord-2975 Treat Blvd	060130002	SFB	Contra Costa
San Jose-Jackson Street	060850005	SFB	Santa Clara
Oakland-West	060010011	SFB	Alameda
Bethel Island Road	060131002	SFB	Contra Costa
San Francisco-Arkansas Street	060750005	SFB	San Francisco
San Ramon-9885 Alcosta Bl	060132007	SFB	Contra Costa
San Pablo-Rumrill Blvd	060131004	SFB	Contra Costa
Oakland-9925 International Blvd	060010009	SFB	Alameda
Vallejo-304 Tuolumne Street	060950004	SFB	Solano

Site Name	AQS ID	Air Basin	County
Livermore-793 Rincon Avenue	060010007	SFB	Alameda
Sebastopol-103 Morris Street	060970004	SFB	Sonoma
Berkeley-Aquatic Park	060010013	SFB	Alameda
San Jose-Knox Avenue	060850006	SFB	Santa Clara
Hanford-S Irwin Street	060311004	SJV	Kings
Turlock-S Minaret Street	060990006	SJV	Stanislaus
Shafter-Walker Street	060296001	SJV	Kern
Fresno-Sierra Skypark #2	060190242	SJV	Fresno
Edison	060290007	SJV	Kern
Stockton-University Park	060771003	SJV	San Joaquin
Fresno-Drummond Street	060190007	SJV	Fresno
Clovis-N Villa Avenue	060195001	SJV	Fresno
Bakersfield-5558 California Avenue	060290014	SJV	Kern
Parlier	060194001	SJV	Fresno
Fresno-2482 Foundry Park Avenue	060192016	SJV	Fresno
Bakersfield-Westwind	060292019	SJV	Kern
Madera-Pump Yard	060390004	SJV	Madera
Fresno-Garland	060190011	SJV	Fresno
Visalia-W. Ashland Avenue	061072003	SJV	Tulare
Tracy-Airport	060773005	SJV	San Joaquin
Bakersfield-Municipal Airport	060292012	SJV	Kern
Calexico-Ethel Street	060250005	SS	Imperial

Site Name	AQS ID	Air Basin	County
Palm Springs-Fire Station	060655001	SS	Riverside
El Centro-9th Street	060251003	SS	Imperial
Sacramento-T Street	060670010	SV	Sacramento
Yuba City-Almond Street	061010003	SV	Sutter
Davis-UCD Campus	061130004	SV	Yolo
Sacramento-Del Paso Manor	060670006	SV	Sacramento
Sacramento-Bercut Drive	060670015	SV	Sacramento
Folsom-Natoma Street	060670012	SV	Sacramento
Elk Grove-Bruceville Road	060670011	SV	Sacramento
Roseville-N Sunrise Blvd	060610006	SV	Placer
Chico-East Avenue	060070008	SV	Butte