

**San Joaquin Valley
Air Pollution Control District**

Ambient Air Monitoring Network Plan

May 29, 2007 Draft

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Ambient Air Monitoring Network Plan – 2007

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Glossary Of Acronyms/Symbols

AB 841: Assembly Bill 841 (Arambula, 2005)
AC EBAM: Alternating Current Environmental Beta Attenuation Monitor (real-time particulate monitor)
AIRS: Aerometric Information Retrieval System
AMTAC: Air Monitoring Technical Advisory Committee
AQI: Air Quality Index
AQS: Air Quality System
AUSPEX: Atmospheric Utility Signatures, Predictions, and Experiments
BAM: Beta Attenuation Monitor (real-time particulate monitor)
CARB: California Air Resources Board
CCOS: Central California Ozone Study
CEC: California Energy Commission
CH₄: Methane
CO: Carbon Monoxide
CRPAQS: California Regional Particulate Air Quality Study
DRI: Desert Research Institute
EPA: Environmental Protection Agency
GC: Gas Chromatography
MSA: Metropolitan Statistical Area
NAAQS: National Ambient Air Quality Standards
NMHC: Non-Methane Hydrocarbons
NMOC: Non-Methane Organic Compounds
NO: Nitric Oxide
NO₂: Nitrogen Dioxide
NOX: Sum of Nitric Oxide and Nitrogen Dioxide (NO + NO₂ = NOX)
NPS: National Park Service
O₃: Ozone
PAMS: Photochemical Assessment Monitoring Stations
PM: Particulate Matter (unspecified)
PM 10: PM of 10 microns or less
PM 2.5: PM of 2.5 microns or less
PSD: Prevention of Significant Deterioration
SARMAP: SJVAQS/AUSPEX Regional Modeling Adaptation Project
SIP: State Implementation Plans
SJV: San Joaquin Valley
SJVAPCD: San Joaquin Valley Air Pollution Control District
SJVAQS: San Joaquin Valley Air Quality Study
SLAMS: State and Local Air Monitoring Station
SPM: Special Purpose Monitor
SO₂: Sulfur Dioxide
THC: Total Hydrocarbons
VOC: Volatile Organic Compound

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Executive Summary

The Ambient Air Monitoring Network Plan for 2007 provides a review of the existing and proposed ambient air monitoring network for the San Joaquin Valley of California. This document serves as the annual review/report to the Environmental Protection Agency (EPA) pursuant to Title 40, Code of Federal Regulations, Part 58, and report on compliance with objectives of the EPA 105 Grant for the San Joaquin Valley Unified Air Pollution Control District. The report also serves as a current directory of ambient air monitoring in the San Joaquin Valley by pollutant and includes an inventory of District-wide air pollutant and meteorological monitoring. Finally, the report reviews the network in terms of changing population, plus it explains recent, pending, and future changes to the network. Maps ES-1 and ES-2 provide an overview of the Air District boundaries and the location of the San Joaquin Valley Air Monitoring Sites.

Ozone monitoring has been found to be adequate for measuring maximum concentrations and representative population exposures. Additional sites in the western parts of the District are under investigation. Please refer to Section 2.0 (Ozone Monitoring Network) for additional information on the Ozone monitoring network.

There are a total of twenty-two ozone monitors within the San Joaquin Valley Air Basin. Nine are sited for urban, eleven for neighborhood and two for regional scale. Of the nine urban scale monitors four of them have a monitoring objective of representative concentration and five are sited for high concentration. Two of the neighborhood monitors observe high concentration, while the rest of the neighborhood monitors along with the two regional are for representative concentration. Comparison of the existing ozone-monitoring network to federal requirements indicates the need for one additional monitor in Tulare County. Funding for construction of a Tulare County station is included in the District's 2007-2008 budget. Additionally the District is in the process of constructing a new monitoring station near Tranquility in western Fresno County to provide data representing Westside air quality between Kern and San Joaquin counties.

Monitoring for particulate matter is focused primarily on representative population exposure concentrations. Due to population growth: Madera, San Joaquin and Stanislaus MSAs require additional PM_{2.5} monitors and potentially one additional PM₁₀ monitor in Madera county. Please see Section 6.2 (Pending Changes) for the upcoming monitoring network enhancements.

Monitoring for PM₁₀ occurs at fifteen sites within the San Joaquin Valley Air Basin. Fourteen of the fifteen sites use filter-based units and one contains a real-time particulate monitor. Of the fourteen sites three of them also contain real time particulate monitors in addition to the filter-based units. Twelve of the sites are neighborhood scale, two are middle scale and the remaining one is urban scale. Of the twelve neighborhood sites, eight are for measuring representative concentration and four for high concentration. The two middle scale sites are split into representative concentration and source impact. The one urban site is sighted for representative

concentration. Comparison of the existing PM10 monitoring network to federal requirements indicates the need for one additional monitor in Madera County.

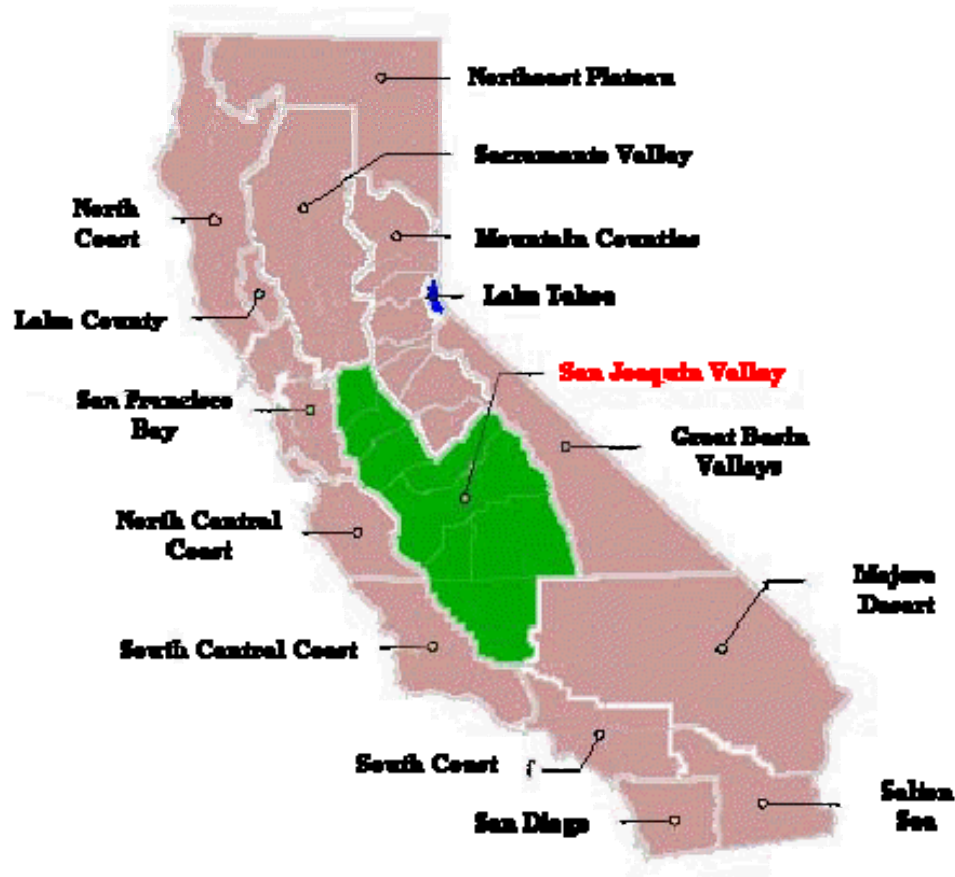
Monitoring for PM2.5 occurs at fourteen sites within the San Joaquin Valley Air Basin. Eleven of the fourteen sites use filter-based units and three contain a real-time particulate monitor. Of the eleven sites seven of them also contain real time particulate monitors in addition to the filter-based units. Twelve of the sites are neighborhood scale and the remaining two are urban scale. All of the PM2.5 sites are used for measuring representative concentration. Comparison of the existing PM2.5 monitoring network to federal requirements indicates the need for one additional monitor in each of the San Joaquin, Stanislaus and Madera counties.

Hydrocarbon monitoring within the District is adequate, especially with regard to the speciation of Non-Methane Organic Compounds (NMOCs) and toxics that contribute to the formation of ozone. Please refer to Section 4.0 (Non-Methane Hydrocarbons) for additional information on the NMOCs monitoring network .

Monitoring for carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), and Lead (Pb) is not currently required anywhere in California in order to comply with the Appendix D requirements of the CFR. Ambient concentrations for these pollutants do not exceed the national air quality standards and do not trigger requirements for monitoring. The District and ARB, however, do still monitor and collect ambient air quality data for CO, NO2 and SO2 to supplement related meteorological and criteria pollutant data. Please see Section 5.0 (Other Monitoring) for additional pollutant site information.

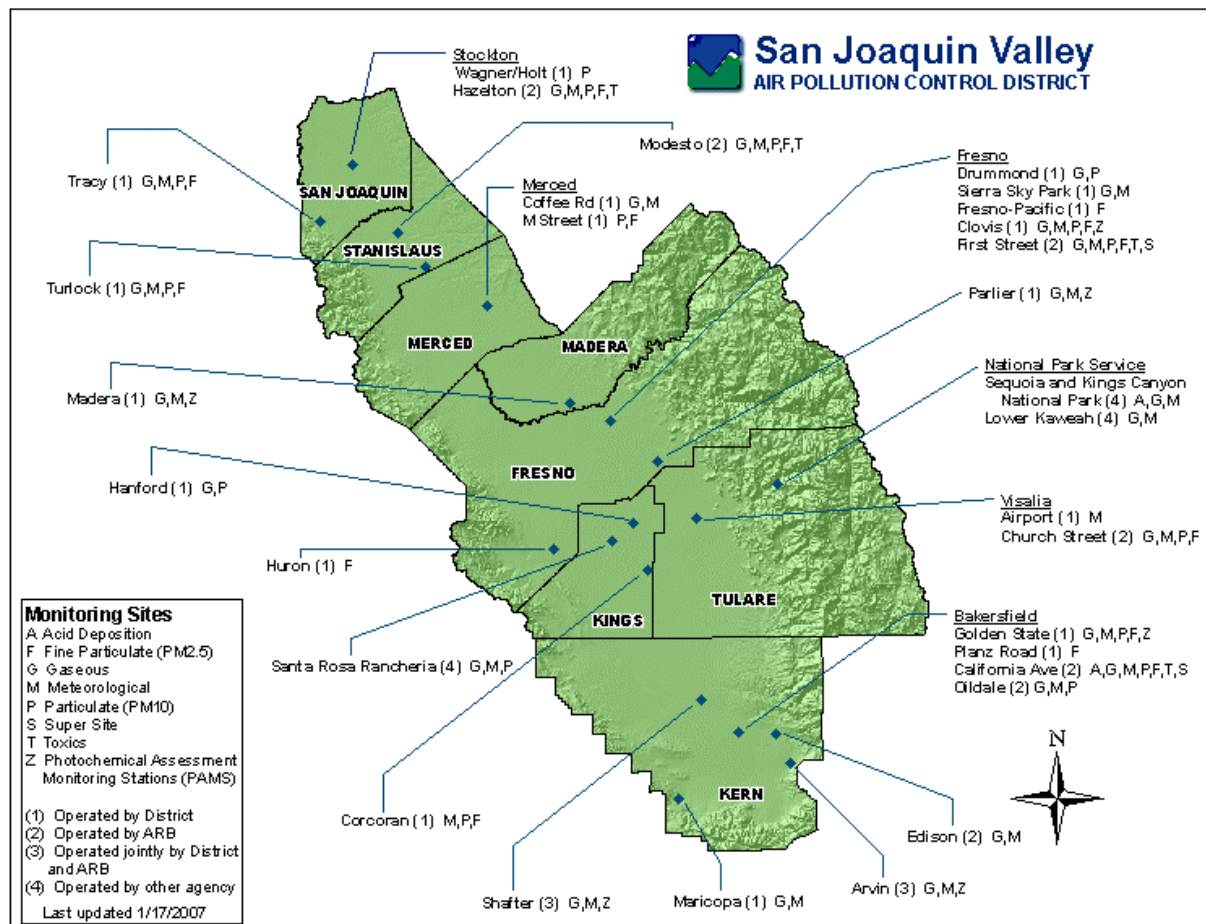
There are ten carbon monoxide monitors within the San Joaquin Valley Air Basin. Two are middle scale and eight are neighborhood. All of the carbon monoxide monitors are set for a monitoring objective of representative concentration. Since the District is in attainment for carbon monoxide, a comparison to the federal requirements is not necessary. There are seventeen nitrogen dioxide monitors within the San Joaquin Valley Air Basin. Twelve measure at a neighborhood scale level, while the other five are for urban scale monitoring. Ten of the twelve neighborhood monitors are for representative concentration and the other two for high concentration. The five urban scale monitors are split, four for representative concentration and one for high concentration. Since the District is in attainment for nitrogen dioxide, a comparison to the federal requirements is not necessary. There is currently one monitor for sulfur dioxide operating with the San Joaquin Valley Air Basin. It is a neighborhood scale monitor set to observe representative concentration. Since the District is in attainment for sulfur dioxide, a comparison to the federal requirements is not necessary.

Meteorological monitoring in the San Joaquin Valley has been improved recently by District efforts to expand the meteorological monitoring network, and by CARB and District personnel working to implement a comprehensive meteorological monitoring network quality assurance program.



Map ES 1
California Air Basins

Map ES 2 shows the current SLAMS/PAMS monitoring network in the San Joaquin Valley.



1.0 Introduction

The 2007 Air Monitoring Network Plan is an annual review of the existing and proposed ambient monitoring network. The network is reviewed periodically to ensure continued consistency with specific monitoring objectives. This report is the yearly update to the Air Monitoring Network Plan prepared by the San Joaquin Valley Air Pollution Control District (District). It details the location and type of ambient air quality monitoring performed at State and Local Air Monitoring Stations (SLAMS) within the San Joaquin Valley Air Basin, including non-criteria pollutant monitoring.

There are three purposes for this review. First, Title 40, Code of Federal Regulations, Part 58.10 and the District's EPA 105 Grant require an annual review of the SLAMS network to confirm continued compliance with specific monitoring objectives defined in the regulations and to ensure that data in the state and federal data records are properly classified (i.e., concentrations representative of background conditions, populated urban areas, maximum values, etc.). Changes in station location, inlet probe location, or other factors external to the station are reviewed to assure the continued representativeness of the data.

Second, the report serves as a directory of existing and proposed SLAMS and Photochemical Assessment Monitoring Stations (PAMS), and an inventory of pollutant monitoring that is performed at each site. The EPA uses the data to develop national air quality trends.

Finally, the report evaluates the monitoring network in terms of changing population and emission trends. Since emissions, population, ambient pollution concentrations, and instrument types and procedures change with time, the report reviews ways to improve the current monitoring network and discusses any need to re-evaluate station siting. This report also documents the development of the Photochemical Assessment Monitoring Stations (PAMS) Network.

This report contains tables of information and figures for the air monitoring station locations and pollutant concentrations. The tables detail site information that includes site location, AIRS code, pollutants monitored, network designation, sampling method, sampling schedule, spatial scale, and monitoring objective. Included in the tables are descriptions of monitoring performed by the California Air Resources Board (CARB), National Park Service, and Santa Rosa Rancheria within the San Joaquin Valley Air Basin.

1.1 Monitoring Objectives/Spatial Scales

Federal regulations require SLAMS networks to meet four basic monitoring objectives, which include:

- 1) monitoring the highest concentration of a pollutant,
- 2) monitoring representative concentrations in areas of high population density,
- 3) monitoring the impact of major pollutant sources, and
- 4) monitoring pollutant background concentrations.

The physical siting of an air monitoring station must achieve a spatial scale of representativeness that is consistent with the monitoring objective. Spatial scales of representativeness are categories of sampling exposure. The spatial scale for each site results from the physical location of the site with respect to the pollutant sources and the population or area, which is to be represented, by the monitoring site. The categories are classified by the size of the area surrounding the monitoring site which experiences uniform pollutant concentrations. The categories of spatial scale are:

- 1) Microscale - An area of uniform pollutant concentrations with a radius ranging from several meters up to 100 meters.
- 2) Middle Scale - Uniform pollutant concentrations in an area with a radius of approximately 100 meters to 0.5 kilometers.
- 3) Neighborhood Scale - Uniform pollutant concentrations in an area with a radius of approximately 0.5 to 4.0 kilometers.
- 4) Urban Scale - Citywide pollutant concentrations in an area with a radius ranging from 4 to 50 kilometers.
- 5) Regional Scale - Uniform pollutant concentrations that would be characteristic of a very large (for example, rural) area that has a radius from tens to hundreds of kilometers.

The relevant spatial scale for each site is determined from the physical location of the site with respect to the pollutant sources and the population or area represented by the monitoring site. For example, if the objective is to measure the highest concentrations, the appropriate scale could be micro, middle, neighborhood, or even urban depending upon if the pollutant is directly emitted or is a secondary pollutant. The middle, neighborhood, and urban scales typically are used for meeting the objective of monitoring in high-density populated areas. A monitoring objective for source impact could require micro, middle, or neighborhood scales. Neighborhood and regional scales are appropriate for monitoring background concentration levels. The following table contains a summary of the monitoring objectives and the associated spatial scales.

**Table 1.1
Monitoring Objectives/Spatial Scales**

Monitoring Objective	Appropriate Spatial Scales
Highest concentration or source impact	Micro, middle, neighborhood, or urban
Representative Concentrations in high population densities	Middle, neighborhood, or urban
Background concentrations	Neighborhood or regional

2.0 Ozone Monitoring Network

2.1 General Information

Ozone (O₃) is not directly emitted into the atmosphere. It is produced by complex photochemical reactions involving reactive organic compounds, oxides of nitrogen, carbon monoxide, and ultraviolet radiation. The relationships between the primary emissions (precursors) and secondary pollutant (O₃) tend to produce large separations spatially and temporally between the major emission sources and the areas with high ozone concentrations. Therefore, the influence of meteorological conditions upon the transport process must be considered when measuring peak concentration levels of ozone.

The San Joaquin Valley (SVJ) is a continuous inter-mountain valley with dimensions of approximately 250 miles in length and 60 miles in width. Climatologically, a semi-permanent, sub-tropical high-pressure area that covers the eastern Pacific and the majority of California dominates the summer weather pattern for the San Joaquin Valley. The Valley is characterized by rainfall of between five and fifteen inches per year, most of which occurs during the winter season. Summer peak temperatures above forty degrees Celsius are common. Wind flow is light and variable.

In the winter season, frontal systems and troughs spawned in the northern Pacific Ocean bring clouds and rain into the San Joaquin Valley. These systems are generally produced from low-pressure areas in the Pacific from several hundred to several thousand miles northwest of the Valley. These weather systems are often followed by periods of atmospheric instability, which result in increased vertical motion of the atmosphere leading to good air quality. Frequently, however, periods of poor dispersion occur during the winter when troughs and frontal systems are pushed northward by high-pressure systems. Dispersion lessens and air quality worsens, as winds become light and strong inversions form.

During the remainder of the year, the predominant wind flow is from the northwest as it proceeds from the California Delta down the axis of the Valley. This flow inland creates a semi-marine layer in the northern portion of the Valley that extends to Modesto and, under certain conditions, as far south as Merced. This marine flow reduces the ozone formation and accumulation in the northern Valley. Beyond Merced the influence of this marine flow is negligible.

A meteorological factor associated with ozone production in the southern portion of the Valley is the typical light synoptic scale winds in this region. This allows localized pressure gradients to dominate wind flow. On most days of elevated ozone, a localized mountain/valley breeze regime exists. Drainage flow and mountain breezes created by nighttime cooling predominate in the early morning hours. Valley breezes produced from differential heating between mountain slopes and valley floor predominate in the afternoon hours. Since valley breeze winds are stronger and of longer duration than typical mountain breezes, the net surface winds are from northwest to southeast.

The presence of subsidence inversions and light transport winds are meteorological conditions conducive to the formation and accumulation of ozone. The major point

sources of ozone precursor emissions (photochemically reactive organic compounds and oxides of nitrogen) are located throughout the District, but primarily in the major metropolitan areas of Stockton, Modesto, Merced, Fresno, Visalia, and Bakersfield, where high population density, industry, and the majority of vehicular travel exist. Additional emission sources are located in Sacramento and the urbanized Bay Area.

Typically, the net northwesterly wind flow produces the effect of having northern Valley and out-of-District sources impact receptor areas in the southern portion of the Valley. Emissions originating in these areas and produced ozone act as background and flow over the Fresno and Bakersfield areas, collect more emissions, and result in peak ozone concentrations near Parlier and Arvin. Another interesting phenomena in the San Joaquin Valley is the presence of an eddy current that transports ozone precursors from Kern County northward along the eastern edge of the valley. Winds then turn easterly near Fresno and then northwesterly in the west SJV creating a closed circulation eddy.

2.2 Ozone Modeling Studies

In 1976 the California Air Resources Board conducted a saturation study to determine ozone concentrations within the Fresno metropolitan area and produced a report entitled *“The Area Representativeness of Air Monitoring Stations – Fresno Study Phase I (Oxidant Study)”*, which is used today for general characteristics of ozone formation in the Fresno metropolitan area. The oxidant study determined that meteorology plays a major role in ozone formation in the Valley; long, hot, dry summer days with morning subsidence inversions and light winds are ideal conditions for ozone formation.

In addition to the Fresno Oxidant Study, several independent efforts were conducted to understand air quality in the valley portion of Kern County and air movement patterns and meteorological features affecting the entire San Joaquin Valley. The results of these studies identified that the appropriate area for study and modeling needed to contain meteorological and air quality initial and boundary conditions from a larger geographic area. The San Joaquin Valley-wide Air Pollution Study Agency was established to develop a better understanding of influences within and affecting the San Joaquin Valley Air Basin. Policy and Technical Committees that include representation of regulators and stakeholders guide the research and analysis of this agency.

2.2.1 The San Joaquin Valley Air Quality Study

In 1986, planning began for the San Joaquin Valley Air Quality Study (SJVAQS). County and City governments in the San Joaquin Valley, federal and state grants, and contributions from industry provided funding for this project. The goals of this \$18 million project were to determine the causes of exceedances of the ozone air quality standards in the San Joaquin Valley and to provide decision makers with the modeling tools needed to assess the impacts of alternative emission controls. In 1987 local industry began funding an additional element of the study called AUSPEX (Atmospheric Utility Signatures, Predictions, and EXperiments) to provide a study domain extending beyond the SJVAB and a research plan that included assessment of tall stack plumes and plume modeling. The two research programs combined to fund a regional model

adaptation program to develop a comprehensive model that addresses ozone, aerosol, visibility, and acid deposition issues in the San Joaquin Valley.

Fieldwork for the SJVAQS/AUSPEX study was conducted in 1990. Data was collected at existing SLAMS stations throughout the San Joaquin Valley as well as sites specifically chosen for the SJVAQS/AUSPEX study. Along with ozone and oxides of nitrogen measurements, samples of volatile organic compounds were taken and analyzed for species present and concentrations of various species to obtain typical VOC profiles for the San Joaquin Valley. Meteorological measurements including wind speed and direction, temperature, relative humidity, and solar radiation were taken at ground sites as well as aloft with a specially-equipped airplane so that three-dimensional fields could be generated for these meteorological parameters. Other meteorological parameters such as sea surface temperature and meteorological parameters outside the Valley were also measured to better determine boundary conditions for the model.

The computer model developed from the SJVAQS/AUSPEX study, referred to as SARMAP (SJVAQS/AUSPEX Regional Modeling Adaptation Project), designed to analyze the complex meteorological and pollutant concentration fields in the San Joaquin Valley, has been developed and has undergone testing. The model can accurately predict atmospheric conditions and pollutant concentrations for an observed episode of several days observed in 1990. The SARMAP model is being used to determine what effect emissions sources outside the District have on air quality within the San Joaquin Valley, as well as predict how changes in emissions will affect ozone concentrations in the San Joaquin Valley. Preliminary findings suggest that for the 1990 episode, emission sources outside the District are responsible for twenty-seven percent of the ozone in the northern portion of the Valley, eleven percent of the ozone in the central portion of the Valley, and seven percent of the ozone in the southern portion of the Valley. Despite the relatively good modeling correlation, careful technical review revealed that the observational and high-resolution modeling domain were still not large enough to accurately represent important flow features and eliminate boundary interference with coastal flux.

2.2.2 Central California Ozone Study (CCOS)

The purpose of the Central California Ozone Study (CCOS) is to guide efforts to comply with the health-based air quality standards for ozone by improving our understanding of the dynamics of ozone formation in urban and regional-scale ozone episodes in central and northern California. The CCOS effort began with a summer 2000 field research effort to collect observations related to formation of ozone at the surface and aloft for a large area of central California, with a supporting collection of activity and emissions data, as well as offshore and aloft meteorological and air quality measurements to improve initial and boundary condition representations.

The Central California Ozone Study is directed by the Policy Committee and Technical Committee which are comprised of representatives from federal agencies, the California Air Resources Board (CARB), the California Energy Commission (CEC), local air pollution control agencies, industry and other sponsoring organizations. University researchers in California and the Desert Research Institute (DRI) provide additional

technical input for CCOS. Funding is provided by a variety of federal agencies with contributions from Policy Committee member agencies and organizations. CARB and the San Joaquin Valley-wide Air Pollution Study Agency administer contracting and funds management.

The CCOS area of study includes most of northern California and all of central California. The northern boundary extends through Redding and provides representation of the entire Central Valley of California. The eastern boundary extends past Barstow and includes a large part of the Mojave Desert and all of the southern Sierra Nevada. The southern boundary extends below Santa Barbara and into the South Coast Air Basin. The western boundary extends approximately 200 kilometers west of San Francisco. Measurements are needed along the western boundary to characterize the temporal and spatial distributions of ambient background levels of ozone precursors in the air flowing into California.

The CCOS field measurement program was conducted during a four-month period from 6/1/2000 to 9/30/2000, a study period corresponding to the time of year the majority of the episodes of unacceptable ozone levels observed in northern and central California during previous years. Continuous surface air quality measurements and surface and upper-air meteorological measurements were made throughout the study period to provide sufficient data to model any day of the study period. Data was collected during ozone episode intensive operational periods to better understand the dynamics and chemistry of the formation of high ozone concentrations and the contribution of transport to exceedances of federal and state ozone standards in downwind areas. Additional continuous surface air quality measurements of ozone formation, carbon and nitrogen chemistry variations by time of day, day-of-the-week and pattern of pollutant transport were made at sites downwind of the San Francisco Bay Area, Sacramento, and Fresno.

The measurements provide information on the meteorology and air quality conditions on days leading up to ozone episodes and characterize the pollutant movement from upwind to downwind areas. Analysis of these measurements will assess representativeness of the episode days, the meteorological and pollutant transport patterns which lead to ozone episodes, and the effects of high temperature and tall stack emissions on regional ozone concentrations. The information generated by CCOS will make valuable contributions to further the fundamental science of air quality modeling as well as provide essential information to assist the district in meeting requirements for ozone State Implementation Plans.

2.3 SLAMS Status of Ozone Monitoring Network

Of the twenty-two ozone-monitoring stations within the San Joaquin Valley Air Basin, eleven are operated by the District, nine are operated by CARB, and two are operated by the National Park Service. All ozone monitors are continuous analyzers and operated on the principle of ultraviolet absorption. Table 2.1 provides a summary of the monitoring requirements for ozone and Table 2.2 contains a listing of the sites that measure ozone within the Valley.

As indicated by Table 2.2, ozone monitoring in the Valley is directed toward measuring representative population exposures and maximum concentrations. As a result of these

monitoring objectives, most ozone monitors in the Valley are scaled for either neighborhood or urban scale measurements.

Table 2.1 Monitoring Requirements for Ozone

MSA	County	Pop. (2006)	8-hr. Design Value	Minimum Monitors Required	Monitors Active	Additional Monitors Needed
San Joaquin	San Joaquin	668,265	0.076	2	2	0
Stanislaus	Stanislaus	514,370	0.086	2	2	0
Merced	Merced	210,554	0.088	1	1	0
Madera	Madera	144,396	0.078	1	1	0
Fresno	Fresno	799,407	0.098	2	5	0
Kings	Kings	129,461	0.086	1	1	0
Tulare	Tulare	420,619	0.103	2	3*	1
Kern	Kern	661,653	0.110	2	7	0

*Two monitors, Ash Mountain and Kaweah, are located in Sequoia National Park and do not reflect general population exposure.

2.4 Enhanced Ozone Monitoring Regulations - The EPA PAMS Program

The 1990 Federal Clean Air Act Amendments include a provision in Title I, Section 182 requiring States to begin a program of enhanced ozone monitoring. On March 4, 1992, EPA promulgated regulations as revisions to Title 40, Code of Federal Regulations, Part 58 for the establishment and operation of Photochemical Assessment Monitoring Stations (PAMS). EPA finalized these regulations on February 12, 1993. The regulations require enhanced monitoring of ozone, ozone precursors including oxides of nitrogen and volatile organic compounds, and meteorological parameters in areas designated as an ozone non-attainment. The San Joaquin Valley is classified as non-attainment for the 8-hour ozone standard.

The final regulations required the District to submit a PAMS Network Plan or an Alternative Network Plan to EPA by August 12, 1993, and a SIP revision supporting PAMS by November 12, 1993. The District submitted an Alternative Network Plan in August 1993 and submitted the PAMS SIP in November 1993. Both CARB and EPA Region IX approved these submittals. The District's PAMS network consists of two smaller networks that are focused on monitoring PAMS parameters in the Bakersfield and Fresno Metropolitan Statistical Areas (MSAs). Each focused network consists of one Type 1 PAMS, one Type 2 PAMS, and one Type 3 PAMS. The Type 1 PAMS is sited to monitor morning upwind ozone and ozone precursor concentrations, the Type 2 PAMS is sited to monitor morning ozone and ozone precursor concentrations at the downwind edge of the central business district, and the Type 3 PAMS is sited to monitor peak afternoon ozone concentration downwind of the MSA. To supplement the network, the District also operates profilers at the Visalia-Airport and at the Tracy-Airport sites.

Currently, all six of the PAMS in the network are operational. The Fresno MSA Type 1 PAMS is located at Madera-Pump Yard, Type 2 is located at Clovis-Villa, and the Type 3 is located at Parlier. The Bakersfield MSA Type 1 is located at Shafter-Walker, Type 2 is located at Bakersfield-Golden State and the Type 3 PAMS is located at Arvin.

TABLE 2.2
Ozone Monitoring Stations in the San Joaquin Valley APCD (part 1)

Site Name	AIRS Site Code	Plan Section Location	Sampling Interval/Frequency	Scale	Monitoring Objective	Type	Agency
Arvin	06 029 5001	A.1	1 Hour/Continuous	Urban	Representative Conc.	PAMS	CARB
Bakersfield-California	06 029 0014	A.3	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Bakersfield-Golden State	06 029 0010	A.4	1 Hour/Continuous	Neighborhood	Representative Conc.	PAMS/SLAMS	SJVAPCD
Clovis-Villa	06 019 5001	A.6	1 Hour/Continuous	Neighborhood	High Concentration	PAMS	SJVAPCD
Edison-Johnson Ranch	06 029 0007	A.8	1 Hour/Continuous	Urban	High Concentration	SLAMS	CARB
Fresno-Drummond	06 019 0007	A.9	1 Hour/Continuous	Neighborhood	High Concentration	SLAMS	SJVAPCD
Fresno-First Street	06 019 0008	A.10	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Fresno-Sky Park	06 019 0242	A.12	1 Hour/Continuous	Urban	Representative Conc.	SLAMS	SJVAPCD
Hanford-Irwin	06 031 1004	A.13	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Madera-Pump Yard	06 039 0004	A.17	1 Hour/Continuous	Urban	Representative Conc.	PAMS/SLAMS	SJVAPCD
Maricopa-Stanislaus	06 029 0008	A.18	1 Hour/Continuous	Urban	High Concentration	SLAMS	SJVAPCD
Merced-Coffee Avenue	06 047 0003	A.19	1 Hour/Continuous	Urban	High Concentration	SLAMS	SJVAPCD

TABLE 2.2
Ozone Monitoring Stations in the San Joaquin Valley APCD (part 2)

Site Name	AIRS Site Code	Plan Section Location	Sampling Interval/Frequency	Scale	Monitoring Objective	Type	Agency
Modesto-14 th Street	06 099 0005	A.21	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Oildale-Manor	06 029 0232	A.22	1 Hour/Continuous	Urban	High Concentration	NAMS	CARB
Parlier	06 019 4001	A.24	1 Hour/Continuous	Urban	High Concentration	PAMS	SJVAPCD
Santa Rosa Rancheria	06 031 0500	A.25					CARB
Sequoia National Park-Ash Mountain	06 107 0009		1 Hour/Continuous	Regional	Representative Conc.	SPM	NPS
Sequoia National Park-Lower Kaweah	06 107 0006		1 Hour/Continuous	Regional	Representative Conc.	SPM	NPS
Shafter-Walker Street	06 029 6001	A.26	1 Hour/Continuous	Urban	Representative Conc.	PAMS/SLAMS	CARB
Stockton-Hazelton	06 077 1002	A.27	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Tracy-Airport	06 077 3005	A.29	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Turlock-Minaret	06 099 0006	A.30	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Visalia-Church Street	06 107 2002	A.32	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB

3.0 Particulate Matter Monitoring Network

3.1 General Information

Particulate Matter (PM) has long been a concern because of its adverse impacts on health. Particulate Matter is any material, except pure water, that exists in the solid or liquid state in the atmosphere. The size of PM can vary from coarse wind blown dust particles to fine particle combustion products. PM is generally divided into two major categories; PM10 and PM2.5. PM10 comprises particles with a diameter less than or equal to 10 microns. Their small size allows them to make their way to the air sacs deep within the lungs where they may be deposited and result in adverse health effects. PM10 also causes visibility reduction. In contrast, PM2.5 is a subset of PM10 and includes those particles with a diameter less than or equal to 2.5 microns. PM2.5 is primarily a product of combustion or atmospheric aerosol chemistry. Particles within the PM2.5 fraction of PM10 penetrate deeper into the lungs, and cause majority of the visibility reduction attributable to PM. EPA has found the San Joaquin Valley as in attainment of the PM10 standard, but the Valley is still designated as a non-attainment area. The District is in the process of developing a maintenance plan, which would lead to an attainment designation.

3.2 Status of the PM Monitoring Network

There are eleven PM2.5 Federal Reference Method (FRM) and fourteen PM10 monitors located throughout the San Joaquin Valley. The District currently operates five PM2.5 and eight PM10 sites, and the remaining are operated by CARB. The District plans to reevaluate the frequency of both PM 10 and PM 2.5 monitoring as part of the 5-year network assessment that is due in July 2010. In the meantime, the District will continue to operate real-time PM 10 federal equivalent method monitors at the peak sites, Corcoran and Bakersfield-Golden State. Tables 3.1 and 3.2 provide a summary of the monitoring requirements for PM 10 and PM 2.5 and Tables 3.3 & 3.4 summarize the PM10 and PM2.5 monitoring networks, respectively.

Table 3.1 Monitoring Requirements for PM 10

MSA	County	Pop. (2006)	Minimum FRM Monitors Required	Additional FRM Monitors	Additional Monitors Needed	FEM Real-time Monitors
San Joaquin	San Joaquin	668,265	2	2	0	1
Stanislaus	Stanislaus	514,370	2	2	0	0
Merced	Merced	210,554	1	1	0	0
Madera	Madera	144,396	1	0	1	0
Fresno	Fresno	799,407	2	3	0	1
Kings	Kings	129,461	1	4	0	1
Tulare	Tulare	420,619	1	1	0	0
Kern	Kern	661,653	2	3	0	1

FRM - Federal Reference Method

FEM - Federal Equivalent Method

Table 3.2 Monitoring Requirements for PM 2.5

MSA	County	Pop. (2006)	Minimum FRM Monitors Required	FRM Monitors Active	Additional FRM Monitors Needed	FEM Real-time Monitors
San Joaquin	San Joaquin	668,265	2	1	1	2
Stanislaus	Stanislaus	514,370	2	1	1	2
Merced	Merced	210,554	1	1	0	0
Madera	Madera	144,396	1	0	1	0
Fresno	Fresno	799,407	2	3	0	2
Kings	Kings	129,461	1	1	0	1
Tulare	Tulare	420,619	1	1	0	1
Kern	Kern	661,653	2	3	0	2

FRM - Federal Reference Method

FEM - Federal Equivalent Method

3.3 Particulate Matter Sampling Frequency

EPA requires that ongoing analysis of PM10 data from throughout the network be conducted to determine if the monitoring schedule meets the minimum sampling frequency requirements of Title 40, Code of Federal Regulations, Part 58.13. By staggering the primary and secondary units with an alternate six-day schedule, the District's sampling frequency is equivalent to every three-day monitoring at the Corcoran site. All other PM10 monitoring in the San Joaquin Valley is conducted on the sixth-day minimum schedule required by EPA and the CARB. PM2.5 scheduling is varied according to season. Sampling frequency for April-September is every six days and increases to every third day for the months of October-March.

3.4 Real-Time Particulate Matter Monitoring

In an effort to supplement the PM FRM network the District monitors real-time hourly PM10 data at Bakersfield-Golden, Corcoran-Patterson, and Tracy-Airport. The District also operates real-time PM2.5 monitors at Bakersfield-Golden, Corcoran-Patterson, Clovis, Tracy-Airport, Huron, and Turlock. The CARB has real-time PM2.5 monitors at Bakersfield-California, Fresno-First, Modesto-14th Street, Stockton-Hazelton and Visalia-Church. The data gathered by these units is being used to document diurnal variations in particulate matter concentrations, and to document PM10 and PM2.5 concentrations for Air Quality Index (AQI) reporting and forecasting.

3.5 California Regional Particulate Air Quality Study (CRPAQS)

The objectives of the California Regional PM10/PM2.5 Air Quality Study (CRPAQS) are to: 1) provide an improved understanding of emissions, PM10 and PM2.5 composition, and dynamic atmospheric processes; 2) establish a strong scientific foundation for informed decision making; and 3) develop methods to identify the most efficient and cost-effective emission control strategies to achieve the PM10 and PM2.5 standards in Central California. Initial field programs were conducted in 1995 with large-scale field monitoring programs conducted from December 1999 through January 2001. Completion of modeling and analysis for the project produced early results used for the

District's PM10 plan with final modeling products and analysis reports are expected in the near future.

CRPAQS is a multi-party collaborative effort, funded by the private and public sectors. CRPAQS is directed by the same Policy Committee that managed the highly successful San Joaquin Valley Ozone Study (SARMAP Ozone Study). CRPAQS is composed of four phases:

Phase 1 involved planning and preparatory research. Projects conducted within this phase included demonstration of alternative control strategies, a preliminary field monitoring program known as the 1995 Integrated Monitoring Study (IMS95), analysis and modeling of historical and IMS95 data, and emission inventory development.

Phase 2 was aimed at developing improved techniques for the identification of primary particulate matter through the use of innovative ambient tracers.

Phase 3 included major field studies to address fall and winter episodic conditions and the annual average. The field data collection efforts included four components:

1. A long-term annual program from December 1, 1999 through January 31, 2001.
 2. A summer program from June 15, 2000 through September 15, 2000.
 3. A fall episodic program between September 15, 2000 and November 15, 2000.
 4. A winter episodic program between December 1, 2000 and January 31, 2001.
- The field measurements were collected over a domain extending from the Pacific Ocean on the west to the Mojave Desert on the east and from the Tehachapi Mountains on the south to the northern end of the Sacramento Valley.

Phase 4 was an intensive period for analysis and modeling of the data collected during the field program.

The Study is intended to provide products to support the development of effective PM10 and PM2.5 attainment plans for Central California. It is uniquely positioned to produce needed data within the implementation schedule specified for the new PM standards.

The information developed will allow apportionment of high PM10 and PM2.5 concentrations to contributing sources, thereby avoiding burdens on the regulated community from unnecessary or ineffective control requirements. Implementation of the control plans that are derived from CRPAQS information will result in significant improvements in visibility, and the health and well being of the citizens of Central California.

TABLE 3.3
PM10 Monitoring Stations in the San Joaquin Valley APCD

Site Name	AIRS Site Code	Plan Section Location	Sampling Interval/Frequency	Scale	Monitoring Objective	Type	Agency
Bakersfield-California	06 029 0014	A.3	24 Hour/6-day	Middle	Representative Conc.	SLAMS	CARB
Bakersfield-Golden St *	06 029 0010	A.4	24 Hour/6-day 1 Hour/Continuous TEOM	Neighborhood	High Concentration	SLAMS	SJVAPCD
Clovis-Villa	06 019 5001	A.6	24 Hour/6-day	Neighborhood	Representative Conc.	NAMS	SJVAPCD
Corcoran-Patterson *	06 031 0004	A.7	24 Hour/6-day 1 Hour/Continuous TEOM	Neighborhood	High Concentration	SLAMS	SJVUAPCD
Fresno-Drummond	06 019 0007	A.9	24 Hour/6-day	Neighborhood	Representative Conc.	NAMS	SJVAPCD
Fresno-First Street *	06 019 0008	A.10	24 Hour/6-day 1 Hour/Continuous BAM	Neighborhood	High Concentration	NAMS	CARB
Hanford-Irwin	06 031 1004	A.13	24 Hour/6-day	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Merced-2334 M Street	06 047 2510	A.20	24 Hour/6-day	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Modesto-14 th Street	06 099 0005	A.21	24 Hour/6-day	Neighborhood	Representative Conc.	SLAMS	CARB
Oildale-Manor	06 029 0232	A.22	24 Hour/6-day	Middle	Source Impact	SLAMS	CARB
Stockton-Hazelton	06 077 1002	A.27	24 Hour/6-day	Neighborhood	High Concentration	NAMS	CARB
Stockton-Wagner/Holt	06 077 3010	A. 28	24 Hour/6-day	Neighborhood	Representative Conc.	NAMS	SJVAPCD
Tracy Airport *	06 077 3005	A. 29	1 Hour/Continuous TEOM	Urban	Representative Conc.	SLAMS	SJVAPCD
Turlock-Minaret	06 099 0006	A. 30	24 Hour/6-day	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Visalia-Church	06 107 2002	A. 32	24 Hour/6-day	Neighborhood	Representative Conc.	SLAMS	CARB

TABLE 3.4
PM_{2.5} Monitoring Stations in the San Joaquin Valley APCD

Site Name	AIRS Site Code	Plan Section Location	Sampling Interval/Frequency	Scale	Monitoring Objective	Type	Agency
Bakersfield-California *	06 029 0014	A.3	24 Hour/Daily 1 Hour/Continuous BAM	Neighborhood	Representative Conc.	SLAMS	CARB
Bakersfield-Golden St *	06 029 0010	A.4	24 Hour/X 1 Hour/Continuous BAM	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Bakersfield-Planz	06 029 0016	A.5	24 Hour / 3 rd day	Neighborhood	Representative Conc.	SLAMS	CARB
Clovis-Villa *	06 019 5001	A.6	24 Hour/X 1 Hour/Continuous BAM	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Corcoran-Patterson *	06 031 0004	A.7	24 Hour/X 1 Hour/Continuous BAM	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Fresno-First Street *	06 019 0008	A.10	24 Hour/Daily 1 Hour/Continuous BAM	Neighborhood	Representative Conc.	NAMS	CARB
Fresno-Hamilton/Winery	06 029 5025	A.11	24 Hour/X	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Huron	06 019	A.14	1 Hour/Continuous EBAM	Neighborhood	Representative Conc.	Special Purpose	SJVAPCD
Merced-2334 M Street	06 047 2510	A.20	24 Hour/X	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Modesto-14 th Street *	06 099 0005	A.21	24 Hour/ 3 rd day 1 Hour/Continuous BAM	Neighborhood	Representative Conc.	SLAMS	CARB
Stockton-Hazelton *	06 077 1002	A. 27	24 Hour/ 3 rd day 1 Hour/Continuous BAM	Neighborhood	Representative Conc.	SLAMS	CARB
Tracy Airport *	06 077 3005	A. 29	1 Hour/Continuous BAM	Urban	Representative Conc.	SLAMS	SJVAPCD
Turlock-Minaret *	06 099 0006	A. 30	1 Hour/Continuous BAM	Urban	Representative Conc.	SLAMS	SJVAPCD
Visalia-Church *	06 107 2002	A. 32	24 Hour/ 3 rd day 1 Hour/Continuous BAM	Neighborhood	Representative Conc.	SLAMS	CARB

* In addition to any filter-based sampling that may be present, the site also contains a real time continuous particulate matter monitor.

X Sampling frequency for Apr-Sep is every six days and increases to sampling every three days for the months of Oct-Mar.

4. Non-Methane Hydrocarbons

4.1 Hydrocarbon Measurements

The PAMS program is applicable to ozone nonattainment areas. Ratios of photochemically reactive hydrocarbons to oxides of nitrogen in ambient air are important as inputs to ozone models and the corroborative analysis for preparation of ozone State Implementation Plans (SIPs).

4.1.1 Continuous Measurements

Continuous year round monitoring of non-methane hydrocarbons (NMHC) is currently performed by the District at Arvin, Bakersfield Golden, Clovis, Madera Pump, Parlier and Shafter as part of the PAMS program.

4.1.2 Integrated Sampling for Non-Methane Organic Compounds

In the past, the continuous hydrocarbon analyzers described above measured the only hydrocarbon data available for modeling. The NMHC component, as measured by the continuous hydrocarbon analyzers, was considered the best available data to represent photochemically reactive hydrocarbons involved in the atmospheric production of ozone. In the mid 1980s, EPA researchers determined that the continuous analyzers underestimated the ambient reactive hydrocarbon levels by as much as fifty percent when compared to more accurate sampling methods, which involve "grab sampling" followed by laboratory gas chromatographic analysis of these grabbed samples. In 1987, EPA issued a technical directive statement that hydrocarbon data collected, as NMHC from continuous analyzers could no longer be used in ozone SIP development; unless the submitting agency could demonstrate equivalency with the integrated grab sampling/laboratory gas chromatography (GC) methods for NMOCs. During 1993 and modified in 1995, the District submitted plans incorporating these changes.

4.1.3 District PAMS Network

Design of the PAMS network is based on selection of an array of site locations relative to ozone precursor source areas and predominant wind directions. The PAMS network is comprised of two monitoring areas: the Fresno MSA and Bakersfield (Kern) MSA. Each MSA has three different "Type" sites: Type 1 sites characterize upwind, background and transported ozone and ozone precursors; Type 2 sites monitor the magnitude and type of precursor emissions in the area where maximum precursor emissions are expected; and Type 3 sites monitor maximum ozone concentrations occurring downwind from the area of maximum precursor emissions.

In the Fresno MSA, the Type 1 site is the Madera Pump site, the Type 2 site is the Clovis site, and the Type 3 site is the Parlier site. While in the Bakersfield MSA, the Type 1 site is the Shafter site, the Type 2 site is the Bakersfield-Golden site, and the Type 3 site is the Arvin site.

Analysis of NMOC data from these newer sampling and analysis methods provides better information for determining hydrocarbon-to-NO_x ratios for photochemical ozone modeling. An ambient hydrocarbon species database is being formed that will enable the District, CARB, and EPA to analyze ambient NMOC profiles and species behaviors under differing atmospheric conditions. NMOC species data may also be used to evaluate the effectiveness of individual hydrocarbon emission control programs, and help shape specific hydrocarbon control strategies in the future.

4.1.4 Future District PAMS Network Changes

Revisions in 40 CFR, adopted December 2006, call for changes in equipment and monitoring. Equipment changes require a different type NO_x analyzer at the Type 3 sites and installation of trace level CO analyzers at the Type 2 sites. The District procured two trace level CO analyzers and is in the process of installing them. Additionally, monitoring at Type 1 sites is no longer required. Past data from Type 1 sites has shown only trace levels of transported ozone and ozone precursors.

5. Other Monitoring

5.1 Carbon Monoxide Monitoring Network

5.1.1 General Information

Monitoring for CO within the District has shown that concentrations have not exceeded the NAAQS for over a decade. Based on this, the District is not required to monitor for CO. However, the District still continues the CO monitoring program to supplement related meteorological and criteria pollutant data.

The highest carbon monoxide (CO) concentrations recorded in the Valley occur during the winter months. More than ninety percent of all annual maximums have been measured during the months of November, December, January, and February when strong radiation or subsidence inversions exist and wind conditions are predominantly calm. Both one-hour and eight-hour daily maximums are usually recorded during early morning and late evening hours.

Table 5.1 Monitoring Specification for Carbon Monoxide

MSA	County	Pop. (2006)	Monitors Active
San Joaquin	San Joaquin	668,265	1
Stanislaus	Stanislaus	514,370	2
Merced	Merced	210,554	0
Madera	Madera	144,396	0
Fresno	Fresno	799,407	4
Kings	Kings	129,461	0
Tulare	Tulare	420,619	0
Kern	Kern	661,653	2

TABLE 5.2
Carbon Monoxide Monitoring Stations in the San Joaquin Valley APCD

Site Name	AIRS Site Code	Plan Section Location	Sampling Interval/Frequency	Scale	Monitoring Objective	TYPE	Agency
Bakersfield-California	06 029 0014	A.3	1 Hour/Continuous	Middle	Representative Conc.	SLAMS	CARB
Bakersfield-Golden State	06 029 0010	A.4	1 Hour/Continuous	Middle	Representative Conc.	SLAMS	SJVAPCD
Clovis-Villa	06 019 5001	A.6	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Fresno-Drummond	06 019 0007	A.9	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Fresno-First Street	06 019 0008	A.10	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Fresno-Sky Park	06 019 0242	A.12	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Modesto-14th Street	06 099 0005	A.21	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Stockton-Hazelton	06 077 1002	A. 27	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Turlock-Minaret	06 099 0006	A. 30	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Visalia-Church	06 107 2002	A. 32	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB

5.2 Nitrogen Dioxide Monitoring Network

5.2.1 General Information

Nitrogen dioxide belongs to a family of highly reactive gases called nitrogen oxides (NO_x). These gases form when fuel is burned at high temperatures, and come principally from motor vehicle exhaust and stationary sources such as electric utilities and industrial boilers. Nitrogen dioxide is a strong oxidizing agent that reacts in the air to form corrosive nitric acid, as well as toxic organic nitrates. It also plays a major role in the atmospheric reactions that produce ground-level ozone and particulate matter.

The San Joaquin Valley does not exceed federal or state standards for NO₂. NO_x emission levels are being reduced in an effort to reach attainment of the ozone and particulate matter standards. Therefore, future ambient NO₂ levels are likely to be reduced below current levels.

5.2.2 SLAMS Status of Nitrogen Dioxide Monitoring Network

Nitrogen dioxide is currently monitored at seventeen sites within the District, ten by the SJVAPCD along with another seven sites by the CARB. Eleven of the sites are listed as SLAMS and are equipped with continuous chemiluminescent NO_x analyzers. The remaining six sites are categorized as PAMS NO₂ monitors.

Table 5.3 Monitoring Specifications for Nitrogen Dioxide

MSA	County	Pop. (2006)	Monitors Active
San Joaquin	San Joaquin	668,265	2
Stanislaus	Stanislaus	514,370	1
Merced	Merced	210,554	1
Madera	Madera	144,396	1
Fresno	Fresno	799,407	5
Kings	Kings	129,461	1
Tulare	Tulare	420,619	1
Kern	Kern	661,653	5

TABLE 5.4
Nitrogen Dioxide Monitoring Stations in the San Joaquin Valley APCD

Site Name	AIRS Site Code	Plan Section Location	Sample Interval/Frequency	Scale	Monitoring Objective	Type	Agency
Arvin	06 029 5001	A.1	1 Hour/Continuous	Urban	Representative Conc.	PAMS/SLAMS	CARB
Bakersfield-California	06 029 0014	A.3	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Bakersfield-Golden State	06 029 0010	A.4	1 Hour/Continuous	Urban	High Concentration	PAMS/SLAMS	SJVAPCD
Clovis-Villa	06 019 5001	A.6	1 Hour/Continuous	Neighborhood	High Concentration	PAMS/SLAMS	SJVAPCD
Edison-Johnson Ranch	06 029 0007	A.8	1 Hour/Continuous	Urban	Representative Conc.	SLAMS	CARB
Fresno-Drummond	06 019 0007	A.9	1 Hour/Continuous	Neighborhood	High Concentration	SLAMS	SJVAPCD
Fresno-First Street	06 019 0008	A.10	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Fresno-Sky Park	06 019 0242	A.12	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Hanford-Irwin	06 031 1004	A.13	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Madera-Pump Yard	06 039 0004	A.17	1 Hour/Continuous	Neighborhood	Representative Conc.	PAMS/SLAMS	SJVAPCD
Merced-Coffee Avenue	06 047 0003	A.19	1 Hour/Continuous	Urban	Representative Conc.	SLAMS	SJVAPCD
Parlier	06 019 4001	A.24	1 Hour/Continuous	Urban	Representative Conc.	PAMS/SLAMS	SJVAPCD
Shafter-Walker Street	06 029 6001	A. 26	1 Hour/Continuous	Neighborhood	Representative Conc.	PAMS/SLAMS	CARB
Stockton-Hazelton	06 077 1002	A. 27	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB
Tracy-Airport	06 077 3005	A. 29	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Turlock-Minaret	06 099 0006	A. 30	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	SJVAPCD
Visalia-Church	06 107 2002	A. 32	1 Hour/Continuous	Neighborhood	Representative Conc.	SLAMS	CARB

5.3 Sulfur Dioxide Monitoring Network

5.3.1 General Information

Emissions of sulfur dioxide (SO₂) result primarily from the combustion of fossil fuels. Annual District-wide SO₂ emissions have decreased by over 70% since 1990. Federal and state SO₂ standards have not been exceeded in the San Joaquin Valley within the last ten years.

5.3.2 SLAMS Status of Sulfur Dioxide Monitoring Network

In early 1997, CARB reviewed several years of SO₂ data from Bakersfield-California, Fresno-First Street, and Oildale-Manor. CARB then determined that all three SO₂ monitors were measuring background concentrations of SO₂ much lower than both the federal and state SO₂ standards. In an effort to conserve resources, CARB terminated operation of two SO₂ monitors.

TABLE 5.5
Sulfur Dioxide Monitoring Stations in the San Joaquin Valley APCD

Site Name	AIRS Site Code	Plan Section Location	Sampling Interval Frequency	Scale	Monitoring Objective	Type	Agency
Fresno-First Street	06 019 0008	A.10	1 Hr Continuous	Neighborhood	Representative Conc.	SLAMS	CARB

5.4 Toxics Monitoring

In late 1984, CARB established a statewide ambient air toxic monitoring network to be used in a program to identify and control the emissions of airborne toxic substances in California. The network includes Bakersfield-California, Fresno-First Street, and Stockton-Hazleton. At these stations, 24-hour periodic samples of air are collected and 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 the following particulate metals: arsenic, and chromium-6. The current CARB Integrated NMOC sampling program, as well as the District PAMS NMOC sampling program, also identify and quantify several toxic hydrocarbon species.

5.5 Meteorological Monitoring

Meteorological monitoring, the measurement of weather variables, has been part of the ambient air monitoring programs for many years. The eight county Air Pollution Control Districts that formed the San Joaquin Valley Air Pollution Control District (SJVAPCD) performed very limited meteorological monitoring. The most the counties monitored was

wind speed and direction, without quality control programs to ensure valid data and often without reporting the data to either CARB or EPA.

Since the formation of the SJVAPCD, the air monitoring section has been working with CARB to build a meteorological monitoring program. With the help of the CARB, the District has installed and semiannually calibrates meteorological sensors at several sites. Table 5.6 summarizes the meteorological monitoring network located within the San Joaquin Valley.

5.5.1 Meteorological and Air Quality Forecasting

One of the primary uses for the meteorological data is to aid in the daily forecasting of weather conditions and air quality. Forecasting activities include:

- 1) Reporting and forecasting the Air Quality Index (AQI) for carbon monoxide, ozone (one and eight hour), PM_{2.5} and PM₁₀ for each of the District's eight counties. The District analyzes for 26 zones within the counties and forecasts the peak value in each. These forecasts are transferred to EPA's AIRNOW.
- 2) Agricultural burn emissions collection for more than 100 burn-zones.
- 3) Issuance of Public Health Advisories or Smog Alerts when required
- 4) Prescribed (controlled) burn planning in consultation with the California Department of Forestry, National Park Service, and local Fire Districts
- 5) Emergency Response consultations

Of the activities listed, determinations of the AQI and burn/no-burn status are the primary ones that require the most day-to-day work effort. The other activities are consequences of the first two. Air Quality Index forecasting and reporting, along with the emergence of Public Health Advisories in 1990, have made the public and media more aware of air quality and what can be done to reduce air pollution.

TABLE 5.6
Meteorological Parameters

Station Name	Wind Speed	Wind Direction	Outdoor Temperature	Relative Humidity	Barometric Pressure	Solar Radiation
Arvin	X	X	X	X	X	X
Bakersfield-California	X	X	X	X	X	X
Bakersfield-Golden St	X	X	X	X	X	X
Clovis-Villa	X	X	X	X	X	X
Corcoran-Patterson	X	X	X		X	
Edison-Johnson	X	X	X			
Fresno-Drummond	X	X	X		X	
Fresno-First Street	X	X	X	X	X	
Fresno-Skv Park	X	X	X			
Hanford-Irwin					X	
Madera-Pump Yard	X	X	X	X	X	X
Maricopa-Stanislaus	X	X	X		X	
Merced-Coffee	X	X	X			
Modesto-14th Street	X	X	X		X	
Oildale-Manor	X	X	X			
Parlier	X	X	X	X	X	X
Sequoia National Park-	X	X	X	X		X
Sequoia National Park-	X	X	X	X		X
Shafter-Walker Street	X	X	X	X	X	X
Stockton-Hazelton	X	X	X	X		
Tracy-Airport	X	X	X		X	
Turlock-Minaret	X	X				
Visalia-Church	X	X	X		X	
Visalia-Airport	X	X	X	X	X	X

6. Changes to the SLAMS/PAMS Network

There are three categories of changes to the San Joaquin Valley Air Pollution Control District SLAMS/PAMS network: recent, pending and future changes.

6.1 Recent Changes

Under the requirement of Assembly Bill 841 (AB 841) "The District shall install one or more monitors for monitoring airborne fine particles smaller than 2.5 microns in diameter (PM 2.5) in primarily low-income and underserved areas in the western region of the County of Fresno," the District placed into operation a PM 2.5 AC-BAM at the Huron Middle School during December 2006. To further enhance the PAMS and the meteorological network, a lower air profiler was added to the Tracy-Airport site and started operation January 1, 2007. The profiler measures wind speed, wind direction, and temperature as a function of altitude.

During 2006, an air-monitoring site started operation on the Santa Rosa Rancheria. Presently, O₃, PM 10 and meteorological data are monitored.

6.2 Pending Changes

During 2005, the District had contracted a consultant to evaluate the western part of the District along the I-5 corridor to determine the placement of a new monitoring station(s). The study was conducted under the administration of the Policy and Technical Committees of the Valleywide Air Pollution Study Agency to provide a thorough scientific evaluation of placement issues. The District is in the process of constructing a site near the town of Tranquility. The Westland-Tranquility site will monitor ozone, NO_x, PM 2.5, and will provide meteorological data. The installation of the PM 2.5 monitor will also satisfy the requirements of AB 841 (Arambula, 2005). Unique to this site will be a 20-meter meteorological tower for measuring the gradient between wind speed/direction at 10 and 20 meters. The purpose of this site is to measure air quality on the westside of the valley from western Kings County to northern Stanislaus County. This site will determine population exposure on a regional scale.

With the increase of population within the San Joaquin Valley, changes to 40 CFR, plus the separation of Madera County from the Fresno Area MSA, more monitoring is required. Listed are the new monitoring requirements:

- San Joaquin County MSA – 1 additional PM 2.5 FRM
- Stanislaus County MSA – 1 additional PM 2.5 FRM
- Madera County MSA – 1 PM 2.5 FRM and 1 PM 10 FRM
- Tulare County – 1 additional O₃ monitor

These new monitoring requirements have been budgeted in the District 2007-2008 Budget. Siting will start shortly.

6.3 Future Changes

The District recognizes the need to install additional monitoring stations in the western and eastern parts of the Valley. Currently, the majority of the monitoring is performed along the 99-freeway corridor. It would be beneficial for both air pollution modeling and for attainment demonstration to have multi-pollutant monitors installed between the I-5 and the 99 corridors and along the foothills to the east of the Valley.

Revisions in 40 CFR, adopted December 2006, call for changes in equipment and monitoring. Equipment changes require a different type NO_x analyzer at the Type 3 sites (Arvin and Parlier) and installation of trace level CO analyzers at the Type 2 sites (Bakersfield Golden and Clovis). The District procured two trace level CO analyzers and is in the process of installing them. Additionally, monitoring at Type 1 sites (Madera and Shafter) is no longer required. Past data from Type 1 sites (Madera and Shafter) has shown only trace levels of transported ozone and ozone precursors.

If the need arises to move a PM 2.5 monitor that has recorded ambient exceedences within the past three years the District will provide opportunity for public comment in accordance with 40 CFR 58.10.(c).

Appendix A Detailed Site Information

- A. 1 Arvin Bear Mountain
- A. 2 Ash Mountain
- A. 3 Bakersfield California
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- A. 27 Stockton Hazelton
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- A. 29 Tracy Airport
- A. 30 Turlock Minaret
- A. 31 Visalia Airport
- A. 32 Visalia Church

A.1 Arvin Bear Mountain

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-029-5001	15247	6/1/89	CARB/SJVAPCD (shared site)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
20401 Bear Mountain Blvd, Arvin CA 93203	Kern	San Joaquin Valley	35° 12' 31"	118° 46' 33"	617

Parameters Monitored
NO ₂ , O ₃ , Total NMHC, Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation

Site Survey Report

Station Temperature	Traffic	Topography	Predominant Wind Direction: Northwest
Controlled: Yes	Description: Rural	Site: Level	Arc Air Flow (Deg): 360 Degrees
Recorded: Yes	Distance: 150 meters	Region: Valley	Probe Clean: Yes
Inside Temp: 25 Degrees Celsius	Count (Veh/Day): 1000	QA Manual	Manifold Clean: Yes
Meteorology	Non-vehicular Local Sources	Approved: Yes	Cleaning Schedule: As Needed
Located With Instruments: Yes	Description: Ag Fields	Agency: CARB	Autocalibrator Type: Environics 9100
Shadowing: Yes	Distance: 10 meters	Urbanization: Rural	Site Survey Complete: Yes
Boom Orientation (Deg): 345 Temp(Motor/Natural): Motor	Direction: East	Ground Cover: Dirt	Logbook Up To Date: Yes

Monitor Type	Nitrogen Dioxide	Non-Methane Hydrocarbons	Ozone	Outdoor Temperature	Relative Humidity	Wind Direction	Horizontal Wind Speed	Barometric Pressure
Manufacturer/Model	TECO 42, 42C	TECO 55C	API/Teledyne 400	MET ONE 060A-2	Vaisala	MET ONE 020-B	MET ONE 010-C	MET ONE 090D
Serial Number	20003375	8986	20004366	T1334	HMP45D	F1024	P1030	6551
POC	1	2	1	2	2	2	2	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	PAMS	Unknown	PAMS	Unknown	PAMS	Unknown	Unknown	PAMS
Objective	POPULATION EXPOSURE	POPULATION EXPOSURE	POPULATION EXPOSURE					
Scale	Urban scale	Urban scale	Urban scale					
Height Above Ground	3.3	3.3	3.3	10	10	10	10	9.5
Height Above Platform	1	1	1	7	7	7	7	7
Sampler Spacing								
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	10/17/2006	10/18/2006	10/17/2006					
Cal. Gas Cert. Date	3/26/2006	3/26/2006						
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	5/8/2006	10/18/2006	5/5/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006
Cal. Equipment Cert. Date	5/8/2006	5/8/2006	7/11/2006	2/6/2006	7/12/2006		7/12/2006	1/3/2006
Obstacle Description	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-					
Distance to Dripline	-	-	-					
Dominant Influence	Agriculture	Vehicular	Agriculture					
Residence Time (sec)	13.4	17.6	13.6					

A.2 Ash Mountain

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-107-0009	54009	1/1/00	National Park Service

Site Address	County	Air Basin	Latitude	Longitude	Elevation
Ash Mountain, Sequoia National Park CA	Tulare	San Joaquin Valley	36° 29' 22"	118° 49' 45"	535

Parameters Monitored

O₃, TEOM_{PM10}, PM_{2.5}, Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Solar Radiation

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 25 Degrees Celsius	Traffic Description: Light Distance: 500 meters Count (Veh/Day): 1000	Topography Site: hilly Region: Mountainous	Predominant Wind Direction: North
			Arc Air Flow (Deg): 360 Degrees
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 346 Temp(Motor/Natural): Motor	Non-vehicular Local Sources Description: None Distance: N/A Direction: N/A	QA Manual Approved: Yes Agency: NPS Urbanization: Rural	Probe Clean: Yes
			Manifold Clean: N/A
		Cleaning Schedule: As Needed Autocalibrator Type: TECO 49	Site Survey Complete: Yes Logbook Up To Date: Yes

Monitor Type	Ozone
Manufacturer/Model	TECO 49, 49C
Serial Number	880676
POC	1
Data For Record?	Yes
Purpose	Non-EPA Federal
Objective	UNKNOWN
Scale	
Height Above Ground	5.1
Height Above Platform	1.9
Sampler Spacing	
Current Manual Available?	Yes
Instrument Log Up-to-date?	Yes
In-line Filter Change Date	9/12/2006
Cal. Gas Cert. Date	
Calibration Current?	Yes
Calibration Date	9/7/2006
Cal. Equipment Cert. Date	Not Available
Obstacle Description	None
Distance to Obstacle	-
Height Above Inlet	-
Distance to Walls, etc.	-
Distance to Dripline	-
Dominant Influence	Vehicular
Residence Time (sec)	8.2

A.3 Bakersfield California

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-029-0014	15255	3/1/94	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
5558 California, Bakersfield CA 93309	Kern	San Joaquin Valley	35° 21' 24"	119° 3' 46"	117

Parameters Monitored

NO₂, O₃, PM₁₀, PM_{2.5}, Toxics, Cr⁶⁺, Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation

Site Survey Report

Station Temperature	Traffic	Topography	Predominant Wind Direction: South
Controlled: Yes Recorded: Yes Inside Temp: 27 Degrees Celsius	Description: Arterial Distance: 300 meters Count (Veh/Day): 10000	Site: Level Region: Level	Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes
		QA Manual	Manifold Clean: Yes
		Approved: Yes	Cleaning Schedule: Semi Annually
		Agency: CARB	Autocalibrator Type: Environics 9100
		Urbanization: City Center	Site Survey Complete: Yes
		Ground Cover: Roof	Logbook Up To Date: Yes
Meteorology	Non-vehicular Local Sources		
Located With Instruments: Yes Shadowing: Yes Boom Orientation (Deg): 346 Temp(Motor/Natural): Motor	Description: None Distance: N/A Direction: N/A		

Monitor Type	Nitrogen Dioxide	Ozone	PM10-SSI	PM10-SSI	BAM-PM2.5	BAM-PM2.5	PM2.5	PM2.5	Xontech 920	Xontech 920	Outdoor Temperature	Wind Direction	Horizontal Wind Speed	Barometric Pressure
Manufacturer/Model	API 200A	API/Teledyne 400	Sierra Anderson SA1200	Sierra Anderson SA1200	Met One BAM 1020	Met One BAM 1020	R & P 2025	R & P 2000-H	Xontech 924	Xontech 924	MET ONE 060A-2	MET ONE 020-C	MET ONE 010-B	MET ONE 090D
Serial Number	20021217	20003806	20018176	20018177	20005413	20021413	20021399	20004999	20021410	20021408	M8663	W1490	M1027	X1370
POC	1	1	1	2	3	4	1	2	2	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	Other	Other	Other	SLAMS	SLAMS	Unknown	Unknown	Other	Other	Other	Other
Objective	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	Other	Other	POPULATION EXPOSURE	Other	UNKNOWN	UNKNOWN				
Scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood			Neighborhood							
Height Above Ground	7.3	7.3	6.5	6.5	7	7	7.3	7.3	7.2	7.2	8	10	10	7
Height Above Platform	3.3	3.3	1.5	1.5	2	2	1.5	1.5	3.2	3.2	3	5	6	2
Sampler Spacing			3	3	3	3	3	3	2	2				
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	2/28/2007	2/28/2007												
Cal. Gas Cert. Date	11/3/2005													
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	10/17/2006	10/17/2006	2/1/2007	2/1/2007	1/19/2007	1/19/2007	2/1/2007	2/1/2007	11/11/2006	11/11/2006	6/3/2002	6/3/2002	6/3/2002	2/9/2006
Cal. Equipment Cert. Date	10/17/2006	10/17/2006	9/15/2006	9/15/2006	8/31/2006	8/31/2006	8/31/2006	8/31/2006	8/31/2006	8/31/2006	Not Available		Not Available	Not Available
Obstacle Description	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Distance to Dripline	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dominant Influence	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular				
Residence Time (sec)	14.4	10.1												

A.4 Bakersfield Golden

IRS Number	CARB Number	Site Start Date	Reporting Agency
06-029-0010	15256	6/1/94	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1128 Golden State Hwy, Bakersfield CA 93301	Kern	San Joaquin Valley	35° 23' 7"	119° 0' 52"	151

Parameters Monitored
CO, NO ₂ , O ₃ , Total NMHC, PM ₁₀ , PM _{2.5} , Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation

Site Survey Report

Station Temperature	Traffic	Topography	Predominant Wind Direction: Northwest
Controlled: Yes	Description: Arterial	Site: Level	Arc Air Flow (Deg): 360 Degrees
Recorded: Yes	Distance: 100 meters	Region: Level	Probe Clean: Yes
Inside Temp: 23 Degrees Celsius	Count (Veh/Day): 10000	QA Manual	Manifold Clean: Yes
Meteorology	Non-vehicular Local Sources	Approved: Yes	Cleaning Schedule: As needed
Located With Instruments: Yes	Description: Sandy Lot	Agency: SJVUAPCD	Autocalibrator Type: Envirionics 6100
Shadowing: Yes	Distance: 1 meters	Urbanization: City Center	Site Survey Complete: Yes
Boom Orientation (Deg): 345	Direction: All	Ground Cover: Dirt	Logbook Up To Date: Yes
Temp(Motor/Natural): Motor			

Monitor Type	Carbon Monoxide	Nitrogen Dioxide	Non-Methane Hydrocarbons	Ozone	PM10-SSI	BAM-PM2.5	PM2.5	Outdoor Temperature
Manufacturer/Model	TECO 48, 48C	TECO 42, 42C	TECO 55	API/Teledyne 400	Sierra Anderson SA1200	Met One BAM 1020	Anderson RAAS 2.5	MET ONE 060A-2
Serial Number	2324	11359	6592	11001	4121	9840	300-00151	X1747
POC	1	1	1	1	1		1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Purpose	SLAMS	SLAMS	PAMS	SLAMS	SLAMS		SLAMS	PAMS
Objective	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	POPULATION EXPOSURE	POPULATION EXPOSURE	
Scale	Middle scale	Null	Null	Neighborhood		Neighborhood	Neighborhood	
Height Above Ground	7.5	7.5	7.5	7.5	5.5	5.7	5.7	9
Height Above Platform	3	3	3	3	1.5	1.7	1.7	3
Sampler Spacing								
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	11/15/2006	11/15/2006	11/15/2006	11/15/2006				
Cal. Gas Cert. Date	6/2/2006	6/2/2006	6/2/2006					
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	8/25/2006	8/25/2006	6/28/2006	11/16/2006	6/6/2006	11/7/2006	1/3/2006	6/15/2006
Cal. Equipment Cert. Date	11/16/2006	11/16/2006	11/16/2006	11/16/2006	4/3/2006	1/3/2006	1/3/2006	2/6/2006
Obstacle Description	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-	-	-	-	
Distance to Dripline	-	-	-	-	-	-	-	
Dominant Influence	Vehicular	Vehicular	Vehicular	Vehicular	Industrial	Vehicular	Commercial	
Residence Time (sec)	11.2	12.4	14.8	12.4				

A.5 Bakersfield Planz Road

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-029-0016	15258	9/19/00	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
401 E. Planz Rd., Bakersfield CA 93307	Kern	San Joaquin Valley	35° 19' 52"	118° 59' 59"	145

Parameter Monitored
PM _{2.5}

Site Survey Report

<p style="text-align: center;">Station Temperature</p> <p>Controlled: No</p> <p>Recorded: No</p> <p>Inside Temp: 0 Degrees Celsius</p>	<p style="text-align: center;">Traffic</p> <p>Description: Commercial</p> <p>Distance: 500 meters</p> <p>Count (Veh/Day): 1000</p>	<p style="text-align: center;">Topography</p> <p>Site: Level</p> <p>Region: Level</p> <p style="text-align: center;">QA Manual</p> <p>Approved: Yes</p> <p>Agency: CARB</p> <p>Urbanization: City Center</p> <p>Ground Cover: Asphalt</p>	<p>Predominant Wind Direction: South</p> <p>Arc Air Flow (Deg): 360 Degrees</p> <p>Probe Clean: N/A</p> <p>Manifold Clean: N/A</p> <p>Cleaning Schedule: N/A</p> <p>Autocalibrator Type: N/A</p> <p>Site Survey Complete: Yes</p> <p>Logbook Up To Date: Yes</p>
<p style="text-align: center;">Meteorology</p> <p>Located With Instruments: No</p> <p>Shadowing: No</p> <p>Boom Orientation (Deg):</p> <p>Temp(Motor/Natural):</p>	<p style="text-align: center;">Non-vehicular Local Sources</p> <p>Description: Airplanes</p> <p>Distance: 20 meters</p> <p>Direction: 360</p>		

Monitor Type	PM _{2.5}
Manufacturer/Model	R&P 2025
Serial Number	20021078
POC	1
Data For Record?	Yes
Purpose	SLAMS
Objective	POPULATION EXPOSURE
Scale	Neighborhood
Height Above Ground	0.6
Height Above Platform	1.5
Sampler Spacing	
Current Manual Available?	Yes
Instrument Log Up-to-date?	Yes
In-line Filter Change Date	
Cal. Gas Cert. Date	
Calibration Current?	Yes
Calibration Date	2/1/2007
Cal. Equipment Cert. Date	8/31/2006
Obstacle Description	None
Distance to Obstacle	-
Height Above Inlet	-
Distance to Walls, etc.	-
Distance to Dripline	-
Dominant Influence	Vehicular
Residence Time (sec)	

A.6 Clovis Villa

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-019-5001	10248	9/1/90	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
908 N. Villa Av, Clovis CA 93612	Fresno	San Joaquin Valley	36° 49' 10"	119° 42' 59"	86

Parameters Monitored
CO, NO ₂ , O ₃ , Total NMHC, PM ₁₀ , PM _{2.5} , Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation

Site Survey Report

<p>Station Temperature</p> <p>Controlled: Yes Recorded: Yes Inside Temp: 26 Degrees Celsius</p>	<p>Traffic</p> <p>Description: SR168 Distance: 50 meters Count (Veh/Day): 7000</p>	<p>Topography</p> <p>Site: Level Region: Valley</p>	<p>Predominant Wind Direction: Southwest</p> <p>Arc Air Flow (Deg): 360 Degrees</p> <p>Probe Clean: Yes</p>
<p>Meteorology</p> <p>Located With Instruments: Yes Shadowing: Yes Boom Orientation (Deg): 345 Temp(Motor/Natural): Motor</p>	<p>Non-vehicular Local Sources</p> <p>Description: Maintenance yard Distance: 3 meters Direction: S,E,W</p>	<p>QA Manual</p> <p>Approved: Yes Agency: SJVU APCD Urbanization: City Center</p>	<p>Manifold Clean: Yes</p> <p>Cleaning Schedule: Semi Annually</p> <p>Autocalibrator Type: Envirionics 6100</p> <p>Site Survey Complete: Yes</p>
		<p>Ground Cover: Asphalt</p>	<p>Logbook Up To Date: Yes</p>

Monitor Type	Carbon Monoxide	Nitrogen Dioxide	Non-Methane Hydrocarbons	Ozone	PM10-SSI	BAM-PM2.5	PM2.5	Outdoor Temperature
Manufacturer/Model	TECO 48, 48C	TECO 42, 42C	TECO 55C	API/Teledyne 400	SA 1200	MET ONE BAM 1020	Anderson 300	MET ONE 060A-2
Serial Number	5019	1727	6822	11004	004040-00	11771	6785	M8677
POC	1	1	1	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	PAMS	PAMS	NAMS	NAMS	SLAMS	SLAMS	PAMS
Objective	MAX PRECURSOR EMISSIONS IMPACT	Highest Concentration	Highest Concentration	Highest Concentration	POPULATION EXPOSURE	Other	Other	
Scale	Null	Neighborhood	Neighborhood	Neighborhood	Neighborhood			
Height Above Ground	6.3	6.3	6.3	6.3	5.3	6	5.3	9.6
Height Above Platform	2.2	2.2	2.2	2.2	1.5	2	1.5	
Sampler Spacing								
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	9/18/2006	9/18/2006	9/18/2006	9/18/2006				
Cal. Gas Cert. Date	10/21/2002	10/21/2002	10/21/2002					
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	3/22/2006	3/22/2006	9/14/2006	7/28/2006	5/22/2006	6/12/2006	6/12/2006	5/17/2006
Cal. Equipment Cert. Date	8/3/2006	8/3/2006	8/3/2006	8/3/2006	4/3/2006	10/19/2005	10/19/2005	Not Available
Obstacle Description	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-	-	-	-	-
Distance to Dripline	-	-	-	-	-	-	-	-
Dominant Influence	Vehicular	Vehicular	Vehicular	Vehicular	Industrial	Vehicular	Vehicular	
Residence Time (sec)	11.7	12.8	12.9	11.4				

A.7 Corcoran Patterson

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-031-0004	16719	10/1/96	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1520 Patterson Av, Corcoran CA 93212	Kings	San Joaquin Valley	36° 6' 8"	119° 33' 57"	62

Parameters Monitored
PM ₁₀ , TEOM _{PM10} , PM _{2.5} , Outdoor Temperature, Wind Direction, Horizontal Wind Speed, Barometric Pressure

Site Survey Report

<p>Station Temperature</p> <p>Controlled: Yes Recorded: Yes Inside Temp: 27 Degrees Celsius</p>	<p>Traffic</p> <p>Description: City Distance: 50 meters Count (Veh/Day): 4000</p>	<p>Topography</p> <p>Site: Level Region: Level</p>	<p>Predominant Wind Direction: Northwest</p> <p>Arc Air Flow (Deg): 360 Degrees Probe Clean: N/A</p>
<p>Meteorology</p> <p>Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 344</p>	<p>Non-vehicular Local Sources</p> <p>Description: None Distance: N/A Direction: N/A</p>	<p>QA Manual</p> <p>Approved: Yes Agency: SJVUAPCD Urbanization: Rural Ground Cover: Roof</p>	<p>Manifold Clean: N/A Cleaning Schedule: N/A Autocalibrator Type: N/A Site Survey Complete: Yes Logbook Up To Date: Yes</p>

Monitor Type	PM10-SSI	PM10-SSI	PM10-SSI	TEOM	BAM-PM2.5	PM2.5	Outdoor Temperature	Wind Direction
Manufacturer/Model	Sierra Anderson SA1200	Sierra Anderson SA 1200	Sierra Anderson SA 1200	Thermo 1400A	BAM 1020	Anderson RAAS2.5-300	MET ONE 060A-2	MET ONE 020-C
Serial Number	2445	2423	2179	13248	B6664	6788	M8736	X2502
POC	3	1	4	4	1	1	1	1
Data For Record?	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose		Other	Other	Other	SLAMS	SLAMS	Other	Other
Objective	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	POPULATION EXPOSURE	POPULATION EXPOSURE		
Scale		Middle scale			Neighborhood	Neighborhood		
Height Above Ground	5	5	5	7.5	7.5	7.5	9	10
Height Above Platform	1	1	1	2	1.5	1.5		
Sampler Spacing	1	1	1					
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date								
Cal. Gas Cert. Date								
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	2/6/2007	1/26/2007	2/6/2007	8/7/2006	2/5/2007	10/30/2006	1/19/2007	1/19/2007
Cal. Equipment Cert. Date	4/3/2006	4/3/2006	4/3/2006	Not Available	11/1/2006	11/1/2006	2/6/2006	
Obstacle Description	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-	-	-		
Distance to Dripline	-	-	-	-	-	-		
Dominant Influence	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture		
Residence Time (sec)								

A.8 Edison

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-029-0007	15242	1/1/80	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
Johnson Farm-Shed Rd, Edison CA 93320	Kern	San Joaquin Valley	35° 20' 45"	118° 51' 6"	172

Parameters Monitored
NO ₂ , O ₃ , Outdoor Temperature, Wind Direction, Horizontal Wind Speed

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 24 Degrees Celsius	Traffic Description: Highway Distance: 450 meters Count (Veh/Day): 50000	Topography Site: Valley Region: Valley QA Manual Approved: Yes Agency: CARB Urbanization: Rural Ground Cover: Dirt	Predominant Wind Direction: Northwest
			Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes Manifold Clean: Yes Cleaning Schedule: As needed Autocalibrator Type: Envionics 9100 Site Survey Complete: Yes Logbook Up To Date: Yes
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 347	Non-vehicular Local Sources Description: Train Distance: 250 meters Direction: SE		

Monitor Type	Nitrogen Dioxide	Ozone	Outdoor Temperature	Wind Direction	Horizontal Wind Speed
Manufacturer/Model	TECO 42, 42C	API/Teledyne 400	MET ONE 060A-2	MET ONE 020-C	MET ONE 010-C
Serial Number	20003376	20003785	M8667	N3105	P1079
POC	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	Other	Other	Other
Objective	UNKNOWN	UNKNOWN			
Scale	Null				
Height Above Ground	7	7	2.4	10	10
Height Above Platform	2	2			
Sampler Spacing					
Current Manual Available?	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	2/26/2007	2/26/2007			
Cal. Gas Cert. Date	2/22/2006				
Calibration Current?	Yes	Yes	Yes	Yes	Yes
Calibration Date	3/8/2006	3/8/2006	6/3/2002	6/3/2002	6/3/2002
Cal. Equipment Cert. Date	3/8/2006	3/8/2006	Not Available		Not Available
Obstacle Description	Tree	Tree	None	None	None
Distance to Obstacle	22	22	-	-	-
Height Above Inlet	16.1	16.1	-	-	-
Distance to Walls, etc.	-	-			
Distance to Dripline	18.5	18.5			
Dominant Influence	Vehicular	Vehicular			
Residence Time (sec)	14.8	15.6			

A.9 Fresno Drummond

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-019-0007	10244	7/1/84	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
4706 E. Drummond Street, Fresno CA 93725	Fresno	San Joaquin Valley	36° 42' 20"	119° 44' 29"	120

Parameters Monitored
CO, NO ₂ , O ₃ , PM ₁₀

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 25 Degrees Celsius	Traffic Description: Industrial Distance: 50 meters Count (Veh/Day): 1000	Topography Site: Level Region: Level	Predominant Wind Direction: North
			Arc Air Flow (Deg): 360 Degrees
		Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 346	Non-vehicular Local Sources Description: Industrial Distance: 50 meters Direction: NE
Manifold Clean: Yes			
Urbanization: City Center	Cleaning Schedule: Semi Annually		
	Autocalibrator Type: DASIBI 5008		
Ground Cover: Asphalt	Site Survey Complete: Yes		
	Logbook Up To Date: Yes		

Monitor Type	Carbon Monoxide	Nitrogen Dioxide	Ozone	PM10-SSI	Outdoor Temperature	Wind Direction	Horizontal Wind Speed	Barometric Pressure
Manufacturer/Model	TECO 48, 48C	TECO 42, 42C	API/Teledyne 400	SA 1200	MET ONE 060A-2	MET ONE 020-B	MET ONE 010-B	MET ONE 090D
Serial Number	4824	11362	11371	4069	D4458	J3036	J1045	D3753
POC	1	1	1	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	NAMS	SLAMS	SLAMS	SLAMS	SLAMS
Objective	UNKNOWN	UNKNOWN	UNKNOWN	POPULATION EXPOSURE				
Scale	Null	Null	Neighborhood	Neighborhood				
Height Above Ground	6.7	6.7	6.7	5.2	10	10	10	10
Height Above Platform	2.6	2.6	2.6	1.5				
Sampler Spacing								
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	4/27/2006	4/27/2006	4/27/2006					
Cal. Gas Cert. Date	9/22/2003	9/22/2003						
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	2/16/2006	2/24/2006	11/15/2005	3/1/2006	12/15/2005	12/15/2005	12/15/2005	1/25/2006
Cal. Equipment Cert. Date	9/9/2005	9/9/2005	9/27/2005	2/23/2005	1/11/2005		12/9/2005	3/31/2005
Obstacle Description	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-				
Distance to Dripline	-	-	-	-				
Dominant Influence	Commercial	Commercial	Commercial	Vehicular				
Residence Time (sec)	14.9	16.2	14.4					

A.10 Fresno First

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-019-0008	10246	1/1/90	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
3425 N. First St, Fresno CA 93726	Fresno	San Joaquin Valley	36° 46' 55"	119° 46' 23"	98

Parameters Monitored
CO, SO ₂ , NO ₂ , O ₃ , Total NMHC, PM ₁₀ , Dichot, BAM _{PM2.5} , PM _{2.5} , Toxics, Cr ⁶⁺ , Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure

Site Survey Report

Station Temperature	Traffic	Topography	Predominant Wind Direction: Northwest
Controlled: Yes	Description: Arterial	Site: Level	Arc Air Flow (Deg): 360 Degrees
Recorded: Yes	Distance: 75 meters	Region: Level	Probe Clean: Yes
Inside Temp: 24 Degrees Celsius	Count (Veh/Day): 3000	QA Manual	Manifold Clean: Yes
Meteorology	Non-vehicular Local Sources	Approved: Yes	Cleaning Schedule: Semi Annually
Located With Instruments: Yes	Description: Vent Stack	Agency: California Air Resources Board	Autocalibrator Type: Environics 9100
Shadowing: No	Distance: 10 meters	Urbanization: City Center	Site Survey Complete: Yes
Boom Orientation (Deg): 346 Temp(Motor/Natural): Motor	Direction: North	Ground Cover: Roof	Logbook Up To Date: Yes

Monitor Type	Carbon Monoxide	Sulfur Dioxide	Nitrogen Dioxide	Non-Methane Hydrocarbons	Ozone	PM10-SSI	BAM-PM2.5	PM2.5
Manufacturer/Model	Dasibi 3008	TECO 43A, 43B, 43C	TECO 42, 42C	TECO 55C	API/Teledyne 400	Andersen SA1200	Met One BAM1020	R&P 2025
Serial Number	20003813	20021373	20004668	20016855	20003822	20018504	20021416	20020969
POC	1		1	1	1	1	3	1
Data For Record?	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS		SLAMS	Other	SLAMS	NAMS	Other	SLAMS
Objective	MAX PRECURSOR EMISSIONS IMPACT		MAX PRECURSOR EMISSIONS IMPACT	MAX PRECURSOR EMISSIONS IMPACT	MAX PRECURSOR EMISSIONS IMPACT	Highest Concentration	POPULATION EXPOSURE	POPULATION EXPOSURE
Scale	Null		Null	Null		Neighborhood		
Height Above Ground	12.2	12.2	12.2	12.2	12.2	9.8	14	9.2
Height Above Platform	3.7	3.7	3.7	3.7	3.7	2.1	3	1.5
Sampler Spacing							1.5	1
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	7/10/2006	7/10/2006	7/10/2006	7/10/2006	7/10/2006			
Cal. Gas Cert. Date	3/24/2006	3/24/2006	3/24/2006	3/24/2006				
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	4/10/2006	4/10/2006	4/10/2006	4/10/2006	4/10/2006	3/27/2006	6/30/2006	6/28/2006
Cal. Equipment Cert. Date	3/8/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006	12/21/2005	3/22/2006	3/22/2006
Obstacle Description	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-	-	-	-	-
Distance to Dripline	26.8	26.8	26.8	26.8	26.8	-	-	-
Dominant Influence	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular
Residence Time (sec)	4.8	6	5.7	5.4	4.3			

A.11 Fresno Pacific

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-019-5025	10025	1/1/00	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1716 Winery, Fresno CA 93726	Fresno	San Joaquin Valley	36° 43' 35"	119° 43' 57"	95

Parameter Monitored
PM _{2.5}

Site Survey Report

Station Temperature Controlled: No Recorded: No Inside Temp: 0 Degrees Celsius	Traffic Description: Side Distance: 50 meters Count (Veh/Day): 500	Topography Site: Level Region: Level	Predominant Wind Direction: North
			Arc Air Flow (Deg): 360 Degrees
			Probe Clean: N/A
Meteorology Located With Instruments: No Shadowing: No Boom Orientation (Deg): NA Temp(Motor/Natural):	Non-vehicular Local Sources Description: None Distance: N/A Direction: N/A	QA Manual Approved: Yes Agency: SJVAPCD	Manifold Clean: N/A
			Cleaning Schedule: N/A
		Urbanization: City Center	Autocalibrator Type: N/A
		Ground Cover: roof	Site Survey Complete: Yes
			Logbook Up To Date: Yes

Monitor Type	PM _{2.5}
Manufacturer/Model	Andersen 300
Serial Number	7843
POC	1
Data For Record?	Yes
Purpose	SLAMS
Objective	Other
Scale	
Height Above Ground	11.5
Height Above Platform	1.5
Sampler Spacing	
Current Manual Available?	Yes
Instrument Log Up-to-date?	Yes
In-line Filter Change Date	
Cal. Gas Cert. Date	
Calibration Current?	Yes
Calibration Date	2/23/2006
Cal. Equipment Cert. Date	10/19/2005
Obstacle Description	None
Distance to Obstacle	-
Height Above Inlet	-
Distance to Walls, etc.	-
Distance to Dripline	-
Dominant Influence	Vehicular
Residence Time (sec)	

A.12 Fresno Skypark

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-019-0242	10245	7/1/86	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
4508 Chennault Ave, Fresno CA 93722	Fresno	San Joaquin Valley	36° 50' 26"	119° 52' 25"	98

Parameters Monitored
CO, NO ₂ , O ₃ , Outdoor Temperature, Wind Direction, Horizontal Wind Speed

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 25 Degrees Celsius	Traffic Description: Residential Distance: 10 meters Count (Veh/Day): 200	Topography Site: Level Region: Level	Predominant Wind Direction: Northwest
			Arc Air Flow (Deg): 360 Degrees
			Probe Clean: Yes
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 345	Non-vehicular Local Sources Description: Aviation Distance: 120 meters Direction: ENE	QA Manual Approved: Yes Agency: SJVUAPCD Urbanization: City Center Ground Cover: asphalt	Manifold Clean: Yes
			Cleaning Schedule: As needed
			Autocalibrator Type: DASIBI 5008
			Site Survey Complete: Yes
			Logbook Up To Date: Yes

Monitor Type	Carbon Monoxide	Nitrogen Dioxide	Ozone	Outdoor Temperature	Wind Direction	Horizontal Wind Speed
Manufacturer/Model	TECO 48, 48C	TECO 42, 42C	API/Teledyne 400	MET ONE 060A-2	MET ONE 020-C	MET ONE 010-B
Serial Number	4823	11358	11368	M8737	C2077	M1060
POC	1	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	Other	Other	Other
Objective	UNKNOWN	UNKNOWN	UNKNOWN			
Scale	Null	Null	Urban			
Height Above Ground	6.2	6.2	6.2	5.5	6	6
Height Above Platform	2.5	2.5	2.5			
Sampler Spacing						
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	5/2/2006	5/2/2006	5/2/2006			
Cal. Gas Cert. Date	7/26/2004	7/26/2004				
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	11/15/2005	11/15/2005	11/9/2005	5/1/2006	5/1/2006	5/1/2006
Cal. Equipment Cert. Date	11/9/2005	11/9/2005	9/27/2005	2/6/2006		2/24/2006
Obstacle Description	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-			
Distance to Dripline	-	-	-			
Dominant Influence	Vehicular	Vehicular	Vehicular			
Residence Time (sec)	10.6	11.5	11.2			

A.13 Hanford Irwin

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-031-1004	16716	10/11/93	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
807 S Irwin St, Hanford CA 93230	Kings	San Joaquin Valley	36° 18' 53"	119° 38' 37"	82

Parameters Monitored
NO ₂ , O ₃ , PM ₁₀

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 26 Degrees Celsius	Traffic Description: City Distance: 75 meters Count (Veh/Day): 5000	Topography Site: Level Region: Level QA Manual Approved: Yes Agency: SJVUAPCD Urbanization: Rural Ground Cover: Grass	Predominant Wind Direction: West
			Arc Air Flow (Deg): 360 Degrees
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): N/A	Non-vehicular Local Sources Description: None Distance: N/A Direction: N/A		Probe Clean: Yes
			Manifold Clean: No
			Cleaning Schedule: As necessary
			Autocalibrator Type: Environics 6100
			Site Survey Complete: Yes
			Logbook Up To Date: Yes

Monitor Type	Nitrogen Dioxide	Ozone	PM10-SSI	Barometric Pressure
Manufacturer/Model	TECO 42, 42C	API/Teledyne 400	Sierra Anderson SA1200	MET ONE 090D
Serial Number	11360	11370	1884	D3755
POC	1	1	1	1
Data For Record?	Yes	Yes	No	Yes
Purpose	SLAMS	SLAMS		Unknown
Objective	UNKNOWN	UNKNOWN	UNKNOWN	
Scale	Null	Neighborhood		
Height Above Ground	5.5	5.5	5.5	5.5
Height Above Platform	1.4	1.4	1.5	
Sampler Spacing				
Current Manual Available?	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes
In-line Filter Change Date	2/12/2007	2/12/2007		
Cal. Gas Cert. Date	10/28/2005			
Calibration Current?	Yes	Yes	Yes	Yes
Calibration Date	2/7/2007	2/15/2007	7/27/2006	1/26/2007
Cal. Equipment Cert. Date	2/15/2007	2/15/2007	4/3/2006	11/1/2006
Obstacle Description	None	None	None	None
Distance to Obstacle	-	-	-	-
Height Above Inlet	-	-	-	-
Distance to Walls, etc.	-	-	-	
Distance to Dripline	-	-	-	
Dominant Influence	Vehicular	Vehicular	Agriculture	
Residence Time (sec)	13.6	12.9		

A.14 Huron

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-019-	unknown	12/28/06	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
16875 4 th Street, Huron, CA 93234	Fresno	San Joaquin Valley	36° 35' "	119° 30' "	

Parameter Monitored
PM 2.5

This site is operating as required by AB 841 (Arambula), which requires the installation of one or more monitors for monitoring PM 2.5 in the western region of the County of Fresno in areas that are primarily low-income and underserved.

A.15 Kaweah

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-107-0006	54036	4/1/87	National Park Service

Site Address	County	Air Basin	Latitude	Longitude	Elevation
Lower Kaweah Campground, Sequoia National Park CA	Tulare	San Joaquin Valley	36° 33' 58"	118° 46' 40"	1937

Parameters Monitored
O ₃ , Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Solar Radiation

Site Survey Report

<p style="text-align: center;">Station Temperature</p> <p>Controlled: Yes Recorded: Yes Inside Temp: 25 Degrees Celsius</p>	<p style="text-align: center;">Traffic</p> <p>Description: Highway Distance: 1500 meters Count (Veh/Day): 5000</p>	<p style="text-align: center;">Topography</p> <p>Site: Mountainous Region: Mountainous</p>	<p>Predominant Wind Direction: North Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes Manifold Clean: Yes Cleaning Schedule: As Needed Autocalibrator Type: TECO 49C Site Survey Complete: Yes Logbook Up To Date: Yes</p>
<p style="text-align: center;">Meteorology</p> <p>Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 346</p>	<p style="text-align: center;">Non-vehicular Local Sources</p> <p>Description: None Distance: N/A Direction: N/A</p>	<p style="text-align: center;">QA Manual</p> <p>Approved: Yes Agency: National Park Service Urbanization: Remote Ground Cover: Gravel</p>	

Monitor Type	Ozone
Manufacturer/Model	TECO 49, 49C
Serial Number	49C-74535-376
POC	1
Data For Record?	Yes
Purpose	Non-EPA Federal
Objective	UNKNOWN
Scale	Neighborhood
Height Above Ground	43
Height Above Platform	2
Sampler Spacing	
Current Manual Available?	Yes
Instrument Log Up-to-date?	Yes
In-line Filter Change Date	9/19/2006
Cal. Gas Cert. Date	
Calibration Current?	Yes
Calibration Date	9/6/2006
Cal. Equipment Cert. Date	9/6/2006
Obstacle Description	None
Distance to Obstacle	-
Height Above Inlet	-
Distance to Walls, etc.	-
Distance to Dripline	-
Dominant Influence	Vehicular
Residence Time (sec)	13.5

A.16 Lebec Peace Valley

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-037-9034	15990	1/1/2001	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
Peace Valley Road, Lebec CA	Los Angeles	*South Coast	34° 49' 0"	118° 53' 12"	1.0

Parameters Monitored
O ₃ , PM _{2.5}

*Located on the border of the San Joaquin Air Basin

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 22 Degrees Celsius	Traffic Description: Freeway Distance: 100 meters Count (Veh/Day): 200000	Topography Site: Mountainous Region: Mountainous QA Manual Approved: Yes Agency: CARB Urbanization: Remote Ground Cover: Asphalt	Predominant Wind Direction: Northeast Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes Manifold Clean: Yes Cleaning Schedule: As needed Autocalibrator Type: Environics 9100 Site Survey Complete: Yes Logbook Up To Date: Yes
Meteorology Located With Instruments: No Shadowing: No Boom Orientation (Deg): N/A Temp(Motor/Natural):	Non-vehicular Local Sources Description: None Distance: N/A Direction: N/A		

Monitor Type	Ozone
Manufacturer/Model	API/Teledyne 400
Serial Number	20004738
POC	1
Data For Record?	Yes
Purpose	Unknown
Objective	POPULATION EXPOSURE
Scale	
Height Above Ground	4.8
Height Above Platform	2.1
Sampler Spacing	
Current Manual Available?	Yes
Instrument Log Up-to-date?	Yes
In-line Filter Change Date	3/1/2007
Cal. Gas Cert. Date	
Calibration Current?	Yes
Calibration Date	11/7/2006
Cal. Equipment Cert. Date	11/7/2006
Obstacle Description	None
Distance to Obstacle	-
Height Above Inlet	-
Distance to Walls, etc.	-
Distance to Dripline	-
Dominant Influence	Vehicular
Residence Time (sec)	14.9

A.17 Madera Pump

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-039-0004	20211	Not Available	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
Av 8 and Road 29 1/2, Madera CA 93637	Madera	San Joaquin Valley	36° 52' 2"	120° 0' 36"	85

Parameters Monitored

NO₂, O₃, Total NMHC, Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 24.3 Degrees Celsius	Traffic Description: Rural Distance: 10 meters Count (Veh/Day): 100	Topography Site: Hilly Region: Level	Predominant Wind Direction: Northwest
			Arc Air Flow (Deg): 360 Degrees
			Probe Clean: Yes
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 348 Temp(Motor/Natural): Motor	Non-vehicular Local Sources Description: Agriculture Distance: 100 meters Direction: 360	QA Manual Approved: Yes Agency: SJVU APCD	Manifold Clean: Yes
			Cleaning Schedule: Semi Annually
		Urbanization: Rural	Autocalibrator Type: Envirionics 6100
		Ground Cover: Asphalt	Site Survey Complete: Yes
			Logbook Up To Date: Yes

Monitor Type	Nitrogen Dioxide	Non-Methane Hydrocarbons	Ozone	Outdoor Temperature	Wind Direction	Horizontal Wind Speed	Barometric Pressure	Solar Radiation
Manufacturer/Model	TECO 42, 42C	TECO 55C	API/Teledyne 400	MET ONE 060A-2	MET ONE 020	MET ONE 010-B	MET ONE 090D	Eppley 8-48
Serial Number	4109	6500	11003	N8641	N3063	F1023	2704	29989
POC	1	1	1	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	PAMS	PAMS	PAMS	PAMS	Other	Other	PAMS	PAMS
Objective	GENERAL/BACKGROUND	GENERAL/BACKGROUND	GENERAL/BACKGROUND					
Scale	Urban scale	Urban scale	Urban scale					
Height Above Ground	5.5	5.5	5.5	9.5	10	10	4.5	10
Height Above Platform	2	2	2				1	1
Sampler Spacing								
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	7/3/2006	7/3/2006	7/3/2006					
Cal. Gas Cert. Date	7/26/2004	2/3/2005						
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	4/12/2006	6/29/2006	5/18/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006	5/9/2006
Cal. Equipment Cert. Date	1/10/2006	1/10/2006	5/3/2006	2/6/2006		2/24/2006	7/21/2005	Not Available
Obstacle Description	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-					
Distance to Dripline	-	-	-					
Dominant Influence	Agriculture	Agriculture	Agriculture					
Residence Time (sec)	15.9	15.6	16.8					

A.18 Maricopa

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-029-0008	15246	7/1/87	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
755 Stanislaus Street, Maricopa CA 93352	Kern	San Joaquin Valley	35° 3' 5"	119° 24' 10"	297

Parameters Monitored

O₃, Outdoor Temperature, Wind Direction, Horizontal Wind Speed

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 25 Degrees Celsius	Traffic Description: Dirt Distance: 40 meters Count (Veh/Day): 10	Topography Site: Level Region: Level	Predominant Wind Direction: West
			Arc Air Flow (Deg): 360 Degrees
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 346 Temp(Motor/Natural): Motor	Non-vehicular Local Sources Description: None Distance: N/A Direction: N/A	QA Manual Approved: Yes Agency: SJVUAPCD	Probe Clean: Yes
			Manifold Clean: N/A
		Urbanization: City Center	Cleaning Schedule: Semi Annually
			Autocalibrator Type: API 400 IZS
		Ground Cover: Dirt	Site Survey Complete: Yes
	Logbook Up To Date: Yes		

Monitor Type	Ozone	Outdoor Temperature	Wind Direction	Horizontal Wind Speed	Barometric Pressure
Manufacturer/Model	API/Teledyne 400	MET ONE 060A	MET ONE 020-C	MET ONE 010-C	MET ONE 090D
Serial Number	10046	K8674	A1179	X2997	U3743
POC	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Objective	UNKNOWN				
Scale	Urban scale				
Height Above Ground	3.7	2.7	10	10	2.7
Height Above Platform	1				
Sampler Spacing					
Current Manual Available?	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	2/28/2007				
Cal. Gas Cert. Date					
Calibration Current?	Yes	Yes	Yes	Yes	Yes
Calibration Date	1/23/2007	2/21/2007	2/21/2007	2/21/2007	2/21/2007
Cal. Equipment Cert. Date	1/23/2007	1/11/2005		3/24/2006	11/8/2006
Obstacle Description	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-
Height Above Inlet	-	-	-	-	-
Distance to Walls, etc.	-				
Distance to Dripline	-				
Dominant Influence	Vehicular				
Residence Time (sec)	4.3				

A.19 Merced Coffee

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-047-0003	24528	10/1/91	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
385 S. Coffee St., Merced CA 95340	Merced	San Joaquin Valley	37° 16' 54"	120° 26' 01"	107

Parameters Monitored

NO₂, O₃, Outdoor Temperature, Wind Direction, Horizontal Wind Speed

Site Survey Report

Station Temperature	Traffic	Topography	Predominant Wind Direction: West
Controlled: Yes	Description: Arterial	Site: Level	Arc Air Flow (Deg): 360 Degrees
Recorded: Yes	Distance: 12 meters	Region: Valley	Probe Clean: Yes
Inside Temp: 26 Degrees Celsius	Count (Veh/Day): 300	QA Manual	Manifold Clean: Yes
Meteorology	Non-vehicular Local Sources	Approved: Yes	Cleaning Schedule: As Needed
Located With Instruments: Yes	Description: livestock	Agency: SJVUAPCD	Autocalibrator Type: Environics 6100
Shadowing: No	Distance: 5 meters	Urbanization: Rural	Site Survey Complete: Yes
Boom Orientation (Deg): 345	Direction: 360	Ground Cover: Grass	Logbook Up To Date: Yes

Monitor Type	Nitrogen Dioxide	Ozone	Outdoor Temperature	Wind Direction	Horizontal Wind Speed
Manufacturer/Model	TECO 42, 42C	API/Teledyne 400	MET ONE 060A	MET ONE 020-B	MET ONE 010-B
Serial Number	8265	11366	R8704	F1018	293-81
POC	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	Other	Other	Other
Objective	UNKNOWN	UNKNOWN			
Scale	Null	Urban scale			
Height Above Ground	3.5	3.5	5	6	6
Height Above Platform	1	1	1.5	2.5	2.5
Sampler Spacing					
Current Manual Available?	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	2/21/2007	2/21/2007			
Cal. Gas Cert. Date	7/27/2004				
Calibration Current?	Yes	Yes	Yes	Yes	Yes
Calibration Date	11/6/2006	12/19/2006	2/14/2007	2/14/2007	2/14/2007
Cal. Equipment Cert. Date	10/25/2006	10/26/2005	2/1/2007		2/24/2006
Obstacle Description	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-
Height Above Inlet	-	-	-	-	-
Distance to Walls, etc.	-	-			
Distance to Dripline	-	-			
Dominant Influence	Vehicular	Vehicular			
Residence Time (sec)	13.7	11.9			

A.20 Merced M Street

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-047-2510	24510	4/1/99	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
2334 M Street, Merced CA 95340	Merced	San Joaquin Valley	37° 18' 31"	120° 28' 47"	35

Parameters MonitoredPM₁₀, PM_{2.5}**Site Survey Report**

Station Temperature Controlled: No Recorded: No Inside Temp: 0 Degrees Celsius	Traffic Description: Moderate Distance: 10 meters Count (Veh/Day): 6000	Topography Site: Level Region: Level	Predominant Wind Direction: West
			Arc Air Flow (Deg): 360 Degrees
Meteorology Located With Instruments: No Shadowing: No Boom Orientation (Deg): N/A Temp(Motor/Natural):	Non-vehicular Local Sources Description: None Distance: N/A Direction: N/A	QA Manual Approved: Yes Agency: SJVUAPCD Urbanization: City Center	Probe Clean: N/A
			Manifold Clean: N/A
		Cleaning Schedule: N/A	
		Autocalibrator Type: N/A	
		Site Survey Complete: Yes	
		Ground Cover: Roof	Logbook Up To Date: Yes

Monitor Type	PM10-SSI	PM2.5
Manufacturer/Model	Andersen 1200	Andersen RAAS2.5-3.00
Serial Number	2308	6786
POC	1	1
Data For Record?	Yes	Yes
Purpose	SLAMS	SLAMS
Objective	UNKNOWN	POPULATION EXPOSURE
Scale		Neighborhood
Height Above Ground	8.7	8.7
Height Above Platform	1.5	1.5
Sampler Spacing		
Current Manual Available?	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes
In-line Filter Change Date		
Cal. Gas Cert. Date		
Calibration Current?	Yes	Yes
Calibration Date	10/18/2006	10/3/2006
Cal. Equipment Cert. Date	4/3/2006	10/19/2005
Obstacle Description	None	None
Distance to Obstacle	-	-
Height Above Inlet	-	-
Distance to Walls, etc.	-	-
Distance to Dripline	-	-
Dominant Influence	Vehicular	Vehicular
Residence Time (sec)		

A.21 Modesto

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-099-0005	50568	1/1/81	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
814 14th Street, Modesto CA 95354	Stanislaus	San Joaquin Valley	37° 38' 31"	120° 59' 39"	27

Parameters Monitored
CO, O ₃ , PM ₁₀ , BAM _{PM2.5} , Outdoor Temperature, Wind Direction, Horizontal Wind Speed, Barometric Pressure

Site Survey Report

<p>Station Temperature</p> <p>Controlled: Yes Recorded: Yes Inside Temp: 26 Degrees Celsius</p>	<p>Traffic</p> <p>Description: City Distance: 13 meters Count (Veh/Day): 10000</p>	<p>Topography</p> <p>Site: Level Region: Level</p>	<p>Predominant Wind Direction: West Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes</p>
<p>Meteorology</p> <p>Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 346 Temp(Motor/Natural): Motor</p>	<p>Non-vehicular Local Sources</p> <p>Description: None Distance: N/A Direction: N/A</p>	<p>QA Manual</p> <p>Approved: Yes Agency: ARB Urbanization: City Center Ground Cover: Roof</p>	<p>Manifold Clean: Yes Cleaning Schedule: Annually Autocalibrator Type: ESC8800 Site Survey Complete: Yes Logbook Up To Date: Yes</p>

Monitor Type	Carbon Monoxide	Ozone	PM10-SSI	BAM-PM2.5	PM2.5	Outdoor Temperature	Barometric Pressure
Manufacturer/Model	Dasibi 3008	API/Teledyn 2400	Andersen 1200	MetOne RAM1020	R&P 2025	MET ONE 060A-2	MET ONE 090C-26/31
Serial Number	20003364	20002075	20003727	20020893	20020956	N8727	X1028
POC	1	1	3	3	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	Other	Other
Objective	UNKNOWN	UNKNOWN	UNKNOWN	Other	POPULATION EXPOSURE		
Scale	Null			Neighborhood	Neighborhood		
Height Above Ground	8	8	6	6	5.5	4	10
Height Above Platform	5	5	1.5	1.5	2.4	2	4
Sampler Spacing			3				
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	2/22/2007	2/22/2007					
Cal. Gas Cert. Date	12/14/2006						
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	2/21/2007	12/14/2006	2/6/2007	2/21/2007	1/31/2007	5/20/2004	2/5/2006
Cal. Equipment Cert. Date	2/21/2007	12/14/2006	1/16/2007	1/16/2007	1/16/2007	Not Available	Not Available
Obstacle Description	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-	-		
Distance to Dripline	-	-	-	-	-		
Dominant Influence	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular		
Residence Time (sec)	17.1	17.1					

A.22 Oildale

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-029-0232	15243	1/1/80	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
3311 Manor St, Oildale CA 93308	Kern	San Joaquin Valley	35° 26' 17"	119° 1' 0"	183

Parameters Monitored
O ₃ , PM ₁₀ , Outdoor Temperature, Wind Direction, Horizontal Wind Speed

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 26 Degrees Celsius	Traffic Description: Arterial Distance: 150 meters Count (Veh/Day): 10000	Topography Site: Level Region: Level QA Manual Approved: Yes Agency: CARB Urbanization: Suburban Ground Cover: Dirt	Predominant Wind Direction: North Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes Manifold Clean: Yes Cleaning Schedule: As needed Autocalibrator Type: Envirionics 9100 Site Survey Complete: Yes Logbook Up To Date: Yes
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 347 Temp(Motor/Natural): Motor	Non-vehicular Local Sources Description: Co-Gen Distance: 800 meters Direction: NE		

Monitor Type	Ozone	PM10-SSI	Outdoor Temperature	Wind Direction	Horizontal Wind Speed
Manufacturer/Model	API/Teledyne 400	Sierra Anderson 1200	MET ONE 020A-2	MET ONE 020-B	MET ONE 010-B
Serial Number	20004967	20018204	M8672	5670	5670A
POC	1	2	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes
Purpose	NAMS	SLAMS	Other	Other	Other
Objective	Highest Concentration	UNKNOWN			
Scale	Urban scale				
Height Above Ground	7.3	3	3	10	10
Height Above Platform	2.1	1.5			
Sampler Spacing					
Current Manual Available?	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	2/21/2007				
Cal. Gas Cert. Date					
Calibration Current?	Yes	Yes	Yes	Yes	Yes
Calibration Date	11/9/2006	12/10/2006	6/3/2002	3/6/2002	3/6/2002
Cal. Equipment Cert. Date	11/9/2006	9/15/2006	4/19/2002		6/15/2001
Obstacle Description	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-
Height Above Inlet	-	-	-	-	-
Distance to Walls, etc.	-	-			
Distance to Dripline	-	-			
Dominant Influence	Vehicular	Vehicular			
Residence Time (sec)	9.3				

A.23 Parlier Tuolumne

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-019-3002	10231	1/1/06	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
13900 Tuolumne St., Parlier CA	Fresno	San Joaquin Valley	36° 36' 26"	119° 32' 23"	115

Parameters Monitored
BAM _{PM2.5} , Toxics

Site Survey Report

Station Temperature	Traffic	Topography	Predominant Wind Direction: Northwest
Controlled: Yes	Description: Arterial	Site: Level	Arc Air Flow (Deg): 360 Degrees
Recorded: Yes	Distance: 800 meters	Region: Level	Probe Clean: N/A
Inside Temp: 25 Degrees Celsius	Count (Veh/Day): 25000	QA Manual	Manifold Clean: N/A
Meteorology	Non-vehicular Local Sources	Approved: Yes	Cleaning Schedule: N/A
Located With Instruments: Yes	Description: Agriculture	Agency: San Joaquin Valley APCD	Autocalibrator Type: N/A
Shadowing: Yes	Distance: 50 meters	Urbanization: Rural	Site Survey Complete: Yes
Boom Orientation (Deg): 345	Direction: East	Ground Cover: Grass	Logbook Up To Date: Yes
Temp(Motor/Natural): Motor			

Monitor Type	BAM-PM2.5	Xontech 920
Manufacturer/Model	BAM 1020	Xontech 924
Serial Number	20005408	20021013
POC	4	1
Data For Record?	Yes	Yes
Purpose	Unknown	Unknown
Objective	POPULATION EXPOSURE	POPULATION EXPOSURE
Scale	Neighborhood	
Height Above Ground	5	3
Height Above Platform	1	1
Sampler Spacing		
Current Manual Available?	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes
In-line Filter Change Date		
Cal. Gas Cert. Date		
Calibration Current?	Yes	Yes
Calibration Date	1/24/2006	4/6/2006
Cal. Equipment Cert. Date	7/26/2005	3/8/2006
Obstacle Description	None	None
Distance to Obstacle	-	-
Height Above Inlet	-	-
Distance to Walls, etc.	-	-
Distance to Dripline	-	-
Dominant Influence	Agriculture	Agriculture
Residence Time (sec)		

A.24 Parlier

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-019-4001	10230	3/1/83	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
9240 S. Riverbend Av, Parlier CA 93648	Fresno	San Joaquin Valley	36° 35' 50"	119° 30' 15"	96

Parameters Monitored
NO ₂ , O ₃ , Total NMHC, Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 24 Degrees Celsius	Traffic Description: Arterial Distance: 800 meters Count (Veh/Day): 25000	Topography Site: Level Region: Level QA Manual Approved: Yes Agency: San Joaquin Valley APCD Urbanization: Rural Ground Cover: Dirt	Predominant Wind Direction: Northwest Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes Manifold Clean: Yes Cleaning Schedule: Semi Annually Autocalibrator Type: Environics 6100 Site Survey Complete: Yes Logbook Up To Date: Yes
Meteorology Located With Instruments: Yes Shadowing: Yes Boom Orientation (Deg): 345 Temp(Motor/Natural): Motor	Non-vehicular Local Sources Description: Agriculture Distance: 50 meters Direction: East		

Monitor Type	Nitrogen Dioxide	Non-Methane Hydrocarbons	Ozone	Outdoor Temperature	Relative Humidity	Wind Direction	Horizontal Wind Speed	Barometric Pressure
Manufacturer/Model	TECO 42, 42C	TECO 55	API/Teledyne 400	MET ONE 060A-2	Vaisala	MET ONE 020-C	MET ONE 010-C	MET ONE 090C-26/32
Serial Number	11361	6663	11002	X3211	083V-0-6	P3035	P1031	5095
POC	1	1	1	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	PAMS	PAMS	PAMS	PAMS	PAMS	PAMS	PAMS	PAMS
Objective	MAX OZONE CONCENTRATION	POPULATION EXPOSURE	MAX OZONE CONCENTRATION					
Scale	Urban scale	Urban scale	Urban scale					
Height Above Ground	8	8	8	11	11	11	11	4.5
Height Above Platform	4	4	4	5	5	5	5	
Sampler Spacing								
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	9/14/2006	9/14/2006	9/14/2006					
Cal. Gas Cert. Date	9/23/2003	9/23/2003						
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	6/7/2006	5/22/2006	5/2/2006	5/23/2006	5/23/2006	5/23/2006	5/23/2006	5/23/2006
Cal. Equipment Cert. Date	5/2/2006	5/2/2006	5/2/2006	Not Available	Not Available		Not Available	Not Available
Obstacle Description	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-					
Distance to Dripline	-	200	-					
Dominant Influence	Agriculture	Agriculture	Agriculture					
Residence Time (sec)	13	15.3	12.3					

A.25 Santa Rosa Rancheria

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-031-0500	unknown	8/01/06	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
17225 Jersey Ave., Santa Rosa Rancheria, CA 93245	Kings	San Joaquin Valley	36° 13' 0"	-119°45' 55 "	

Parameter Monitored
O ₃ , PM 10, Outdoor Temperature, Wind Direction, Horizontal Wind Speed

A.26 Shafter

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-029-6001	15248	1/1/89	CARB/SJVAPCD (shared site)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
578 Walker St, Shafter CA 93263	Kern	San Joaquin Valley	35° 30' 13"	119° 16' 21"	126

Parameters Monitored
NO ₂ , O ₃ , Total NMHC, Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation

Site Survey Report

<p>Station Temperature</p> <p>Controlled: Yes Recorded: Yes Inside Temp: 28 Degrees Celsius</p>	<p>Traffic</p> <p>Description: Residential Distance: 10 meters Count (Veh/Day): 1200</p>	<p>Topography</p> <p>Site: Level Region: Level</p>	<p>Predominant Wind Direction: Northwest Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes</p>
<p>Meteorology</p> <p>Located With Instruments: Yes Shadowing: Yes Boom Orientation (Deg): 344</p>	<p>Non-vehicular Local Sources</p> <p>Description: None Distance: N/A Direction: N/A</p>	<p>QA Manual</p> <p>Approved: Yes Agency: CARB Urbanization: City Center Ground Cover: Roof</p>	<p>Manifold Clean: Yes Cleaning Schedule: As needed Autocalibrator Type: Environics 9100 Site Survey Complete: Yes Logbook Up To Date: Yes</p>

Monitor Type	Nitrogen Dioxide	Non-Methane Hydrocarbons	Ozone	Outdoor Temperature	Wind Direction	Horizontal Wind Speed	Barometric Pressure
Manufacturer/Model	TECO 42, 42C	TECO 55	API/Teledyne 400	MET ONE 060A-2	MET ONE 020-B	MET ONE 010-C	MET ONE 090D
Serial Number	20003374	6793	20004966	N8731	4242	N1068	1227
POC	1	1	1	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	Unknown	SLAMS	Other	Unknown	Unknown	Unknown
Objective	POPULATION EXPOSURE	UNKNOWN	POPULATION EXPOSURE				
Scale	Neighborhood		Neighborhood				
Height Above Ground	6.7	6.7	6.7	9.5	10	10	5
Height Above Platform	2.7	2.7	2.7	4.5	5	5	1
Sampler Spacing							
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	11/14/2006	11/16/2006	11/14/2006				
Cal. Gas Cert. Date	9/21/2005	9/21/2005					
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	11/3/2006	11/1/2006	11/2/2006	6/29/2006	6/29/2006	6/29/2006	9/29/2006
Cal. Equipment Cert. Date	11/2/2006	11/2/2006	10/18/2006	2/6/2006		2/24/2006	1/3/2006
Obstacle Description	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-				
Distance to Dripline	-	-	-				
Dominant Influence	Vehicular	Vehicular	Vehicular				
Residence Time (sec)	13.6	14.9	12.5				

A.27 Stockton Hazelton

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-077-1002	39252	Not Available	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1593 E Hazelton St, Stockton CA 95205	San Joaquin	San Joaquin Valley	37° 57' 6"	121° 16' 8"	4

Parameters Monitored
CO, NO ₂ , O ₃ , PM ₁₀ , BAM _{PM2.5} , PM _{2.5} , Toxics, Cr ⁶⁺ , Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 24 Degrees Celsius	Traffic Description: Commercial Distance: 62 meters Count (Veh/Day): 1000	Topography Site: Level Region: Level	Predominant Wind Direction: Northwest
			Arc Air Flow (Deg): 360 Degrees
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 344	Non-vehicular Local Sources Description: Light Industry Distance: 800 meters Direction: West	QA Manual Approved: Yes Agency: California Air Resources Board Urbanization: City Center Ground Cover: Asphalt	Probe Clean: Yes
			Manifold Clean: Yes
			Cleaning Schedule: Semi Annually
			Autocalibrator Type: Environics 9100
			Site Survey Complete: Yes
			Logbook Up To Date: Yes

Monitor Type	Carbon Monoxide	Nitrogen Dioxide	Ozone	PM10-SSI	BAM-PM2.5	PM2.5	Xontech 920	Xontech 920	Outdoor Temperature	Relative Humidity
Manufacturer/Model	Dasibi 3008	TECO 42, 42C	API/Teledyne 400	Sierra Andersen SA1200	Met One 1020	R&P 2025	Xontech 924	Xontech 924	MET ONE 064-2	Met One 083D-0
Serial Number	20004286	20003401	20003807	20004282	20020745	20021075	20021014	2021016	X3203	M6267
POC	1	2	1	2		3	2	2	1	1
Data For Record?	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
Purpose	SLAMS	SLAMS	SLAMS	NAMS		Unknown	Unknown	Unknown	Other	
Objective	UNKNOWN	UNKNOWN	UNKNOWN	Highest Concentration		GENERAL/BACKGROUND	UNKNOWN	UNKNOWN		
Scale	Null	Null		Neighborhood						
Height Above Ground	7.6	7.6	7.6	6.1	3.5	6.1	6.1	6.1	6.8	6.8
Height Above Platform	3.7	3.7	3.7	1.5	2	1.5	1.5	1.5	1.3	1.3
Sampler Spacing							2	2		
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	10/5/2006	10/5/2006	10/5/2006							
Cal. Gas Cert. Date	5/31/2006	5/31/2006								
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	9/11/2006	9/11/2006	9/11/2006	9/1/2006	10/3/2006	10/3/2006	10/4/2006	10/4/2006	10/2/2006	Not Available
Cal. Equipment Cert. Date	9/11/2006	9/11/2006	6/28/2006	12/29/2005	1/4/2006	1/4/2006	1/4/2006	1/4/2006	1/4/2006	Not Available
Obstacle Description	None	None	None	None	None	None	None	None	Tree	Tree
Distance to Obstacle	-	-	-	-	-	-	-	-	2.5	5
Height Above Inlet	-	-	-	-	-	-	-	-	4	13
Distance to Walls, etc.	-	-	-	-	-	-	-	-		
Distance to Dripline	-	-	-	-	-	-	-	-		
Dominant Influence	Vehicular	Vehicular	Vehicular	Residential	Residential	Residential	Vehicular	Vehicular		
Residence Time (sec)	8	8.7	9							

A.28 Stockton Wagner-Holt

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-077-3010	39288	10/1/96	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
8778 Brattle Pl, Stockton CA 95209	San Joaquin	San Joaquin Valley	38° 1' 47"	121° 21' 9"	8

Parameter Monitored
PM ₁₀

Site Survey Report

Station Temperature Controlled: No Recorded: No Inside Temp: 0 Degrees Celsius	Traffic Description: Residential Distance: 50 meters Count (Veh/Day): 500	Topography Site: Level Region: Level QA Manual Approved: Yes Agency: California Air Resources Board Urbanization: City Center Ground Cover: Roof	Predominant Wind Direction: West
			Arc Air Flow (Deg): 360 Degrees
			Probe Clean: N/A
Meteorology Located With Instruments: No Shadowing: No Boom Orientation (Deg): N/A Temp(Motor/Natural):	Non-vehicular Local Sources Description: NONE Distance: 0 meters Direction:	Manifold Clean: N/A Cleaning Schedule: N/A Autocalibrator Type: None Site Survey Complete: Yes Logbook Up To Date: Yes	

Monitor Type	PM10-SSI
Manufacturer/Model	Graseby Andersen SA 1200
Serial Number	3519
POC	1
Data For Record?	Yes
Purpose	Other
Objective	UNKNOWN
Scale	Neighborhood
Height Above Ground	5.9
Height Above Platform	1.5
Sampler Spacing	
Current Manual Available?	Yes
Instrument Log Up-to-date?	Yes
In-line Filter Change Date	
Cal. Gas Cert. Date	
Calibration Current?	Yes
Calibration Date	7/12/2006
Cal. Equipment Cert. Date	4/3/2006
Obstacle Description	None
Distance to Obstacle	-
Height Above Inlet	-
Distance to Walls, etc.	-
Distance to Dripline	-
Dominant Influence	Vehicular
Residence Time (sec)	

A.29 Tracy Airport

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-077-3005	39271	1/11/05	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
5749 S. Tracy Blvd., Tracy CA 95376	San Joaquin	San Joaquin Valley	37° 41' 10"	121° 26' 36"	30

Parameters Monitored

NO₂, O₃, BAM_{PM2.5}, TEOM_{PM10}, Wind Direction, Horizontal Wind Speed, Lower Air Profile

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 25 Degrees Celsius	Traffic Description: Freeway Distance: 2000 meters Count (Veh/Day): 30000	Topography Site: level Region: level	Predominant Wind Direction: West
			Arc Air Flow (Deg): 360 Degrees
			Probe Clean: Yes
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 345 Temp(Motor/Natural):	Non-vehicular Local Sources Description: None Distance: N/A Direction: N/A	QA Manual Approved: Yes Agency: San Joaquin Valley Unified APCD Urbanization: Rural Ground Cover: Dirt	Manifold Clean: Yes
			Cleaning Schedule: Semi-Annually
			Autocalibrator Type: Environics 6100
			Site Survey Complete: Yes
			Logbook Up To Date: Yes

Monitor Type	Nitrogen Dioxide	Ozone	TEOM	BAM-PM2.5	Outdoor Temperature	Wind Direction	Horizontal Wind Speed	Barometric Pressure
Manufacturer/Model	TECO 42, 42C	API/Teledyne 400	TEOM 1400A	MetOne BAM1020	MET ONE 060A-2	MET ONE 020-C	MET ONE 010-C	MET ONE 090D
Serial Number	9201	11372	6056	11767	N8642	A4259	A3694	A4044
POC	1	1				1	1	
Data For Record?	Yes	Yes	No	No	No	Yes	Yes	Yes
Purpose	Unknown	Unknown				Unknown	Unknown	SLAMS
Objective	Other	Other		Other				
Scale	Null			Urban				
Height Above Ground	4.5	4.5	4.5	4.5	9	10	10	9
Height Above Platform	0.8	0.8	1.7	1.7				
Sampler Spacing				3.9				
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
In-line Filter Change Date	2/20/2007	2/20/2007						
Cal. Gas Cert. Date	7/27/2004							
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	1/18/2007	5/9/2006	10/12/2006	10/12/2006	2/6/2007	2/6/2007	2/6/2007	2/6/2007
Cal. Equipment Cert. Date	5/9/2006	5/9/2006	1/3/2006	1/3/2007	2/6/2006		2/24/2006	8/11/2006
Obstacle Description	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-				
Distance to Dripline	-	-	-	-				
Dominant Influence	Vehicular	Vehicular	Vehicular	Vehicular				
Residence Time (sec)	14.5	10.1						

A.30 Turlock Minaret

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-099-0006	50573	Not Available	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1034 S Minaret St, Turlock CA 95380	Stanislaus	San Joaquin Valley	37° 29' 17"	120° 50' 9"	30

Parameters Monitored
CO, NO ₂ , O ₃ , PM ₁₀ , Wind Direction, Horizontal Wind Speed

Site Survey Report

<p>Station Temperature</p> <p>Controlled: Yes Recorded: Yes Inside Temp: 26 Degrees Celsius</p>	<p>Traffic</p> <p>Description: Light Distance: 25 meters Count (Veh/Day): 1000</p>	<p>Topography</p> <p>Site: Level Region: Valley</p>	<p>Predominant Wind Direction: Northwest Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes Manifold Clean: Yes Cleaning Schedule: Annually Autocalibrator Type: Environics 6100 Site Survey Complete: Yes Logbook Up To Date: Yes</p>
<p>Meteorology</p> <p>Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 345 Temp(Motor/Natural):</p>	<p>Non-vehicular Local Sources</p> <p>Description: Light industrial Distance: 1500 meters Direction: NW</p>	<p>QA Manual</p> <p>Approved: Yes Agency: SJVUAPCD Urbanization: Suburban Ground Cover: Gravel</p>	

Monitor Type	Carbon Monoxide	Nitrogen Dioxide	Ozone	PM10-SSI	BAM-PM2.5	Wind Direction	Horizontal Wind Speed
Manufacturer/Model	TECO 48, 48C	TECO 42, 42C	API/Teledyne 400	Andersen 1200	MetOne BAM1020	MET ONE 020-C	MET ONE 010-B
Serial Number	8266	3705	11356	4161	11760	R3137	1744
POC	1	1	1	1		1	1
Data For Record?	Yes	Yes	Yes	Yes	No	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	Other		Other	Other
Objective	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN			
Scale	Null	Null	Neighborhood				
Height Above Ground	6.1	6.1	6.1	5.2	5.2	8.7	8.7
Height Above Platform	2.4	2.4	2.4	1.5	1.5	5	5
Sampler Spacing							
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	2/23/2007	2/23/2007	2/23/2007				
Cal. Gas Cert. Date	7/27/2006	7/27/2006					
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	1/17/2007	1/17/2007	1/17/2007	10/18/2006	9/14/2006	2/15/2007	2/15/2007
Cal. Equipment Cert. Date	1/17/2007	1/17/2007	1/17/2007	Not Available	Not Available		2/24/2006
Obstacle Description	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-	-	-	-
Distance to Dripline	-	-	-	-	-	-	-
Dominant Influence	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular		
Residence Time (sec)	15.7	13.8	14.6				

A.31 Visalia Airport

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-107-3000	54000	Not Available	SJVAPCD

Site Address	County	Air Basin	Latitude	Longitude	Elevation
Airport, Visalia CA 93291	Tulare	San Joaquin Valley	36° 18' 50"	119° 23' 32"	90

Parameters Monitored
Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation, Lower Air Profile

This Site Is Used for Meteorological Information Only

A.32 Visalia Church

AIRS Number	CARB Number	Site Start Date	Reporting Agency
06-107-2002	54568	7/1/79	CARB

Site Address	County	Air Basin	Latitude	Longitude	Elevation
310 N. Church St, Visalia CA 93291	Tulare	San Joaquin Valley	36° 19' 57"	119° 17' 27"	97

Parameters Monitored
NO ₂ , O ₃ , PM ₁₀ , BAM _{PM2.5} , PM _{2.5} , Outdoor Temperature, Wind Direction, Horizontal Wind Speed, Barometric Pressure

Site Survey Report

Station Temperature Controlled: Yes Recorded: Yes Inside Temp: 22.8 Degrees Celsius	Traffic Description: Arterial Distance: 23 meters Count (Veh/Day): 10000	Topography Site: Level Region: Level QA Manual Approved: Yes Agency: California Air Resources Board Urbanization: City Center Ground Cover: Roof	Predominant Wind Direction: South Arc Air Flow (Deg): 360 Degrees Probe Clean: Yes Manifold Clean: Yes Cleaning Schedule: Semi Annually Autocalibrator Type: Environics 9100 Site Survey Complete: Yes Logbook Up To Date: Yes
Meteorology Located With Instruments: Yes Shadowing: No Boom Orientation (Deg): 345	Non-vehicular Local Sources Description: None Distance: N/A Direction: N/A		

Monitor Type	Nitrogen Dioxide	Ozone	PM10-SSI	PM10-SSI	BAM-PM2.5	PM2.5	Outdoor Temperature	Wind Direction	Horizontal Wind Speed
Manufacturer/Model	TECO 42, 42C	API/Teledyne 400	Andersen SA1200	Andersen SA1200	Met One BAM1020	R&P 2025	MET ONE 060A-2	MET ONE 020-C	MET ONE 010-SC
Serial Number	20003373	20003827	7471	7678	20005406	20020968	N8734	Feb-61	576
POC	1	1	1	2	3	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	Other	SLAMS	Unknown	SLAMS	Other	Other	Other
Objective	UNKNOWN	UNKNOWN	POPULATION EXPOSURE	UNKNOWN	Other	POPULATION EXPOSURE			
Scale	Null		Neighborhood						
Height Above Ground	7	7	5.2	5.2	5.7	5.7	6.6	11.9	11.9
Height Above Platform	3.3	3.3	1.5	1.5	2	2	2.8	7.3	7.3
Sampler Spacing									
Current Manual Available?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	7/10/2006	7/10/2006							
Cal. Gas Cert. Date	11/30/2004								
Calibration Current?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calibration Date	4/5/2006	4/5/2006	6/12/2006	6/12/2006	7/28/2005	7/28/2005	7/28/2005	7/28/2005	7/28/2005
Cal. Equipment Cert. Date	3/2/2006	3/2/2006	10/5/2005	10/5/2005	9/8/2004	9/8/2004	6/15/2005		5/16/2005
Obstacle Description	None	None	None	None	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-	-	-	-	-
Height Above Inlet	-	-	-	-	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-	-	-	-	-	-
Distance to Dripline	-	-	-	-	-	-	-	-	-
Dominant Influence	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular	Vehicular			
Residence Time (sec)	19.2	14.2							

Appendix B

Assembly Bill 841 (AB 841)

Assembly Bill No. 841

CHAPTER 569

An act to add Section 40607 to the Health and Safety Code, relating to air quality.

[Approved by Governor October 6, 2005. Filed with Secretary of State October 6, 2005.]

legislative counsel's digest

AB 841, Arambula. Air quality: San Joaquin Valley Unified Air Pollution Control District: particulate monitoring.

(1) Existing law requires the State Air Resources Board to develop and conduct an expanded and revised program of particulate monitoring. Existing law requires that the program be designed to accomplish specified conditions, including, among others, that the monitoring network used in the program site monitors so as to characterize population exposure, background conditions, and transport influence, and attain any other objective identified by the state board as necessary to understand conditions and provide information for the development of control strategies. Existing law establishes the San Joaquin Valley Unified Air Pollution Control District, formed by the Counties of Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare, and consisting of the Counties of Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare, and that portion of the County of Kern that is within the San Joaquin Valley Air Basin. This bill would require the district to install one or more monitors for monitoring airborne fine particles smaller than 2.5 microns in diameter in the western region of the County of Fresno in areas that are primarily low-income and underserved. Because this bill would require the San Joaquin Valley Unified Air Pollution Control District to perform a specified function, this bill would impose a state-mandated local program. This bill would also make legislative findings and declarations as to the necessity of a special statute.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement. This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. Section 40607 is added to the Health and Safety Code, to read:

40607. The district shall install one or more monitors for monitoring airborne fine particles smaller than 2.5 microns in diameter (PM 2.5) in primarily low-income and underserved areas in the western region of the County of Fresno.

SEC. 2. The Legislature finds and declares that a special law is necessary and that a general law cannot be made applicable within the meaning of Section 16 of Article IV of the California Constitution because of unique air quality issues faced by the County of Fresno.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.

Appendix C

40 CFR 58.10

§ 58.10 Annual monitoring network plan and periodic network assessment.

- (a)(1) Beginning July 1, 2007, the State, or where applicable local, agency shall adopt and submit to the Regional Administrator an annual monitoring network plan which shall provide for the establishment and maintenance of an air quality surveillance system that consists of a network of SLAMS monitoring stations including FRM, FEM, and ARM monitors that are part of SLAMS, NCore stations, STN stations, State speciation stations, SPM stations, and/or, in serious, severe and extreme ozone nonattainment areas, PAMS stations, and SPM monitoring stations. The plan shall include a statement of purposes for each monitor and evidence that siting and operation of each monitor meets the requirements of appendices A, C, D, and E of this part, where applicable. The annual monitoring network plan must be made available for public inspection for at least 30 days prior to submission to EPA.
- (2) Any annual monitoring network plan that proposes SLAMS network modifications including new monitoring sites is subject to the approval of the EPA Regional Administrator, who shall provide opportunity for public comment and shall approve or disapprove the plan and schedule within 120 days. If the State or local agency has already provided a public comment opportunity on its plan and has made no changes subsequent to that comment opportunity, the Regional Administrator is not required to provide a separate opportunity for comment.
- (3) The plan for establishing required NCore multipollutant stations shall be submitted to the Administrator not later than July 1, 2009. The plan shall provide for all required stations to be operational by January 1, 2011.
- (b) The annual monitoring network plan must contain the following information for each existing and proposed site:
- (1) The AQS site identification number.
 - (2) The location, including street address and geographical coordinates.
 - (3) The sampling and analysis method(s) for each measured parameter.
 - (4) The operating schedules for each monitor.
 - (5) Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal.
 - (6) The monitoring objective and spatial scale of representativeness for each monitor as defined in appendix D to this part.
 - (7) The identification of any sites that are suitable and sites that are not suitable for comparison against the annual $PM_{2.5}$ NAAQS as described in §58.30.
 - (8) The MSA, CBSA, CSA or other area represented by the monitor.
- (c) The annual monitoring network plan must document how States and local agencies provide for the review of changes to a $PM_{2.5}$ monitoring network that impact the location of a violating $PM_{2.5}$ monitor or the creation/change to a community monitoring zone, including a description of the proposed use of spatial averaging for purposes of making comparisons to the annual $PM_{2.5}$ NAAQS as set forth in appendix N to part 50 of this chapter. The affected State or local agency must document the process for obtaining public comment and include any comments received through the public notification process within their submitted plan.
- (d) The State, or where applicable local, agency shall perform and submit to the EPA Regional Administrator an assessment of the air quality surveillance system every 5 years to determine, at a minimum, if the network meets the monitoring objectives defined in appendix D to this part, whether new sites are needed, whether existing sites are no longer needed and can be terminated, and whether new technologies are appropriate for incorporation into the ambient air monitoring network. The network assessment must consider the ability of existing and proposed sites to support air quality characterization for areas with relatively high populations of susceptible individuals (e.g., children with asthma), and, for any sites that are being proposed for discontinuance, the effect on data users other than the agency itself, such as nearby States and Tribes or health effects studies. For $PM_{2.5}$, the assessment also must identify needed changes to population-oriented sites. The State, or where applicable local, agency must submit a copy of this 5-year assessment, along with a revised annual network plan, to the Regional Administrator. The first assessment is due July 1, 2010.
- (e) All proposed additions and discontinuations of SLAMS monitors in annual monitoring network plans and periodic network assessments are subject to approval according to §58.14.

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