Monterey Bay Air Resources District

Serving Monterey, San Benito, and Santa Cruz Counties

North Central Coast Air Basin
California

2023
Annual Monitoring Network Plan
June 30, 2023

Monterey Bay Air Resources District
24580 Silver Cloud Court
Monterey, California 93940
(831) 647-9411

TABLE OF CONTENTS

ACRONYMS

8HrO3	Ozone eight hour running average
AIRS	Air Information Retrieval System
APCD	Air Pollution Control District
CARB AQS	The CARB Air Quality System audit division
BAAQMD	Bay Area Air Quality Management District
ARM	approved regional method
ATM	Atmospheric temperature monitor
BAM	Beta Attenuation Monitor
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CO	carbon monoxide
District	Short for Monterey Bay Unified Air Pollution Control District
EPA	United States Environmental Protection Agency
EPA AQS	The EPA Air Quality System
FEM	Federal Equivalent Method
FRM	Federal Reference Method
IMPROVE	Interagency Monitoring of Protected Visual Environments
m	meters
MBARD	Monterey Bay Air Resources District
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NCCAB	North Central Coast Air Basin
NO	nitric oxide
NO2	nitrogen dioxide
NOx	nitrogen oxides
O3	ozone
PM_{10}	particulate matter (0 to 10 microns aerodynamic diameter)
$PM_{2.5}$	particulate matter (0 to 2.5 microns aerodynamic diameter)
SIP	State Implementation Plan
SLAMS	State or Local Air Monitoring Stations
SO2	sulfur dioxide
SPM	Special Purpose Monitoring
WDA	Wind direction average
WSA	Wind speed average

Executive Summary

The Air Monitoring Division is responsible for operating and maintaining the Monterey Bay Air Resources District's (MBARD) ongoing ambient air monitoring network described in this plan and for operating and maintaining any monitoring equipment in support of temporary, seasonal, or special projects. Air Monitoring is also responsible for ensuring the accuracy of the monitoring data collected and making sure that it is made available to the public and to any interested organizations and agencies. This past year, Air Monitoring has carried out or has been involved with several short-term and long-term projects that support these responsibilities.

People who live in the jurisdiction of MBARD or are coming into the area are regularly interested in the current and expected local air quality. To meet the needs of the concerned citizenry, MBARD operates and maintains a webpage to provide air quality information as it relates to the Air Quality Index. The air quality data website contains four sections. The first provides hourly data and daily trends of the particulate and ozone monitors within MBARD's ambient monitoring network. The second provides daily forecasts for cities within MBARD's jurisdiction. The third section provides burn status information. The last section provides a network map and hourly data for controlled burns on the Fort Ord property. The webpage is reached through the "Air Quality" tab on MBARD's website (http://mbard.org). There is also a camera section off of the main page which shows hourly photos of the areas around six monitoring stations throughout MBARD's district and a new map will be going up on the website which will be showing the sub-hourly results of smoke measurements in both AQI and smoke concentrations in $\mu g/m^3$.

Wildfires throughout the Western United States and particularly in California have become an increasing concern to the public. Smoke impacts from large scale, controlled burns, may also be significant. Air quality changes rapidly during these events. MBARD has been looking for a way to monitor and inform the public of these changes in a rapid manner than has been possible with the normal regulatory network, and has almost completed the process of setting up a network of low-cost but highly responsive sensors utilizing Clarity™ devices and their Open Map™ webpage. MBARD still intends to set up a more sophisticated webpage to be used to display this network data.

AIR MONITORING NETWORK PLAN
Background

Formed in 1974, the Monterey Bay Air Resources District *a.k.a. the Monterey Bay Unified Air Pollution Control District* (District) is the public agency responsible for air quality management in Monterey, Santa Cruz, and San Benito Counties, which make up the North Central Coast Air Basin (NCCAB). MBARD collects and reports data from a network of seven air monitoring stations throughout the NCCAB. These monitoring sites currently consist of six State and Local Air Monitoring Stations (SLAMS), and one Special Purpose Monitoring Station (SPM).

NORTH CENTRAL COAST AIR BASIN: PERMANENT AIR MONITORING STATIONS

The Pinnacles site, although located within the MBARD's district boundaries, is operated and maintained by the National Parks Service and is a Special Purpose Monitoring Station (SPM). MBARD performs short-term monitoring and special testing as needed and maintains a network consisting of both mobile and stationary instruments. These include beta attenuation monitors, BAM-1020s and E-BAMs that are primarily intended for the detection of $PM_{2.5}$ from outdoor and residential burning, as well as wildfires.

NETWORK DESCRIPTION

Network Plan

MBARD adopts and submits an Annual Monitoring Network Plan to the EPA Regional Administrator. This plan provides for the establishment, maintenance, and evolution of an air quality monitoring system. The Code of Federal Regulations currently requires that this report be submitted to the U.S. Environmental Protection Agency (U.S. EPA) by July 1 of each year. The geographical scope of this report consists of Monterey, Santa Cruz, and San Benito counties, which make up the North Central Coast Air Basin (NCCAB) in California.

General Information

The ambient air quality standards impose limits on air pollutant concentrations. They are established by the California Air Resources Board (CARB) and the EPA, and they are designed to protect human health and the environment. Based on these standards, MBARD monitors the air quality in the NCAAB. If an area does not meet the air quality standards, then regulations and control strategies are developed to reduce pollutants. MBARD collects data on both pollutant and meteorological parameters. The primary pollutants of concern, from a regulatory and public health perspective, are O_3, $PM_{2.5}$, and PM_{10}. Most sites monitor for multiple pollutants and some sites collect data for other pollutants, such as NO-NO2-NO_x, and CO. Meteorological parameters are monitored at all sites and include atmospheric temperature monitors (ATM), wind speed average (WSA), and wind direction average (WDA).

Data Use

The air monitoring data collected by MBARD is used in several ways. It is available to various regulatory agencies, health and environmental researchers, and to the general public; including environmental groups, businesses, and concerned citizens. This data is reviewed for compliance with the ambient air quality standards, as well as associated public health and environmental effects and impacts. The data is submitted to CARB and the EPA, and is published on MBARD's website, the "AirNow" website, and in newspapers.

EPA Monitoring Requirements

EPA regulations dictate the minimum number of monitoring sites to be established by State and local air agencies. MBARD's network meets the minimum monitoring requirements for all criteria pollutants (Tables 1-5). These requirements are based on local Metropolitan Statistical Area (MSA) data, as set forth in the Code of Federal Regulations, (40 CFR 58). MSAs are part of a classification of geographical regions developed by the U.S. Census Bureau and include one or more counties, although not all counties fall within an MSA. For the criteria pollutants, such as O_3, $PM_{2.5}$, and PM_{10}, the required minimum number of monitoring sites is based on both the population and the pollutant concentration in a MSA. The San Jose-Sunnyvale-Santa Clara MSA falls across the jurisdictions of both the Monterey Bay Unified Air Pollution Control District and the Bay Area Air Quality Management District (BAAQMD). Because of this, in accordance with 40 CFR Part 58, Appendix D, Section (2)(e), and interagency agreement (See Appendix B) has been entered into in order for both Districts to share responsibility in meeting some of these requirements. BAAQMD also operates an NCORE site in San Jose within this MSA, and since MBUAPCD is not part of the NCORE Program, no agreement is required for it. State and local agencies may deploy additional monitors to meet more stringent State standards, to track specific local air quality issues, or to address local public concerns. For example, CARB which is the primary quality assurance

organization for MBARD, maintains a network of collocated $PM_{2.5}$ sites. The Salinas Air Monitoring Station is part of that network and maintains relatively low design values (See detailed site information).

Table 1: Minimum Monitoring Requirements for Ozone. (DV site is highest listed regardless of agency.)

MSA	County(ies)	Population (2022)	8-hour Design Value [ppb] (2020-2022)	Design Value Site	# Required Monitors	# Active Monitors	# Additional Monitors Needed
San Jose-Sunnyvale-Santa Clara	San Benito Santa Clara	1951116	69	13030 Murphy Avenue 060852006	2	6*	0
Santa Cruz-Watsonville	Santa Cruz	264370	49	Santa Cruz 060870007	0	1	0
Salinas	Monterey	432858	57	King City 060530008	1	3	0

(Note: Refer to 40 CFR, Part 58, Appendix D, section 4.1 and Table D-2)
Monitors required for SIP or Maintenance Plan: None
*Two of the monitors located in the San Jose-Sunnyvale-Santa Clara MSA is located within the MBARD (See Appendix B).

Table 2: Minimum Monitoring Requirements for $PM_{2.5}$ SLAMS. (DV site is highest listed regardless of agency.)

MSA	County(ies)	Population (2022)	Annual Design Value (2020-2022)	Annual Design Value Site	Daily Design Value (2020-2022)	Daily Design Value Site	Minimum # of Monitors Required	# of Monitors Present
San Jose-Sunnyvale-Santa Clara	San Benito Santa Clara	1951116	10.7**	1007 Knox Avenue 060850006	36**	158B Jackson St. 060850005	3	4*
Santa Cruz-Watsonville	Santa Cruz	264370	7.2**	San Lorenzo Valley 060871005	40**	San Lorenzo Valley 060871005	0	2
Salinas	Monterey	432858	6.9**	King City 060530008	30**	King City 060530008	1	1

(Note: Refer to 40 CFR, Part 58, Appendix D, section 4.7 and Table D-5)
Monitors required for SIP or Maintenance Plan: None
*One of the monitors located in the San Jose-Sunnyvale-Santa Clara MSA is located within MBARD (See Appendix B).
**The Annual Design Values and the Daily Design Values are higher than what would normally be expected for the District monitoring site due to the large number of California wildfires in 2020 which include the local Dolan Fire in Big Sur, the CZU Lightning Complex Near Santa Cruz, and the SCU Lightning Complex in the Santa Clara County area.

Table 3: Minimum Monitoring Requirements for PM_{10}. (Max. Conc. site is highest listed regardless of agency.)

MSA	County(ies)	Population (2022)	Max Concentration (2022)	Max Concentration Site	# Required Monitors	# Active Monitors	# Additional Monitors Needed
San Jose-Sunnyvale-Santa Clara	San Benito Santa Clara	1951116	77**	Hollister 060690002	4-8**	3*	1**
Santa Cruz-Watsonville	Santa Cruz	264370	N/A	N/A	0-1	0	0
Salinas	Monterey	432858	64	King City 2 060530008	0-1**	1	0

(Note: Refer to 40 CFR, Part 58, Appendix D, section 4.6 and Table D-4)
Monitors required for SIP or Maintenance Plan: None
*Two of the monitors located in the San Jose-Sunnyvale-Santa Clara MSA are located within MBARD (See Appendix B).
** MBARD will continue to assess the adequacy of the PM_{10} monitoring in the Annual Network Plans and in each 5-Year Network Assessment to determine whether high PM_{10} measurements are becoming more common and require additional monitoring. The Air District is committed to working with EPA, CARB, and BAAQMD to ensure that monitoring levels continue to protect public health and safety. Towards these goals, the San Juan Bautista station was added and started collecting PM_{10} data in April of 2021.

Table 4: Minimum Monitoring Requirements for NO_x.

CBSA	Population (2022)	Max AADT Counts (2020)	# Required Near Road Monitors	# Active Near Road Monitors	# Additional Near Road Monitors	# Required Area Wide Monitors	# Active Area Wide Monitors	Additional Monitors Needed
Salinas MSA	432858	22395	0	0	0	0	1	0

(Note: Refer to 40 CFR, Part 58, Appendix D, section 4.3) (See Appendix B.) Monitors required for SIP or Maintenance Plan: None. MBARD is currently operating no other NOx monitors. Near-road monitoring (NO_2 by 2014, CO & $PM_{2.5}$ by 2017), and area-wide by 2013 NO_x requirements being met by BAAQMD (see interagency agreements – Appendix B).

Table 5: Minimum Monitoring Requirements for CO.

CBSA	Population (2022)	# Required Near Road Monitors	# Active Near Road Monitors	# Additional Near Road Monitors Needed
Salinas MSA	432858	0	0	0

(Note: Refer to 40 CFR, Part 58, Appendix D, section 4.2) (See Appendix B.) Monitors required for SIP or Maintenance Plan: None. MBARD is currently operating no other CO monitors. Near-road monitoring (NO_2 by 2014, CO & $PM_{2.5}$ by 2017), and area-wide NO_x requirements being met by BAAQMD (see interagency agreements – Appendix B).

- **SO_2** (Note: Refer to 40 CFR, Part 58, Appendix D, section 4.4)
  Monitors required for SIP or Maintenance Plan: None
- **Pb** (Note: Refer to 40 CFR, Part 58, Appendix D, section 4.5) BAAQMD is monitoring for the San Jose-Sunnyvale-Santa Clara MSA. No additional Pb monitoring is being carried out by MBARD. Monitors required for SIP or Maintenance Plan: None

Ambient Air Quality Standards

The EPA sets National Ambient Air Quality Standards (NAAQS - Table 6) for criteria pollutants as directed by the Federal Clean Air Act. The State of California has adopted a set of State standards (Table 7) which are required to be at least as stringent as the NAAQS. The State standards and the federal primary standards are both designed to protect the health of the public. The State standards and the federal secondary standards safeguard public welfare, including protection against decreased visibility, damage to property, and damage to the environment. The federal primary and secondary standards for the pollutants currently measured in the NCCAB are identical.

Table 6: Federal Standards (NAAQS)

Pollutant	Requirements of Standard	Level
Ozone	The 3-year average of each year's 4th highest daily maximum 8-hour ozone concentration is not to exceed the level of the standard.	0.07ppm
Particulate Matter 10µm	The 24-hour average is not to exceed the level of the standard more than once per year.	150µg/m^3
Particulate Matter 2.5µm	The 3-year average of the 98th percentile of the 24-hour averages is not to exceed the level of the standard.	35µg/m^3
	The 3-year average of the weighted annual means is not to exceed the level of the standard.	12.0µg/m^3
Nitrogen Dioxide	The 3-year average of the 98th percentile of the daily maximum 1-hour averages is not to exceed the level of the standard.	100ppb
	The Annual average is not to exceed the level of the standard.	53ppb
Carbon Monoxide	The 1-hour average is not to exceed the level of the standard more than once per year.	35ppm
	The 8-hour average is not to exceed the level of the standard more than once per year.	9ppm

(Note: The national ambient air quality standards are found within 40 CFR, Part 50.)
(Note: The EPA adopts both rounding and truncating conventions depending on the standard. Where rounding conventions are used, as long as the measured pollutant level does not round up to a value higher than the standard, as read with the same number of significant digits as listed by the standard, the standard is not considered to be exceeded.

Table 7: State Standards (CAAQS)

Pollutant	Standard	Level
Ozone	The 1-hour average is not to exceed the level of the standard.	0.09ppm
	The 8-hour average is not to exceed the level of the standard.	0.07ppm
Particulate Matter 10µm	The 24-hour average is not to exceed the level of the standard.	50µg/m^3
	The Annual average is not to exceed the level of the standard.	20µg/m^3
Particulate Matter 2.5µm	The 24-hour average is not to exceed the level of the standard.	35µg/m^3
	The Annual average is not to exceed the level of the standard.	12µg/m^3
Nitrogen Dioxide	The 1-hour average is not to exceed the level of the standard.	0.18ppm
	The Annual average is not to exceed the level of the standard.	0.030ppm
Carbon Monoxide	The 1-hour average is not to exceed the level of the standard.	20ppm
	The 8-hour average is not to exceed the level of the standard.	9.0ppm

(Note: The State ambient air quality standards are found within Section 70200 of Title 17 of the California Code of Regulations.)

Quality Assurance

MBARD follows a quality assurance program to ensure compliance with the regulations set within 40 CFR 58. Except where otherwise noted, monitors in both the District's SPM and SLAMS sites meet the requirements of 40 CFR 58, Appendix A through 40 CFR 58, Appendix E. Consistent with these federal regulations, the California Air Resources Board, Quality Assurance Section (CARB QAS) conducts annual performance evaluations of nitrogen dioxide, ozone and carbon monoxide analyzers, meteorological instruments, and flow rates for $PM_{2.5}$ and PM_{10} monitors. CARB QAS also conducts site evaluations as part of the annual audit at each air monitoring station. Physical measurements and observations, including probe/sensor height above ground level, distance from trees, type of ground cover, residence time, obstructions to air flow, distance to local sources, topography, vehicle counts, predominant wind direction, and probe material are used to determine compliance with the requirements of 40 CFR 58, Appendix E for both the District's SLAMS and SPM sites.

The CARB QAS also ensures the quality of the data collected by the air monitoring sites operating in the NCCAB. This is done monthly through analysis of precision data submitted to the U.S. EPA Air Quality System (EPA AQS). The EPA reviews the frequency of flow rate verifications for manual samplers and the frequency of one-point quality control checks for gaseous instruments. On an annual basis, the EPA performs an analysis of the precision data that concentrates on three parameters: precision data submission, validity, and usability. The data analyses for both SLAMS and SPM sites are conducted in accordance with 40 CFR 58, Appendix A.

The EPA QAS, through a contractor, conducts annual flow rate audits on $PM_{2.5}$ and PM_{10} monitors. MBARD performs both weekly and monthly checks of instrument functionality. Calibrations are done on either a quarterly or a semi-annual basis depending on the individual requirements for each instrument. MBARD has collocated $PM_{2.5}$ monitors in Salinas as a further quality check as required by 40 CFR 58, Appendix A.

Finally, CARB QAS conducts technical systems audits to determine if MBARD's air monitoring program satisfies the requirements of 40 CFR 58, and U.S. EPA's Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, April 1994. Compliance with these regulations is necessary for the data to be considered data-for-record, as required by the California Code of Regulations (Title 17, Article 3, Section 70301). Data meeting these requirements is eligible to be used in actions taken pursuant to the Federal and State Clean Air Acts.

Proposed Modifications to Network in the Next 18 Months

Proposed changes to the air monitoring network are approved by the District's Board and the APCO to reduce air monitoring costs, improve data collection and data handling efficiencies, or add new capabilities.

- Parameter changes for SLAM stations:
  - MBARD is in contact with ARB, EPA, and BAAQMD concerning the District's PM10 monitors in Hollister and San Juan Bautista within the San Jose/Sunnyvale/Santa Clara CBSA. MBARD is committed to working with EPA, CARB, and BAAQMD to ensure that monitoring levels continue to protect public health and safety.
  - The Carmel Valley Air Monitoring Station (06-053-0002) will soon no longer be able to meet its site requirements due to a growing tree northwest of its location. During a station audit last fall on 08/25/22, ARB issued Corrective Action Notification #573 which stated that the tree was becoming too close and too tall for the station to continue to meet siting requirements. The tree was trimmed back as a temporary measure, but the tree will continue to encroach the station. MBARD intends to relocate the station towards the mouth of Carmel Valley at the District Maintenance Yard on the Carmel Middle School Campus during FY23/24.
  - MBARD is in the process of updating ozone analyzers from TECO 49Cs to Thermo-Fisher 49iQs. It is also in the process of updating its aging BAM-1020s to newer BAM-1020s. Supporting equipment such as ozone transfer standards and flow meters are also being updated. This is happening over the course of a few fiscal cycles.
- Other Monitoring Projects:

  MBARD is currently maintaining a year-round low-cost sensor network which currently includes 30 towns within its jurisdiction. It has prioritized setting up monitors in disadvantaged and low-income neighborhoods within these areas. The network also includes the sites in the San Lorenzo Valley winter wood smoke network and now replaces those monitors with the year-round low-cost sensors.

Modifications Made to Network in 2022 and Early 2023

MBARD collected data from seven monitoring sites in 2021. The following sites and/or monitoring parameters were changed:

- None.

REVIEW OF CHANGES TO $PM_{2.5}$ MONITORING NETWORK

The NCCAB is currently in compliance with the $PM_{2.5}$ ambient air quality standards. In the event that standards are exceeded, appropriate changes will be made to the $PM_{2.5}$ monitoring network. This would then be documented in the Annual Network Plan which would then undergo a 30-day public review before submittal to the EPA.

DATA SUBMISSION REQUIREMENTS

Precision reports are submitted to the EPA's AQS. Annual data certification is submitted by May 1, each year.

Detailed Site Information for State and Local Air Monitoring Stations (SLAMS)

Salinas 3

This station was established in December 1999 to monitor air quality conditions in the Salinas MSA, the District's most populated area. This station features one of MBARD's most extensive sets of measurements. The data collected include CO, NO_2, O_3, FRM R&P $PM_{2.5}$, FEM BAM-1020 $PM_{2.5}$, WSA, WDA and ATM. $PM_{2.5}$ data is collected hourly using the FEM BAM-1020 as the primary instrument. It is also collected by an R&P FRM-2000, a filter-based instrument operating on the 1 in 6-day schedule, which is collocated to the BAM-1020. The collocation is required by CARB, our Primary Quality Assurance Organization (PQAO), and is a part of their overall collocation network. The $PM_{2.5}$ filters are analyzed by BAAQMD according to EPA specifications (See following two pages). Data from this populated area generally indicates good air quality and meets all State and federal standards for CO, NO_2, O_3, and $PM_{2.5}$. Data from this site has been useful in assessing air pollution impacts on populations during unusual events, such as wildfires at Fort Ord. The 2022 $PM_{2.5}$ annual design value is 5.6µg/m^3 for the primary instrument (BAM-1020). The 2022 $PM_{2.5}$ 24-Hour design value is 24µg/m^3 for the primary instrument (BAM-1020).

Salinas Site Information

Site Name	Salinas 3
AQS ID	06-053-1003
GIS Coordinates	36.694261, -121.623271
Address	867 East Laurel Dr., Salinas, CA 93905
County	Monterey (TAMC)
Distance to Roadways	5000m
Traffic Count	22395 ADT (2020) (TAMC-Peak)
Groundcover	Gravel
Representative Statistical Area	MSA: Salinas, CA

From: Eric Stevenson <EStevenson@baaqmd.gov>
Sent: Thursday, May 23, 2013 4:45 PM
To: Mark Stoelting; Wendy Caruso; William Chevalier
Cc: Katherine Hoag (Hoag.Katherine@epamail.epa.gov)
Subject: Letter for Data Certification for PM2.5 Weighing
Attachments: PM2 5 Laboratory Document.docx

All –

I've attached a document regarding weighing of PM2.5 filters. EPA Region 9 has asked that this letter be included in your Annual Network Plans to ensure that your data meet requirements.

Please let me know if you have any questions or concerns.

Thanks,

Eric Stevenson
Director of Technical Services
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
415-749-4695, estevenson@baaqmd.gov

$PM_{2.5}$ team members,
This correspondence is to inform the appropriate members of the North Coast Unified Air Quality Management District and Monterey Bay Unified Air Pollution Control District that all pre- and post-sampled $PM_{2.5}$ filters weighed by the designated staff of the Bay Area Air Quality Management District gravimetric analysis laboratory followed EPA specifications as required by the references listed in Tables 1 & 2 below and that the room was operating in accordance with EPA requirements on the days the filters were weighed. Therefore the weights can be used for comparison to the NAAQS and the data can be certified by the aforementioned agencies.

Table 1 QC Measures

Quality Control Measures (Laboratory)		
Equipment	Reference	Frequency
Filter Conditioning Environment	40 CFR Part 50, Appendix L, Sections 8.0 & 10.0	All filters
Filters	Quality Assurance Guidance Document 2.12, Section 7.7	All filters
Filter Weighing	40 CFR Part 50, Appendix L, Section 10.10; Quality Assurance Guidance Document 2.12, Sections 7.9, 7.10, & 7.11	Within 30 days of collection if provided to the laboratory within 23 days of collection
Working Mass standards	Quality Assurance Guidance Document 2.12, Sections 7.9 & 7.11	Every weighing session

Table 2 QA Measures

Quality Assurance Measures (Laboratory)		
Equipment	Reference	Frequency
Working Mass standards	Quality Assurance Guidance Document 2.12 Sections 3.3, 4.3.7 & 7.3	Yearly
Temperature & Relative Humidity	Quality Assurance Guidance Document 2.12 Section 3.3, 4.3.7, & 7.6	Quarterly
Balance	Quality Assurance Guidance Document 2.12 Section 3.3, 4.3.6 & 7.2	Yearly
Working Mass standards vs. primary standards	Quality Assurance Guidance Document 2.12 Sections 3.3, 4.3 & 7.3	Quarterly
Primary standards	Quality Assurance Guidance Document 2.12 Section 3.3, 4.3 & 7.3	Yearly

Salinas Air Monitoring Instrument Information

Pollutant, POC	O_3, 1	CO, 1	NO_2, 1	Wind Speed, 1
Parameter Code	44201	42101	42602	61101
Basic Monitoring Objective	NAAQS Comparison	NAAQS Comparison	NAAQS Comparison	N/A
Site Types	Population Oriented	Population Oriented	Population Oriented	Population Oriented
Monitor Types	SLAMS	SLAMS	SLAMS	SLAMS
Primary/QA Collocated/Other	Primary	Primary	Primary	Primary
Instrument Manufacturer and Model	TEI 49C	TEI 48	TECO 42C	RM Young 86000 Sonic Anemometer
Method Code	047	054	074	062
FRM/FEM/ARM/other	FEM	FRM	FRM	N/A
Collecting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Analytical Lab	N/A	N/A	N/A	N/A
Reporting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	12/31/1999	12/31/1999	12/31/1999	12/31/1999
Current Sampling Frequency	Continuous	Continuous	Continuous	Continuous
Calculated Sampling Frequency	N/A	N/A	N/A	N/A
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height	6.0m	6.0m	6.0m	10m
Distance from supporting structure	6.0m	6.0m	6.0m	10m
Distance from obstructions on roof	N/A	N/A	N/A	N/A
Distance from obstructions not on roof	N/A	N/A	N/A	N/A
Distance from trees	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue	N/A	N/A	N/A	N/A
Distance between collocated monitors	N/A	N/A	N/A	N/A
Unrestricted airflow	360 Degrees	360 Degrees	360 Degrees	360 Degrees
Probe material	Teflon	Teflon	Teflon	N/A
Residence time	3.7s	4.1s	4.6s	N/A
Will there be changes within the next 18 months?	No	No.	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A
Frequency of one-point QC check (gaseous)	Daily	Weekly	Weekly	N/A
Last Annual Performance Evaluation (gaseous)	08/23/2022	08/23/2022	08/23/2022	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A
Network Affiliation	N/A	N/A	N/A	N/A

Salinas Air Monitoring Instrument Information

Pollutant, POC	Wind Direction, 1	ATM, 1	$PM_{2.5}$, 3	$PM_{2.5}$, 2
Parameter Code	61102	62101	88101	88101
Basic Monitoring Objective	N/A	N/A	NAAQS Comparison	NAAQS Comparison
Site Types	Population Oriented	Population Oriented	Population Oriented	Population Oriented
Monitor Types	SLAMS	SLAMS	SLAMS	SLAMS
Primary/QA Collocated/Other	Primary	Primary	Primary	QA Collocated
Instrument Manufacturer and Model	RM Young 86000 Sonic Anemometer	RM Young 41342 VC/VF	MET ONE BAM-1020	R&P FRM-2000
Method Code	062	050	170	143
FRM/FEM/ARM/other	N/A	N/A	FEM	FRM
Collecting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Analytical Lab	N/A	N/A	N/A	Bay Area AQMD
Reporting Agency	MBUAPCD	MBUAPCD	MBUAPCD	Bay Area AQMD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	12/31/1999	12/31/1999	1/1/2009	11/1/2008
Current Sampling Frequency	Continuous	Continuous	Continuous	1:6
Calculated Sampling Frequency	N/A	N/A	N/A	1:6
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height	10m	10m	6.0m	6.2m
Distance from supporting structure	10m	10m	2.1m	2.3m
Distance from obstructions on roof	N/A	N/A	N/A	N/A
Distance from obstructions not on roof	N/A	N/A	N/A	N/A
Distance from trees	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue	N/A	N/A	N/A	N/A
Distance between collocated monitors	N/A	N/A	1.8m	1.8m
Unrestricted airflow	360 Degrees	360 Degrees	360 Degrees	360 Degrees
Probe material	N/A	N/A	N/A	N/A
Residence time	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	Yes	Yes
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	Weekly	N/A
Frequency of one-point QC check (gaseous)	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	03/08/2022 08/23/2022	03/08/2022 08/23/2022
Network Affiliation	N/A	N/A	N/A	N/A

Carmel Valley

This station was established in 1982 due to the smoke sensitive nature of the rural/residential Carmel Valley. The limited natural ventilation of the valley can also lead to trapping of ozone. Measurements made at this site include O3, FEM BAM-1020 $PM_{2.5}$, WSA, WDA, and ATM. Data from this location has been useful for issuing public Health Advisories during wildfire events. A siting waiver for this station had been sought and approved by the EPA (See Appendix C) due to the presence of a nearby tree. The 2022 $PM_{2.5}$ annual design value is 5.0µg/m^3 and the 2022 $PM_{2.5}$ 24 Hour design value is 27µg/m^3 for this station.

Carmel Valley Site Information

Site Name	Carmel Valley
AQS ID	06-053-0002
GIS Coordinates	36.48187, -121.73333
Street Address	35 Ford Rd., Carmel Valley, CA 93924
County	Monterey
Distance to Road	25m
Traffic Count	15333 ADT (2020) (TAMC-Peak)
Groundcover	Paved
Representative Area	MSA: Salinas, CA

Carmel Valley Instrument Information

Pollutant, POC	O_3, 1	Wind Direction, 1	Wind Speed, 1	ATM, 1	$PM_{2.5}$, 3
Parameter Code	44201	61102	61101	62101	88101
Basic Monitoring Objective	NAAQS Comparison	N/A	N/A	N/A	NAAQS Comparison
Site Types	Population Oriented	Population Oriented	Population Oriented	Population Oriented	Highest Concentration
Monitor Types	SLAMS	SLAMS	SLAMS	SLAMS	Special Purpose
Primary/QA Collocated/Other	Primary	Primary	Primary	Primary	Primary
Instrument Manufacturer and Model	TEI 49C	RM Young 86000 Sonic Anemometer	RM Young 86000 Sonic Anemometer	RM Young 41342 VC/VF	MET ONE BAM-1020
Method Code	047	062	062	050	170
FRM/FEM/ARM/other	FEM	N/A	N/A	N/A	FEM
Collecting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Analytical Lab	N/A	N/A	N/A	N/A	N/A
Reporting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	10/12/1982	7/1/2007	7/1/2007	1/1/1997	1/1/2012
Current Sampling Frequency	Continuous	Continuous	Continuous	Continuous	Continuous
Calculated Sampling Frequency	N/A	N/A	N/A	N/A	N/A
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height	5.9m	10m	10m	10 m	5.0m
Distance from supporting structure	3.0m	10m	10m	10m	2.0m
Distance from obstructions on roof	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof	N/A	N/A	N/A	N/A	N/A
Distance from trees	6.1m (Waiver – Appendix C)	11m	11m	11m	N/A
Distance to furnace or incinerator flue	N/A	N/A	N/A	N/A	N/A
Distance between collocated monitors	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow	360 Degrees	360 Degrees	360 Degrees	360 Degrees	360 Degrees
Probe material	Teflon	N/A	N/A	N/A	N/A
Residence time	9.0s	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A	Weekly
Frequency of one-point QC check (gaseous)	Daily	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	08/25/2022	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	03/09/2022 08/25/2022
Network Affiliation	N/A	N/A	N/A	N/A	N/A

King City 2

This station was relocated to the city center in 2007 and now serves as a population exposure/representative concentration site. The station was previously operated by a contractor but has now been operated by the District since July 1, 2010. Measurements made at the site include FEM BAM-1020 $PM_{2.5}$, FEM BAM-1020 PM_{10}, O3, WSA, WDA and ATM. This is the southernmost site in the NCCAB network. The 2022 $PM_{2.5}$ annual design value is 6.9µg/m^3 and the 2022 $PM_{2.5}$ 24 Hour design value is 30µg/m^3 for this station.

King City 2 Site Information

Site Name	King City 2
AQS ID	06-053-0008
GIS Coordinates	36.209286, -121.126371
Street Address	415 Pearl St., King City, CA 93930
County	Monterey
Distance to Road	50 m
Traffic Count	27642 ADT (2020) (CalTrans-Hwy101)
Groundcover	Paved
Representative Area	MSA: Salinas, CA

King City Instrument Information

Pollutant, POC	O_3, 1	Wind Direction, 1	Wind Speed, 1	ATM, 1	PM_{10}, 3	$PM_{2.5}$, 3
Parameter Code	44201	61102	61101	62101	81102	88101
Basic Monitoring Objective	NAAQS Comparison	N/A	N/A	N/A	NAAQS Comparison	NAAQS Comparison
Site Types	Highest Concentration	Population Oriented	Population Oriented	Population Oriented	Highest Concentration	Population Oriented
Monitor Types	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	Special Purpose
Primary/QA Collocated/Other	Primary	Primary	Primary	Primary	Primary	Primary
Instrument Manufacturer and Model	TEI 49C	RM Young 86000 Sonic Anemometer	RM Young 86000 Sonic Anemometer	RM Young 41342 VC/VF	MET ONE BAM-1020	MET ONE BAM-1020
Method Code	047	062	062	050	122	170
FRM/FEM/ARM/other	FEM	N/A	N/A	N/A	FEM	FEM
Collecting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Analytical Lab	N/A	N/A	N/A	N/A	N/A	N/A
Reporting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	6/1/2007	10/1/2007	10/1/2007	10/1/2007	2/1/2011	1/1/2012
Current Sampling Frequency	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Calculated Sampling Frequency	N/A	N/A	N/A	N/A	N/A	N/A
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height	4.3	10m	10m	10m	4.9m	4.7m
Distance from supporting structure	1.5	10m	10m	10m	2.3m	2.1m
Distance from obstructions on roof	N/A	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof	N/A	N/A	N/A	N/A	N/A	N/A
Distance from trees	N/A	N/A	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue	N/A	N/A	N/A	N/A	N/A	N/A
Distance between collocated monitors	N/A	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow	360 Degrees	360 Degrees	360 Degrees	360 Degrees	360 Degrees	360 Degrees
Probe material	Teflon	N/A	N/A	N/A	N/A	N/A
Residence time	2.5s	N/A	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A	Weekly	Weekly
Frequency of one-point QC check (gaseous)	Daily	N/A	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	08/25/2022	N/A	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	03/08/2022 08/25/2022	03/08/2022 08/25/2022
Network Affiliation	N/A	N/A	N/A	N/A	N/A	N/A

Santa Cruz

Monitoring at this station began in 1996 to assess population exposure in the Santa Cruz/Watsonville Metropolitan Statistical Area (MSA). Santa Cruz is currently the largest city in Santa Cruz County and is the second most populated city in the NCCAB. Data collected hourly at this SLAMS site includes O_3, FEM BAM-1020 $PM_{2.5}$, WSA, WDA and ATM. The data generally indicate good air quality and meets all state and federal standards for both ozone and particulates. The 2022 PM2.5 annual design value is 6.2µg/m^3 and the 2022 $PM_{2.5}$ 24 Hour design value is 25µg/m^3 for this station.

Santa Cruz Site Information

Site Name	Santa Cruz
AQS ID	06-087-0007
GIS Coordinates	36.98332, -121.98822
Street Address	960 Bostwick Lane, Santa Cruz, CA 95062
County	Santa Cruz
Distance to Road	120m
Traffic Count	12690 ADT (2015) (Santa Cruz County)
Groundcover	Gravel, Grass
Representative Area	MSA: Santa Cruz – Watsonville, CA

Santa Cruz Instrument Information

Pollutant, POC	O_3, 1	Wind Direction, 1	Wind Speed, 1	ATM, 1	$PM_{2.5}$, 3
Parameter Code	44201	61102	61101	62101	88101
Basic Monitoring Objective	NAAQS Comparison	N/A	N/A	N/A	NAAQS Comparison
Site Types	Population Oriented	Population Oriented	Population Oriented	Population Oriented	Population Oriented
Monitor Types	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Primary/QA Collocated/Other	Primary	Primary	Primary	Primary	Primary
Instrument Manufacturer and Model	TEI 49C	RM Young 86000 Sonic Anemometer	RM Young 86000 Sonic Anemometer	RM Young 41342 VC/VF	MET ONE BAM-1020
Method Code	047	062	062	050	170
FRM/FEM/ARM/other	FEM	N/A	N/A	N/A	FEM
Collecting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Analytical Lab	N/A	N/A	N/A	N/A	N/A
Reporting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	9/1/1996	8/1/2006	8/1/2006	1/1/1999	1/1/2009
Current Sampling Frequency	Continuous	Continuous	Continuous	Continuous	Continuous
Calculated Sampling Frequency	N/A	N/A	N/A	N/A	N/A
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height	4.8m	6.2m	6.2m	6.2m	4.6m
Distance from supporting structure	2.0m	3.5m	3.5m	3.5m	2.0m
Distance from obstructions on roof	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof	N/A	N/A	N/A	N/A	N/A
Distance from trees	10.7m	16m	16m	16m	N/A
Distance to furnace or incinerator flue	N/A	N/A	N/A	N/A	N/A
Distance between collocated monitors	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow	360 Degrees	360 Degrees	360 Degrees	360 Degrees	360 degrees
Probe material	Teflon	N/A	N/A	N/A	N/A
Residence time	6.3s	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A	Weekly
Frequency of one-point QC check (gaseous)	Daily	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	08/24/2022	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	03/09/2022 08/24/2022
Network Affiliation	N/A	N/A	N/A	N/A	N/A

Hollister

This station was established in 1987 to monitor potential air pollution exposures in the Hollister area, the largest and most rapidly growing city in San Benito County. Data collected hourly at this site includes O_3, FEM BAM-1020 PM_{10}, FEM BAM-1020 $PM_{2.5}$, WSA, WDA and ATM. Hollister is the second highest station on the NCCAB's ozone monitoring network. Ozone levels at Hollister are impacted by both local sources as well as ozone transported from the San Francisco Bay Area Air Basin. Ozone data from this site have been useful in a number of regional photochemical modeling studies including SARMAP and CCOS, as well as a special District-funded project using the BAAQMD's urban airshed model. PM_{10} exceedances at this site might occasionally be impacted by wildfire events, although fugitive dust appears to be the most common contributor to PM_{10} measurements. A housing development under construction nearby for a couple of years has moved adjacent to the monitoring station and also has the potential to impact PM_{10} levels. MBARD is keeping track of the construction and its impact on PM10 levels. The 2022 $PM_{2.5}$ annual design value is 6.5µg/m^3 and the 2022 $PM_{2.5}$ 24 Hour design value is 28µg/m^3 for this station.

Hollister Site Information

Site Name	Hollister
AQS ID	06-069-0002
GIS Coordinates	36.843425, -121.3621
Street Address	1979 Fairview Rd., Hollister, CA 95023
County	San Benito
Distance to Road	100m
Traffic Count	(Nearby Sunnyslope Rd.) 5666 ADT (2017)
Groundcover	Gravel
Representative Area	MSA: San Jose – Sunnyvale – Santa Clara, CA

Hollister Instrument Information

Pollutant, POC	O_3, 1	Wind Direction, 1	Wind Speed, 1	ATM, 1	PM_{10}, 3	$PM_{2.5}$, 3
Parameter Code	44201	61102	61101	62101	81102	88101
Basic Monitoring Objective	NAAQS Comparison	N/A	N/A	N/A	NAAQS Comparison	NAAQS Comparison
Site Types	Highest Concentration	Population Oriented	Population Oriented	Population Oriented	Highest Concentration	Highest Concentration
Monitor Types	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Primary/QA Collocated/Other	Primary	Primary	Primary	Primary	Primary	Primary
Instrument Manufacturer and Model	TEI 49C	RM Young 86000 Sonic Anemometer	RM Young 86000 Sonic Anemometer	RM Young 41342 VC/VF	MET ONE BAM-1020	MET ONE BAM-1020
Method Code	047	062	062	050	122	170
FRM/FEM/ARM/other	FEM	N/A	N/A	N/A	FEM	FEM
Collecting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Analytical Lab	N/A	N/A	N/A	N/A	N/A	N/A
Reporting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	1/1/1980	1/1/1980	1/1/1980	1/1/1980	2/1/2011	1/1/2009
Current Sampling Frequency	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Calculated Sampling Frequency	N/A	N/A	N/A	N/A	N/A	N/A
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height	4.2m	10m	10m	10m	5.1m	4.9m
Distance from supporting structure	1.4m	10m	10m	10m	2.1m	1.9m
Distance from obstructions on roof	N/A	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof	N/A	N/A	N/A	N/A	N/A	N/A
Distance from trees	N/A	N/A	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue	N/A	N/A	N/A	N/A	N/A	N/A
Distance between collocated monitors	N/A	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow	360 Degrees	360 Degrees	360 Degrees	360 Degrees	360 Degrees	360 Degrees
Probe material	Teflon	N/A	N/A	N/A	N/A	N/A
Residence time	6.2s	N/A	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A	Weekly	Weekly
Frequency of one-point QC check (gaseous)	Daily	N/A	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	08/26/2022	N/A	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	03/07/2022 08/26/2022	03/07/2022 08/26/2022
Network Affiliation	N/A	N/A	N/A	N/A	N/A	N/A

San Lorenzo Valley Middle School

This station was set up in October of 2014 for the purpose of monitoring $PM_{2.5}$ on a Neighborhood scale with the use of an FEM BAM-1020. It became a SLAMS site in October of 2016 after two years of operation. The station has also provided a good platform for conducting special studies such as a levoglucosan study during the 2014/2015 winter season. For years, the San Lorenzo Valley has been the source of many of the MBARD's wood smoke complaints. The sources have primarily been smoke output from residential chimneys during the winter months or from outdoor brush during the burn season. Monitoring has been carried out at this location during the months of October to April during the 2011-2012 to 2019-2020 winter burn seasons and indicated significant levels of smoke periodically. Data collected hourly at this site includes FEM BAM-1020 PM2.5, WSA, WDA and ATM. The 2022 $PM_{2.5}$ annual design value is 7.2µg/m^3 and the 2022 $PM_{2.5}$ 24 Hour design value is 40µg/m^3 for this station.

San Lorenzo Valley Middle School Site Information

Site Name	San Lorenzo Valley Middle School
AQS ID	06-087-1005
GIS Coordinates	37.06315, -122.083092
Street Address	7179 Hacienda Way, Felton, CA 95018
County	Santa Cruz
Distance to Road	88m
Traffic Count	21727 ADT (2019) (Santa Cruz County)
Groundcover	Gravel, Grass
Representative Area	MSA: Santa Cruz – Watsonville, CA

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

DEC 05 2016

Mr. Richard A. Stedman
Air Pollution Control Officer
Monterey Bay Air Resources District
24580 Silver Cloud Court
Monterey, California 93940

Dear Mr. Stedman:

This letter provides the U.S. Environmental Protection Agency's (EPA's) review and approval of the Monterey Bay Air Resources District's (MBARD's) request to change the monitor type for the Met One BAM 1020 Federal Equivalent Method (FEM) $PM_{2.5}$ monitor from a Special Purpose Monitor (SPM) to a State/Local Air Monitoring Stations (SLAMS) monitor at the San Lorenzo Valley Middle School (AQS Site ID: 06-087-1005) site located at 7179 Hacienda Way, Felton, CA.

On October 5, 2016 MBARD sent a letter to EPA with an official request for this network change. Upon our review of the documentation you have provided, pursuant to 40 CFR 58.10 and 58.14, EPA approves your conversion of the SPM $PM_{2.5}$ monitor to a SLAMs $PM_{2.5}$ monitor beginning on October 1, 2016.

In accordance with 40 CFR 58.20, we request that you continue to submit data to AQS under parameter code 88101 and method code 170 as an FEM $PM_{2.5}$ SLAMS monitor at the site. Please attach this approval letter and update the relevant monitor and site information in your next Annual Monitoring Network Plan.

Thank you for your cooperation throughout this process and please feel free to contact me at (415) 947-4134 or Dena Vallano at (415) 972-3134.

Sincerely,

Gwen Yoshimura, Acting Manager
Air Quality Analysis Office

cc (via email): Bill Chevalier, MBARD
Gayle Sweigert, California Air Resources Board
Rebekka Fine, California Air Resources Board
Kyle Vagadori, California Air Resources Board

San Lorenzo Valley Middle School Instrument Information

Pollutant, POC	Wind Direction, 1	Wind Speed, 1	ATM, 1	$PM_{2.5}$, 3
Parameter Code	61102	61101	62101	88101
Basic Monitoring Objective	N/A	N/A	N/A	NAAQS Comparison
Site Types	Population Oriented	Population Oriented	Population Oriented	Highest Concentration (Expected)
Monitor Types	SLAMS	SLAMS	SLAMS	SLAMS
Primary/QA Collocated/Other	Primary	Primary	Primary	Primary
Instrument Manufacturer and Model	RM Young 86000 Sonic Anemometer	RM Young 86000 Sonic Anemometer	RM Young 41342 VC/VF	MET ONE BAM-1020
Method Code	062	062	050	170
FRM/FEM/ARM/other	N/A	N/A	N/A	FEM
Collecting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Analytical Lab	N/A	N/A	N/A	N/A
Reporting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	01/15/2015	10/23/2014	10/23/2014	10/23/2014
Current Sampling Frequency	Continuous	Continuous	Continuous	Continuous
Calculated Sampling Frequency	N/A	N/A	N/A	N/A
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height	10m	10m	10m	5.9m
Distance from supporting structure	10m	10m	10m	2.0m
Distance from obstructions on roof	N/A	N/A	N/A	N/A
Distance from obstructions not on roof	N/A	N/A	N/A	N/A
Distance from trees	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue	N/A	N/A	N/A	N/A
Distance between collocated monitors	N/A	N/A	N/A	N/A
Unrestricted airflow	360 Degrees	360 Degrees	360 Degrees	360 degrees
Probe material	N/A	N/A	N/A	N/A
Residence time	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	Weekly
Frequency of one-point QC check (gaseous)	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	03/09/2022 08/24/2022
Network Affiliation	N/A	N/A	N/A	N/A

Detailed Site information for Special Purpose Monitoring (SPM) Sites

Pinnacles National Park

This station was established in 1987 by the National Parks Service (NPS) to monitor conditions at Pinnacles National Park, which is a federal Class I protected area, and part of the National Park Monitoring Network operated by the National Parks Service. Data acquired at this site include O3, WS, WD, and ATM. In addition, as part of the federal Interagency Monitoring of Protected Visual Environments (IMPROVE) program, a wide variety of particulate aerosols is monitored for the purpose of assessing visibility trends. However, the only parameters of interest to MBARD that are reported by NPS at this site are O3 and 8HrO3. Although this site is located in a remote and unpopulated area, ozone readings there are the highest within MBARD's boundaries and the ozone data are used to establish the NCCAB's designations in relation to the State and federal standards. CARB's triennial transport assessments have demonstrated that the cause of the high readings at this mountain site has often been overwhelming transport, particularly from the upwind San Francisco Bay Area. Nitrate data from the IMPROVE monitors have also been used in District plans to indicate an improving trend. This is most likely due to regional reductions in motor vehicle NOx emissions, as well as controls on stationary sources.

Pinnacles Site Information

Site Name	Pinnacles National Monument
AQS ID	06-069-0003
GIS Coordinates	36.485278, -121.155556
Street Address	Pinnacles National Monument, 5000 Hwy 146, Paicines, CA 95043
County	San Benito
Distance to Road	75 m
Traffic Count	760 ADT (2019) (CalTrans./CA)
Groundcover	Gravel
Representative Area	CBSA: San Jose – Sunnyvale – Santa Clara, CA

Pinnacles Instrument Information:

Pollutant, POC	O_3, 1
Parameter Code	44201
Basic Monitoring Objective	NAAQS Comp.
Site Types	Regional Transport
Monitor Types	Special Purpose
Primary/QA Collocated/Other	Primary
Instrument Manufacturer and Model	TEI 49C
Method Code	047
FRMFEM/ARM/other	FEM
Collecting Agency	NPS
Analytical Lab	N/A
Reporting Agency	NPS
Spatial scale	Neighborhood
Start date	11/7/1986
Current Sampling Frequency	Continuous
Calculated Sampling Frequency	N/A
Sampling season	01/01-12/31

Probe height	10.0 meters
Distance from supporting structure	N/A
Distance from obstructions on roof	N/A
Distance from obstructions not on roof	N/A
Distance from trees	N/A
Distance to furnace or incinerator flue	N/A
Distance between collocated monitors	N/A
Unrestricted airflow	360 Degrees
Probe material	Teflon
Residence time	8.4s
Will there be changes within the next 18 months?	See page 6.
Is it suitable for comparison against the annual PM2.5?	N/A
Frequency of flow rate verification for manual PM samplers audit	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A
Frequency of one-point QC check (gaseous)	Weekly
Last Annual Performance Evaluation (gaseous)	08/22/2022
Last two semi-annual flow rate audits for PM monitors	N/A
Network Affiliation	CASTNET

San Juan Bautista

This special purpose monitoring station was set up in March of 2021 for the purpose of monitoring PM_{10} on a Neighborhood scale with the use of an FEM BAM-1020. On 10/31/2019, the Hollister Station measured a 24-Hour PM10 average of 130ug/m3, which exceeded 80% of the NAAQS. This triggered the requirement for an increase in the number of monitors for the San Jose-Sunnyvale-Santa Clara MSA, which includes San Benito County. The San Juan Bautista Station was initially set up as a SPM, with the consultation of ARB and EPA. The future designation of this site will depend on monitoring results within the San Jose-Sunnyvale-Santa Clara MSA over the next three years.

San Juan Bautista Site Information

Site Name	San Juan Bautista
AQS ID	06-069-0004
GIS Coordinates	36.84188, -121.533444
Street Address	100 Nylund Drive, San Juan Bautista, CA. 95045
County	San Benito
Distance to Road	75m to Route 156
Traffic Count	61800 ADT (2020) (The Alameda & 156)
Groundcover	Grass
Representative Area	MSA: San Jose – Sunnyvale – Santa Clara, CA

San Juan Bautista Instrument Information

Pollutant, POC	Wind Direction, 1	Wind Speed, 1	ATM, 1	PM_{10}, 3
Parameter Code	61102	61101	62101	81102
Basic Monitoring Objective	N/A	N/A	N/A	NAAQS Comparison
Site Types	Population Oriented	Population Oriented	Population Oriented	Population Oriented
Monitor Types	SLAMS	SLAMS	SLAMS	SLAMS
Primary/QA Collocated/Other	Primary	Primary	Primary	Primary
Instrument Manufacturer and Model	RM Young 86000 Sonic Anemometer	RM Young 86000 Sonic Anemometer	RM Young 41342 VC/VF	MET ONE BAM-1020
Method Code	062	062	050	122
FRM/FEM/ARM/other	N/A	N/A	N/A	FEM
Collecting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Analytical Lab	N/A	N/A	N/A	N/A
Reporting Agency	MBUAPCD	MBUAPCD	MBUAPCD	MBUAPCD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	04/01/2021	04/01/2021	04/01/2021	04/01/2021
Current Sampling Frequency	Continuous	Continuous	Continuous	Continuous
Calculated Sampling Frequency	N/A	N/A	N/A	N/A
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height	6.5m	6.5m	5.9m	4.8m
Distance from supporting structure	5.9m	5.9m	5.3m	2.5m
Distance from obstructions on roof	N/A	N/A	N/A	N/A
Distance from obstructions not on roof	N/A	N/A	N/A	N/A
Distance from trees	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue	N/A	N/A	N/A	N/A
Distance between collocated monitors	N/A	N/A	N/A	N/A
Unrestricted airflow	360 Degrees	360 Degrees	360 Degrees	360 degrees
Probe material	N/A	N/A	N/A	N/A
Residence time	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	Weekly
Frequency of one-point QC check (gaseous)	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation (gaseous)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	03/07/2022 08/26/2022
Network Affiliation	N/A	N/A	N/A	N/A

Appendix A - Public Process

Released for Comment -- May 15, 2023
Published to District WEB Page -- May 15, 2023
Submitted to U.S. EPA by June 30, 2023

As of June XX, 2023, ~~no comments were received by MBARD~~.

Appendix B
MBUAPCD and BAAQMD Interagency Agreements

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

December 13, 2012

Mr. William Chevalier
Supervising Air Monitoring Specialist
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940

Dear Mr. Chevalier:

During a recent review of the Annual Network Report for the Bay Area Air Quality Management District (BAAQMD), EPA Region 9 pointed out that we do not have a written agreement to share minimum monitoring requirements with neighboring Air Districts. For $PM_{2.5}$ monitoring in the San Jose-Sunnyvale-Santa Clara Metropolitan Statistical Area (MSA), both of our agencies are required to meet the full minimum monitoring requirements of 40 CFR Part 58 Appendix D, section (2)(e) in the absence of a $PM_{2.5}$ monitoring agreement.

The San Jose-Sunnyvale-Santa Clara MSA must have three SLAMS $PM_{2.5}$ monitors to meet EPA minimum monitoring requirements. The BAAQMD operates two SLAMS $PM_{2.5}$ monitors (San Jose and Gilroy) and both instruments are FEM BAM operating continuously. Additionally, the San Jose site has a collocated filter measurement as of October 1, 2012 for quality assurance purposes. The BAAQMD will continue to operate all of the above instruments indefinitely.

The BAAQMD requests Monterey reply to this letter confirming agreement to continue operation of the SLAMS $PM_{2.5}$ FEM BAM at Hollister. As part of the agreement, both agencies will advise each other if changes to the instruments (as shown below) are planned.

	AQS#	Parameter	Method	POC
San Jose	060850005	88101	170	3 (Primary)
San Jose	060850005	88101	145	1 (QA – collocated)
Gilroy	060850002	88101	170	3
Hollister	060690002	88101	170	3

Sincerely,

Eric D. Stevenson
Director, Technical Services Division

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

January 14, 2013

Mr. William Chevalier
Supervising Air Monitoring Specialist
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940

Dear Mr. Chevalier:

During a recent review of the Annual Network Report for the Bay Area Air Quality Management District (BAAQMD), EPA Region 9 pointed out that we do not have a written agreement to share minimum monitoring requirements with neighboring Air Districts. For PM_{10} monitoring in the San Jose-Sunnyvale-Santa Clara Metropolitan Statistical Area (MSA), both of our agencies are required to meet the full minimum monitoring requirements of 40 CFR Part 58 Appendix D, section (2)(e) in the absence of a PM_{10} monitoring agreement.

The San Jose-Sunnyvale-Santa Clara MSA must have two SLAMS PM_{10} monitors to meet EPA minimum monitoring requirements. The BAAQMD operates one SLAMS PM_{10} monitor at San Jose and will continue to operate this instrument indefinitely.

The BAAQMD requests Monterey Bay Unified Air Pollution Control District reply to this letter confirming agreement to continue operating the SLAMS PM_{10} monitor at Hollister. As part of the agreement, both agencies will advise each other if changes to the instruments (as shown below) are planned.

	AQS#	Parameter	Method	POC
San Jose	060850005	81102	127	1
Hollister	060690002	81102	122	3

Sincerely,

Eric D. Stevenson
Director, Technical Services Division

MBUAPCD
Monterey Bay Unified Air Pollution Control District
Serving Monterey, San Benito, and Santa Cruz Counties

24580 Silver Cloud Court
Monterey, CA 93940
PHONE: (831) 647-9411 • FAX: (831) 647-8501

January 22, 2013

Mr. Eric D. Stevenson
Director, Technical Services Division
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Dear Mr. Stevenson,

In response to your letters dated December 13, 2012, and January 14, 2013, the District will continue the operation of the Hollister air monitoring station (AQS#: 060690002) for purpose of meeting 40 CFR Part 58, Appendix D minimum monitoring requirements. The District's intention is to continue operation of this SLAMs site for both PM_{10} and $PM_{2.5}$ FEM BAM indefinitely. Should the District need to revisit this in the future, we will coordinate with BAAQMD prior to any changes to the station.

Sincerely,

Michael J Gilroy
Deputy Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Ct.
Monterey, CA 93940
(831) 647-9411

MBUAPCD
Monterey Bay Unified Air Pollution Control District
Serving Monterey, San Benito, and Santa Cruz Counties

24580 Silver Cloud Court
Monterey, CA 93940
PHONE: (831) 647-9411 • FAX: (831) 647-8501

May 23, 2014

Mr. Eric D. Stevenson
Director, Technical Services Division
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Subject: Shared Ozone Monitoring Responsibilities

Dear Mr. Stevenson:

For Ozone monitoring in the San Jose-Sunnyvale-Santa Clara Metropolitan Statistical Area (MSA), both of our agencies are required to meet the full minimum monitoring requirements of 40 CFR Part 58 Appendix D, section (2)(e) in the absence of an Ozone monitoring agreement. The Monterey Bay Unified Air Pollution Control District (MBUAPCD) currently operates one SLAMS Ozone monitor in this MSA (at Hollister) but two monitors are required. Therefore, MBUAPCD would like this letter to serve as a monitoring agreement between our two agencies.

The MBUAPCD requests BAAQMD reply to this letter confirming agreement to continue operation of the SLAMS Ozone monitors at San Jose, Los Gatos, Gilroy, and San Martin. Both agencies will advise each other if changes to the instruments listed below are planned.

	AQS#	Parameter	Method	POC
San Jose	060850005	44201	047	1
Los Gatos	060851001	44201	047	1
Gilroy	060850002	44201	047	1
San Martin	060852006	44201	047	1
Hollister	060690002	44201	047	1

Sincerely,

Michael J Gilroy
Deputy Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940
(831) 647-9411

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

2014 JUN 9 AM 8:05

June 4, 2014

Mr. Michael J. Gilroy
Deputy Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940

Dear Mr. Gilroy:

The Bay Area Air Quality Management District has signed the Ozone monitoring agreement as described in your letter of May 23, 2014 (attached). We will continue to operate the Ozone monitors at San Jose, Los Gatos, Gilroy, and San Martin as stated in your letter. We will advise you well in advance if any of these monitors are shutdown or moved to another location.

Sincerely,

Eric D. Stevenson
Director, Technical Services Division

Enclosure

MBUAPCD
Monterey Bay Unified Air Pollution Control District
Serving Monterey, San Benito, and Santa Cruz Counties

24580 Silver Cloud Court
Monterey, CA 93940
PHONE: (831) 647-9411 • FAX: (831) 647-8501

May 23, 2014

Mr. Eric D. Stevenson
Director, Technical Services Division
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Subject: Shared NO/NO2/NOX Monitoring Responsibilities

Dear Mr. Stevenson:

40 CFR Part 58 Appendix D, section (2)(e), requires air monitoring of oxides of nitrogen to be performed to meet minimum federal requirement for the San Jose-Sunnyvale-Santa Clara Metropolitan Statistical Area (MSA). The Monterey Bay Unified Air Pollution Control District (MBUAPCD) currently does not operate any SLAMS NO_2 monitors in this MSA and would like this letter to serve as a monitoring agreement between our two agencies.

The MBUAPCD requests the Bay Area Air Quality Management District reply to this letter confirming agreement to continue operation of the SLAMS NO_2 monitor at San Jose and advise MBUAPCD if changes to this instrument are planned.

	AQS#	Parameter	Method	POC
San Jose	060850005	42602	074	1

Sincerely,

Michael J Gilroy
Deputy Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940
(831) 647-9411

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

2014 JUN 9 AM8:04

June 4, 2014

Mr. Michael J. Gilroy
Deputy Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940

Dear Mr. Gilroy:

The Bay Area Air Quality Management District has signed the NO_2 monitoring agreement as described in your letter of May 23, 2014 (attached). We will continue to operate the NO_2 monitor at San Jose as stated in your letter. We will advise you well in advance if this monitor is shutdown or moved to another location.

Sincerely,

Eric D. Stevenson
Director, Technical Services Division

Enclosure

MBUAPCD
Monterey Bay Unified Air Pollution Control District
Serving Monterey, San Benito, and Santa Cruz Counties

24580 Silver Cloud Court
Monterey, CA 93940
PHONE: (831) 647-9411 • FAX: (831) 647-8501

June 9, 2014

Mr. Eric D. Stevenson
Director, Technical Services Division
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Subject: Shared Near-Road CO Monitoring Responsibilities

Dear Mr. Stevenson:

40 CFR Part 58 Subparts 58.10(a)(7), 58.13(e)(1), and Appendix D section 4.3.1, requires near-road monitoring of CO to be performed to meet minimum federal requirements for the San Jose-Sunnyvale-Santa Clara Core Based Statistical Area (CBSA), 41940. The Bay Area Air Quality Management District (BAAQMD) is establishing a near-road monitor in San Jose on July 1, 2014 and will take responsibility for meeting these near-road requirements as they currently exist. The Monterey Bay Unified Air Pollution Control District (MBUAPCD) currently does not operate any Near-Road CO monitors in this MSA and would like this letter to serve as a monitoring agreement between our two agencies.

The MBUAPCD requests the Bay Area Air Quality Management District reply to this letter confirming agreement to continue operation of the Near-Road CO monitor at San Jose-Knox Avenue and advise MBUAPCD if changes to this instrument are planned.

	AQS#	Parameter	Method	POC
San Jose	060850006	42101	054	1

Sincerely,

Michael J Gilroy
Deputy Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940
(831) 647-9411

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

June 17, 2014

Mr. Michael J. Gilroy
Deputy Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940

Dear Mr. Gilroy:

The Bay Area Air Quality Management District has signed the CO near-road monitoring agreement as described in your letter of June 9, 2014 (attached). This monitor is not yet operational but we expect it to be so in July 2014. We will continue to operate the near-road CO monitor at San Jose indefinitely and will advise you well in advance if this monitor is shutdown or moved to another location.

Sincerely,

Eric D. Stevenson
Director, Technical Services Division

Enclosure

MBUAPCD
Monterey Bay Unified Air Pollution Control District
Serving Monterey, San Benito, and Santa Cruz Counties

24580 Silver Cloud Court
Monterey, CA 93940
PHONE: (831) 647-9411 • FAX: (831) 647-8501

May 13, 2015

Mr. Eric D. Stevenson
Director, Technical Services Division
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Subject: Shared Near-Road CO, NO2, and $PM_{2.5}$ Monitoring Responsibilities

Dear Mr. Stevenson:

40 CFR Part 58 Subparts 58.10(a)(7), 58.13(e)(1), and Appendix D section 4.3.1, requires near-road monitoring of CO, NOx, and $PM_{2.5}$ to be performed to meet minimum federal requirements for the San Jose-Sunnyvale-Santa Clara Core Based Statistical Area (CBSA), 41940. The Bay Area Air Quality Management District (BAAQMD) established a near-road monitor in San Jose on September 1, 2014 and will take responsibility for meeting these near-road requirements as they currently exist. The Monterey Bay Unified Air Pollution Control District (MBUAPCD) currently does not operate any Near-Road CO, NO2, and $PM_{2.5}$ monitors in this MSA and would like this letter to serve as a monitoring agreement between our two agencies.

The MBUAPCD requests the Bay Area Air Quality Management District reply to this letter confirming agreement to continue operation of the Near-Road CO, NO2, and $PM_{2.5}$ monitors at San Jose-Knox Avenue and advise MBUAPCD if changes to this instrument are planned.

	AQS#	Parameter	Method	POC
San Jose	060850006	42101	054	1
San Jose	060850006	42602	074	1
San Jose	060850006	88101	170	1

Sincerely,

Michael J Gilroy
Deputy Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940
(831) 647-9411

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

May 14, 2015

Mr. Michael J. Gilroy
Deputy Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940

Dear Mr. Gilroy:

The Bay Area Air Quality Management District has signed the shared near-road CO, NO_2 and $PM_{2.5}$ monitoring agreement as described in your letter of May 13, 2015 (attached). We will continue to operate these monitors at the San Jose Knox monitoring site (060850006) as stated in your letter. We will advise you in advance if any of these monitors are shutdown or moved to another location.

Sincerely,

Eric D. Stevenson
Director, Meteorology, Measurement and Rules Division

Enclosure

Appendix C
EPA Siting Waiver for Carmel Valley AMS

(Next Page)

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

NOV 01 2012

MONTEREY BAY
UNIFIED APCD

2012 NOV -5 PM 2:56

Bill Chevalier
Supervising Air Monitoring Specialist
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, California 93940

Dear Mr. Chevalier:

We received your letter dated October 30, 2012, requesting a 40 CFR 58 Appendix E siting waiver for the Carmel Valley (AQS ID 06-053-0002) air monitoring station in Monterey County. Having reviewed the information provided, the U.S. Environmental Protection Agency (EPA) grants a waiver from the spacing from trees requirement in 40 CFR 58 Appendix E, Section 5, for the ozone monitor at the Carmel Valley site.

40 CFR 58 Appendix E, Section 10.1.1 states that a siting waiver may be granted for an existing site provided that the site "...can be demonstrated to be as representative of the monitoring area as it would be if the siting criteria were being met." As shown in the wind rose attachments, the wind comes from the direction of the tree less than 3% of the time. EPA concludes that the tree is not presenting an obstruction and it is unlikely to produce a scrubbing effect that would impact the concentrations recorded at the ozone monitor. We therefore grant the waiver per Section 10.1.1. EPA encourages Monterey Bay Unified Air Pollution Control District to continue monitoring the tree growth and coordinate with the owners to keep the tree trimmed as much as possible.

In future annual network plans, please include this waiver approval as well as a note in the detailed site information section for Carmel Valley. Please also make a note in the comment field in AQS for 06-063-0002-44201 that an Appendix E siting waiver for proximity to trees was granted on 11/1/2012.

Thank you for your correspondence and the thorough data evaluation provided with the site closure request. Should you have any questions, please contact me at 415-972-3851, or Gwen Yoshimura (yoshimura.gwen@epa.gov) at 415-947-4134.

Sincerely,

Matthew Lakin
Manager, Air Quality Analysis Office

cc: Karen Magliano, ARB