air pollution control district

SANTA BARBARA COUNTY

Annual Air Monitoring Network Plan for Santa Barbara County

May 30, 2022 Draft

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Annual Air Monitoring Network Plan
For Santa Barbara County

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1.0 Introduction

This report was prepared to meet the requirements for an annual criteria pollutant air monitoring network plan as listed in federal ambient air monitoring regulations (Title 40, Part 58, Section 10 of the Code of Federal Regulations (40 CFR 58.10)). This review is used to determine whether the State and Local Air Monitoring Station (SLAMS) network in Santa Barbara County meets the U.S. Environmental Protection Agency (EPA) criteria for station siting based on the EPA monitoring objectives. The network review ensures that the data collected by the SLAMS air monitoring network in Santa Barbara County is representative and will satisfy specific monitoring objectives of EPA, California Air Resources Board (CARB), and the Santa Barbara County Air Pollution Control District (the District). This network plan includes SLAMS monitors which are federal reference methods (FRM), federal equivalent methods (FEM), or approved regional methods (ARM).

The language of 40 CFR 58.10 is included in Appendix A of this report. The regulations require that this annual monitoring network plan be submitted to the U.S. Environmental Protection Agency (EPA) by July 1 of each year. The plan must be made available for public inspection for at least 30 days prior to submission to EPA. A draft plan was available for public review and comment from May 30 through June 28, 2022. Email notification was sent to the District's news noticing list and the plan was available for review at the APCD office at 260 N San Antonio Rd, Santa Barbara, CA, 93110, and also on the APCD website: www.ourair.org/news. A public notice was also published in the Santa Barbara News-Press. The public notices can be found in Appendix C.

Industrial and "other" monitors are also included in this plan for informational purposes. The Industrial and "other" monitors in Santa Barbara County consist of several stations operated by the District or private contractors. There are several major oil and gas developments in Santa Barbara County with permits for the production, processing and transportation of oil and gas. The Industrial stations are designed to measure regional air quality in addition to criteria pollutants from these oil and gas facilities; the "other" stations are designed to measure odorous compounds from these facilities. Operating permits for the oil and gas facilities require the industrial and "other" monitors to be operated for the life of the permitted facility. These Industrial and "other" monitors are not utilized for comparison to national ambient air quality standards (NAAQS), are not counted in assessing minimum monitoring requirements, and are considered secondary monitors by EPA.

1.1 Network Design

The air monitoring network in Santa Barbara County consists of SLAMS and Industrial monitors operated by the District, California Air Resources Board (CARB) and private

contractors. The monitoring network is designed to cover the diverse range of topography, meteorology, emissions, and air quality in Santa Barbara County, while adequately representing the population in the county.

Santa Barbara County has agreed to coordinate the air monitoring network design with CARB through the joint Primary Quality Assurance Organization (PQAO) Roles and Responsibilities agreement between the two agencies. Item 5 of this agreement stipulates that both agencies will coordinate any changes to the network, assuring that requirements of the network design are met. Complete details of the Roles and Responsibilities can be obtained from the following link: https://ww2.arb.ca.gov/our-work/programs/quality-assurance/qm-document-repository/quality-assurance-roles-responsibility.

This network review is used to determine whether the monitoring system meets the monitoring objectives defined in 40 CFR 58 Appendix D. The three basic monitoring objectives as described in Appendix D are:

1) Provide air pollution data to the general public in a timely manner;
2) Support compliance with ambient air quality standards and emissions strategy development; and,
3) Support for air pollution research studies.

1.2 Stations

In order to support the air quality management work indicated in the three basic air monitoring objectives, the network is designed with a variety of monitoring station types. There are six general types:

1) Highest concentrations expected to occur in the area;
2) Typical concentrations in areas of high population density;
3) Impact of significant sources on air quality;
4) General background concentration levels;
5) Regional pollutant transport among populated areas; and,
6) Air pollution impact on visibility, vegetation damage or other welfare-based impacts.

During 2018 and 2019, the District worked with CARB and EPA to modify the monitoring network to free up resources from redundant and non-essential monitors while

maintaining one of the most extensive air monitoring networks in the state. In February 2019 the District received EPA approval to shut down some monitors, change some Industrial monitors approved for shutdown to non-NAAQS compliant (removing CARB and EPA oversight), and change the ozone (O_3) monitors at Paradise Road, Carpinteria, and Las Flores Canyon #1 from Industrial to SLAMS monitors. Additionally, the District agreed to develop a transition plan to take responsibility for the operation of the Santa Barbara and Santa Maria SLAMS monitoring stations that were historically operated by CARB. The District took responsibility for the Santa Barbara station in January 2020. CARB shut down the Santa Maria site on February 28, 2021. The District is moving the Santa Maria site (due to the CARB site location not meeting siting criteria as noted in previous network reviews) with an expected start date for the new Santa Maria station of July 1, 2022. The new Santa Maria site is located at 3700 Orcutt Rd, Santa Maria 93455 (Lat/Long is 34.890667/-120.4328444 elevation 294 ft.). The other changes to the monitoring network were implemented in March 2019. This report details the network following implementation of these network modifications.

After the network modifications in March 2019, there are now 12 ambient air monitoring stations located in Santa Barbara County. Figure 1.1 shows the location of the stations on a map of Santa Barbara County. Table 1.1 lists the sites in Santa Barbara County after the network modification and identifies the station's EPA AQS identification code, type of station, and operator. These stations are operated for different objectives. The stations with SLAMS monitors are sited to measure the typical concentrations in areas of high population density and/or to monitor the impacts of regional pollution.

In the 1980's during a major expansion of oil and gas development in Santa Barbara County, stations were installed to comply with permit conditions for major sources to measure the impacts of these stationary sources and to measure regional air quality. These stations have been classified as Industrial. O_3 monitors at three of these stations (Carpinteria, Paradise Road, and Las Flores Canyon #1) have recorded the highest O_3 concentrations in the county, prompting the change to SLAMS noted above.

There are three stations in Santa Barbara County that measure odor impacts from permitted sources: Lompoc Odor, Las Flores Canyon Odor, and West Campus. These odor monitoring stations operate to meet Santa Barbara County regulatory requirements and are not required for state or federal regulatory purposes. Information on these odor monitoring stations are provided in this report for informational purposes only. The Las Flores Canyon Odor station was temporarily shut down on June 18, 2018 due to the shutdown of the oil processing facility. This station will resume operation when the facility begins processing oil.

Figure 1.1
Map of Monitoring Network in Santa Barbara County

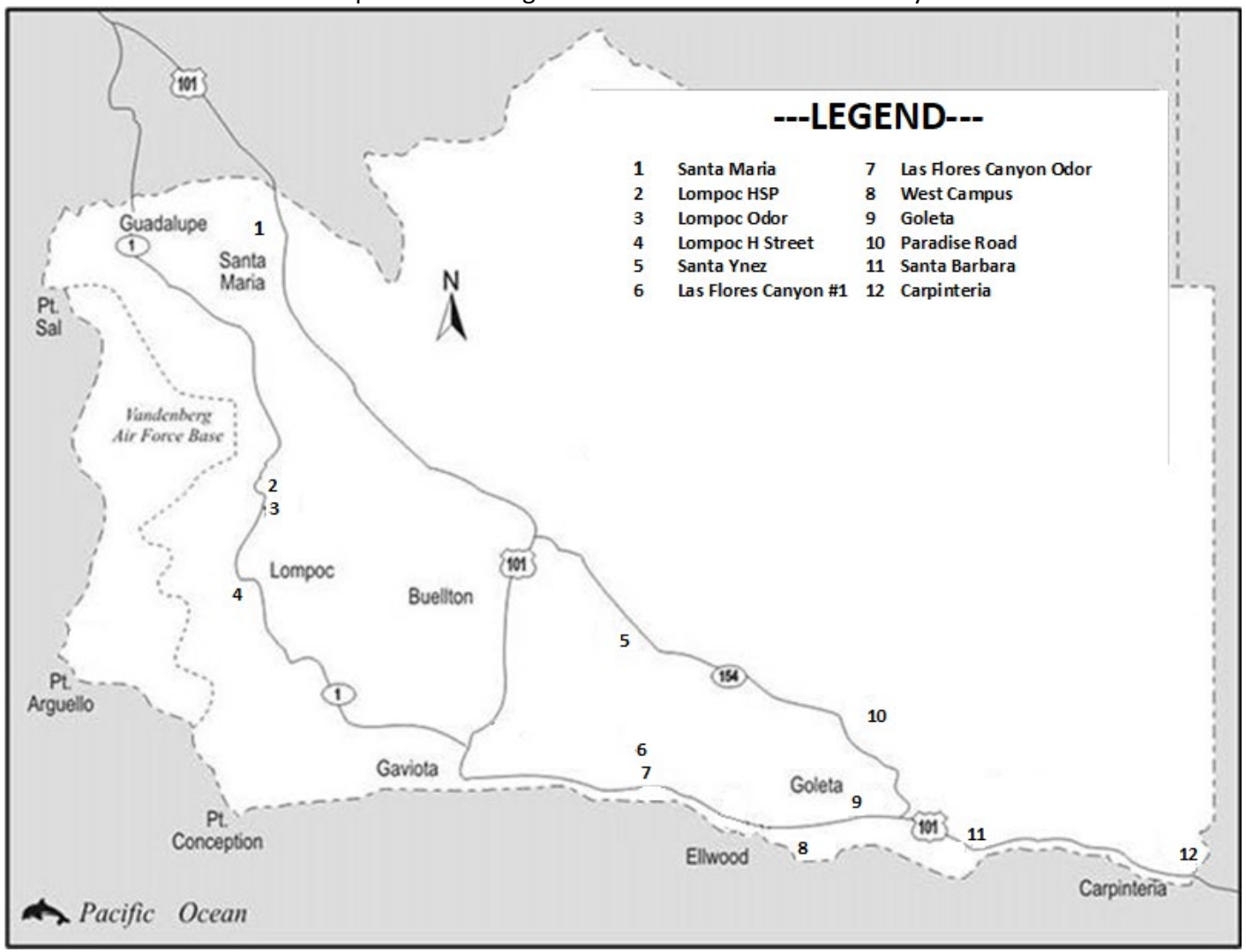

Table 1.1
Monitoring Network in Santa Barbara County

No.	Name	Site Code	Type	Operator
1	Santa Maria	060831008	SLAMS	CARB/District[2]
2	Lompoc HS&P (North)	060831013	Industrial	Contractor
3	Lompoc Odor	060831022	Industrial	Contractor
4	Lompoc H Street	060832004	SLAMS	District
5	Santa Ynez	060833001	SLAMS	District
6	Exxon LFC 1	060831025	Industrial/SLAMS[1]	District
7	LFC Odor	060831037	Industrial	District
8	West Campus	060831020	Industrial	Contractor
9	Goleta	060832011	SLAMS	District
10	Paradise Road	060831014	Industrial/SLAMS[1]	Contractor
11	Santa Barbara	060830011	SLAMS	District[2]
12	Carpinteria	060831021	Industrial/SLAMS[1]	District[3]

[1] Ozone monitors at these locations are SLAMS; other monitors are Industrial.
[2] The District took responsibility for the Santa Barbara station January 2020 and is moving the Santa Maria station with an expected start date of July 1, 2022.
[3]The District took over operations of the Carpinteria site from a consultant beginning September 2020.

1.3 Monitors

Many of the stations in the monitoring network serve multiple purposes. They may be ideal for background concentration for one pollutant, while also measuring the impact of transport for another pollutant. To clarify the nature of the link between the general monitoring objectives, station types, and physical location of a monitor, the concept of spatial scale of representativeness is defined. The goal of locating monitors is to correctly match the spatial scale represented by the sample of monitored air with the spatial scale most appropriate for the monitoring station type, air pollutant to be measured, and the monitoring objective. The scales of representativeness of most interest for the monitoring station types are described as follows:

1) Micro scale – Defines the concentrations in air volumes associated with area dimensions ranging from several meters up to about 100 meters;

2) Middle scale – Defines the concentration typical of areas up to several city blocks in size with dimensions ranging from about 100 meters to 0.5 kilometer;

3) Neighborhood scale – Defines concentrations within some extended area of the city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometers range;

4) Urban scale – Defines concentrations within an area of city like dimensions, on the order of 4 to 50 kilometers; and,

5) Regional scale – Defines usually a rural area of reasonably homogeneous geography without large sources, and extends from tens to hundreds of kilometers.

Classification of the monitor by its type and spatial scale of representativeness aids in the interpretation of the monitoring data for a monitoring objective. Table 1.2 illustrates the relationship between the various station types that can be used to support the three basic monitoring objectives and the scales of representativeness that are generally most appropriate for that type of station.

Table 1.2
Relationship between Station Types and Scales of Representativeness

Type	**Appropriate Siting Scales**
Highest concentration	Micro, middle, neighborhood (sometimes urban or regional for secondarily formed pollutants)
Population oriented	Neighborhood, urban
Source Impact	Micro, middle, neighborhood
General/background and regional transport	Urban, regional
Welfare-related impacts	Urban, regional

The stations and the monitors at each location in Santa Barbara County are listed in Table 1.3. The table includes the spatial scale and monitoring objective for each monitored pollutant.

Table 1.3
Measured Parameters with Spatial Scale and Monitoring Objective

Parameter	O_3	NO_2	SO_2	CO	$PM_{2.5}$	PM_{10}	THC	H_2S	TRS
AIRS Pollutant Code	**44201**	**42602**	**42401**	**42101**	**88101**	**81102**	**43101**	**42402**	**43911**
Carpinteria	**RS/HC**	*RS/BL*							
Goleta	**US/PO**				**NS/PO**	**NS/PO**			
Las Flores Cyn 1	**RS/HC**	*NS/IM*	*NS/IM*	*NS/IM*		*NS/IM*	*NS/IM*		
LFC Odor								*NS/IM*	
Lompoc H St.	**NS/PO**	**NS/PO**	**NS/PO**	**NS/PO**	**NS/PO**	**NS/PO**			
Lompoc HSP	*RS/BL*	*NS/IM*	*NS/IM*				*NS/IM*		
Lompoc Odor								*NS/IM*	*NS/IM*
Paradise Road	**RS/HC**	*RS/BL*							
Santa Barbara	**US/PO**				**NS/HC**	**NS/HC**			
Santa Maria	**US/PO**	**US/PO**		**MS/HC**	**NS/PO**	**NS/PO**			
Santa Ynez	**US/PO**								
West Campus			*NS/IM*				*NS/IM*	*NS/IM*	*NS/IM*

Note: Bold are SLAMS monitors, italic are Industrial or other (e.g., odor).

Spatial Scale:

- MI - Microscale
- MS - Middle Scale
- NS - Neighborhood Scale
- US - Urban Scale
- RS - Regional Scale
- NG - National and Global scale

Monitoring Objective:

- HC - Highest concentration
- PO - Population Oriented
- IM - Source Impact
- BL - Background Levels
- WR - Welfare-related impacts

Note: Las Flores Canyon #1 PM_{10} monitor is classified as Neighborhood Scale due to the dominant source being the large nearby oil and gas facility.

2.0 Monitoring Requirements

EPA regulations specify the minimum number of locations at which state and local air agencies must deploy monitors. Santa Barbara County meets or exceeds EPA's minimum requirements. In practice, state and local agencies find they need to deploy more monitors than required by the law. The additional monitors are needed to fulfill state and local monitoring needs. Several monitors are required by operating permits issued to stationary emission sources. California ambient air quality standards are generally more stringent than national standards and require more monitors to demonstrate compliance with the state standards. Monitors are also used to keep the public informed of the air quality conditions where they live and work. Due to the complex topography and meteorology in Santa Barbara County, more monitors than the minimum required by EPA are needed to properly characterize the air quality in different areas of the county.

The requirements for numbers of monitors appear in Appendix D of Part 58 of the Code of Federal Regulations (CFR). For O_3, $PM_{2.5}$, and PM_{10}, the required minimum number is based on the population of an area and the severity of the air quality for the pollutant in that area. For other pollutants, no monitoring is required unless an area exceeds or is close to exceeding a national ambient air quality standard. For purposes of the minimum requirements, the areas are defined by the Metropolitan Statistical Areas (MSAs) and Core-Based Statistical Areas (CBSAs) developed by the U.S. Census Bureau. Santa Barbara County is part of the Santa Maria – Santa Barbara MSA and CBSA. It covers the major cities in our county and has a population count of 446,475 based on the 2021 U.S. Census estimate.

All criteria pollutant monitors in Santa Barbara County are sited and operated to meet the requirements outlined in 40 CFR 58 Appendix A, B, C, D, and E where applicable.

2.1 Ozone (O_3)

Data from O_3 monitors in Santa Barbara County are utilized to inform the public on air quality through air quality index (AQI) reporting and air quality mapping. Additionally, the data from these sites are compared to the federal and state standards to assess whether Santa Barbara County is in attainment of those standards.

The minimum monitoring requirements for O_3 are listed in Table 2.1. Santa Barbara County has nine O_3 monitors, with eight of these being SLAMS monitors that meet EPA requirements. Santa Barbara County has a design value of 0.065 ppm for the federal O_3 standard, based on 2019 – 2021 data; this design value meets the federal 8-hour O_3 standard of 0.070 ppm. Santa Barbara County is currently designated as nonattainment

for the state O_3 standard[1]. Only the Paradise Road station in Santa Barbara County recorded concentrations of O_3 in excess of the federal and state 8-hour O_3 standards in 2021. The highest 8-hour O_3 value recorded in Santa Barbara County in 2021 was 0.071 ppm measured at the Paradise Road monitoring station on June 17, 2021.

Table 2.1
Minimum Monitoring Requirements for Ozone

MSA	County	Pop. (year)	8-hour Design Value (years)[2]	Design Value Site (name, AQS ID)	Min. # Sites Required	# Sites Active[1]	Sites Needed
Santa Barbara – Santa Maria, CA	Santa Barbara County	446,475 (2021)	.065 ppm 2019 - 2021	Paradise Rd 060831014	2	7	0

[1] Only SLAMS monitors are counted towards meeting minimum monitoring requirements. Also, O_3 monitors that do not meet traffic count/distance requirements to be neighborhood or urban scale (40 CFR 58 Appendix E, Table E-1) are not counted towards minimum monitoring requirements. The Santa Maria O_3 monitor did not meet traffic count/distance requirements when operated by CARB and was not operational for most of 2021 due to re-location issues, see Section 2.9 and Table 5.12 for more details.

[2] DV Years = the three years over which the design value (DV) was calculated (e.g., 2019 - 2021).
Monitors required for State Implementation Plan (SIP) or Maintenance Plan: Santa Barbara County has a maintenance plan for O_3 that requires any modification to the existing O_3 network to be approved by EPA.

2.2 Carbon Monoxide (CO)

There are no EPA minimum requirements for the number of CO monitoring sites for CBSAs with a population less than one million. For CBSAs with a population of one million or greater, near-roadway CO monitors are required. Continued operation of existing SLAMS CO stations is required until discontinuation is approved by the EPA. There are two SLAMS CO monitors located at Lompoc H Street and Santa Maria (shut down for most of 2021 to relocate due to old CARB site not meeting siting requirements) that are used to measure the impacts of high population exposure and are not near-roadway monitors. There is also a CO monitor located at Exxon Las Flores Canyon #1 that is required by air district operating permit conditions issued to the nearby stationary source. Table 2.2 lists the near-roadway monitoring requirements.

[1] For additional information see ww2.arb.ca.gov/rulemaking/2021/sad2020

Table 2.2
Near-Roadway Monitoring Requirements

CBSA/MSA	Pop. (year)	# Required Near Roadway Monitors	# Active Near Roadway Monitors	# Additional Monitors Needed
Santa Barbara Santa Maria, CA	446,475 (2021)	0	0	0

Monitors required for SIP or Maintenance Plan: None
EPA Regional Administrator-required monitors per 40 CFR 58, App.D 4.2.2: None

2.3 Nitrogen Dioxide (NO_2)

Ambient air monitoring and reporting requirements for NO_2 are based on EPA's 2010 rule. One "near-road" monitor is required in urban areas with a population greater than or equal to 500,000 people. A second monitor is required near another major road in areas with either a population greater than or equal to 2.5 million people or a road segment with an annual average daily traffic count greater than or equal to 250,000 vehicles. One community-wide monitor is required in urban areas with a population of greater than or equal to 1 million people. Santa Barbara does not meet any of these criteria, so no NO_2 monitors are required. However, continued operation of existing SLAMS NO_2 sites is required until discontinuation is approved by the EPA. There are two SLAMS NO_2 monitors located at Lompoc H Street and Santa Maria (shut down for most of 2021 to relocate due to old CARB site not meeting siting requirements) that are used to measure the impacts of population exposure. There are four other sites that measure NO_2: Carpinteria, Exxon Las Flores Canyon #1, Paradise Road, and Lompoc HS&P. These monitors are required by air district operating permit conditions for nearby stationary sources and are used to measure the impact of sources on regional O_3 formation. Table 2.3 lists the minimum monitoring requirements for NO_2.

Table 2.3
Minimum Monitoring Requirements for Nitrogen Dioxide

CBSA/MSA	Pop. (year)	Max AADT	# Required Near Roadway	# Active Near Roadway	# Additional Near Roadway needed	# Required Area-wide	# Active Area-wide[1]	# Additional Area-wide needed
Santa Barbara Santa Maria, CA	446,475 (2021)	N/A (below pop. Threshold)	0	0	0	0	1	0

[1] Only SLAMS sites are counted for minimum monitoring requirements. Also, NO_2 monitors that do not meet traffic count/distance requirements to be neighborhood or urban scale (40 CFR 58 Appendix E, Table E-1) are not counted towards minimum monitoring requirements. The Santa Maria NO_2 monitor did not meet traffic count/distance requirements when operated by CARB and was not operational for most of 2021 due to re-location issues, see Section 2.9 and Table 5.12 for more details.
Monitors required for SIP or Maintenance Plan: None
Monitors required for PAMS: None
EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.3.4: None

2.4 Sulfur Dioxide (SO_2)

Ambient air monitoring and reporting requirements for SO_2 are based on EPA's June 2, 2010 rule, where EPA strengthened the primary NAAQS for SO_2. Monitors are required based on CBSAs, using a population-weighted emissions index for the area. Three monitors are required in CBSAs with index values of 1,000,000 or more. Two monitors are required in CBSAs with index values less than 1,000,000 but greater than 100,000. One monitor is required in CBSAs with index values greater than 5,000. Continued operation of existing SLAMS SO_2 sites is required until discontinuation is approved by the EPA. There is one SLAMS SO_2 monitor at Lompoc H Street that is used to measure the impacts of population exposure. There are three other sites that measure SO_2: Exxon Las Flores Canyon #1, UCSB West Campus, and Lompoc HS&P. These monitors are required by air district operating permit conditions for nearby sources and are used to measure the impact of sources on the surrounding air quality. Table 2.4 lists the minimum monitoring requirements for SO_2.

Table 2.4
Minimum Monitoring Requirements for Sulfur Dioxide

CBSA/MSA	County	Pop. (year)	Total SO_2[1](Ton/yr)	Population Weighted Emissions Index[2]	Data Requirements Rule Source(s) using Monitoring	# Required Monitors	# Active Monitors[3]	# Additional Monitors Required
Santa Barbara Santa Maria, CA	Santa Barbara	446,475 (2021)	1149.4	513.2	N/A below emissions threshold	0	1	0

[1] Using NEI data (2017).
[2] Calculated by multiplying CBSA population and total SO_2 and dividing product by one million.
[3] Only SLAMS sites are counted for minimum monitoring requirement.
Monitors required for SIP or Maintenance Plan: None
EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.4.3: None

2.5 Particulate Matter (PM_{10})

The minimum monitoring requirements for PM_{10} are listed in Table 2.5. There are four SLAMS PM_{10} monitors located at Santa Barbara, Goleta, Lompoc H Street, and Santa Maria (shut down for most of 2021 to relocate due to old CARB site not meeting siting requirements). There is one industrial station that measures PM_{10}: Exxon Las Flores Canyon #1. The Las Flores Canyon monitor is required by air district operating permit conditions for the nearby stationary source and is used to measure the impact on the surrounding air quality.

Table 2.5
Minimum Monitoring Requirements for PM_{10}

MSA	County	Pop. (year)	Max 24 Hour Concentration (ug/m3)	2021 Max Concentration Site (name, AQS ID)	# Required Sites	# Active Sites[1]	# Additional SitesNeeded
Santa Barbara – Santa Maria, CA	Santa Barbara County	446,475 (2021)	73 (10/11/2021)	Lompoc H Street 060832004	0-1	3	0

[1] Only SLAMS sites are counted for minimum monitoring requirement. Santa Maria not operational for most of 2021 due to relocation.

Monitors required for SIP or Maintenance Plan: None

2.6 Particulate Matter (PM2.5)

The minimum monitoring requirements for $PM_{2.5}$ are listed in Tables 2.6a and 2.6b. There are four SLAMS $PM_{2.5}$ monitors located at Santa Barbara, Santa Maria (shut down for most of 2021 to relocate due to old CARB site not meeting siting requirements), Goleta, and Lompoc H Street. The annual design value calculations (2019-2021) for these sites are listed in Tables 2.6a and 2.6b.

$PM_{2.5}$ colocation requirements are based on the primary quality assurance organization (PQAO) network. Santa Barbara County is part of the CARB PQAO. See the CARB annual network plan for details on meeting the $PM_{2.5}$ colocation requirements.

Table 2.6a
Minimum Monitoring Requirements for $PM_{2.5}$ Monitors

MSA	County	Pop. (year)	Annual Design Value (years[1])	Annual Design Value Site (name, AQS ID)	Daily Design Value (years)	Daily Design Value Site (name, AQS ID)	# Required SLAMS Sites	# Active SLAMS Sites[2]	# Additional SLAMS Sites Needed
Santa Barbara – Santa Maria, Ca	Santa Barbara County	446,475 (2021)	7.6 ug/m3 2019 – 2021	Santa Barbara 06-083-0011	21 ug/m3 2019 - 2021	Santa Barbara 06-083-0011 And Lompoc H 06-083-2004	0	3	0

[1] DV Years = the three years over which the design value (DV) was calculated (e.g., 2019-2021).

[2] Only SLAMS sites are counted for minimum monitoring requirement. Santa Maria not operational for most of 2021 due to relocation.

Monitors required for SIP or Maintenance Plan: None

Table 2.6b
Minimum Monitoring Requirements for Continuous $PM_{2.5}$ Monitors

MSA	County	Pop. (year)	Annual Design Value (years[1])	Annual Design Value Site (name, AQS ID)	Daily Design Value (years)	Daily Design Value Site (name, AQS ID)	# Required Cont. Monitors	# Active Cont. Monitors[3]	# Additional Cont. Monitors[2] Needed
Santa Barbara – Santa Maria, Ca	Santa Barbara County	446,475 (2021)	7.6 ug/m3 2019 – 2021	Santa Barbara 06-083-0011	21 ug/m3 2019 - 2021	Santa Barbara 06-083-0011 And Lompoc H 06-083-2004	0	3	0

[1] DV Years = the three years over which the design value (DV) was calculated (e.g., 2019-2021).
[2] Only count one continuous monitor per site.
[3] Only SLAMS sites are counted for minimum monitoring requirement. Santa Maria not operational for most of 2021 due to relocation.
Monitors required for SIP or Maintenance Plan: None

2.7 Lead (Pb)

The monitoring requirements for lead (Pb) are based on EPA's 2008 rule. The level of the primary standard is set at 0.15 µg/m^3 measured as total suspended particles (TSP). The secondary standard is identical to the primary standard. Source-oriented monitors are required in areas with airport sources that emit one ton or more per year of lead or non-airport sources that emit one-half ton per year of lead. Additionally, non-source lead monitoring is required at NCore sites in a CBSA with a population greater than 500,000. The population of Santa Barbara County is below the 500,000 threshold and there are no NCore sites required in Santa Barbara County; therefore, non-source lead monitors are not required. The highest emission inventory of lead in Santa Barbara County is for the Santa Barbara Municipal airport with 0.23 tons per year (2017 NEI). Since this is below the threshold, no source-oriented lead monitors are required. Tables 2.7a and 2.7b show the minimum monitoring requirements for lead at NCore and source-oriented sites.

Table 2.7a
Minimum Monitoring Requirements for Pb at NCore sites

CBSA/MSA	Pop. (year)	# Required Near Road Monitors	# Active Near Road Monitors	# Additional Monitors Needed
Santa Barbara – Santa Maria, Ca	446,475 (2021)	0	0	0

Table 2.7b
Minimum Monitoring Requirements for Source-Oriented Pb Monitoring

Source Name	Address	Pb Emissions	Emissions Source (year)	Max Design Value	Design Value Date	# Required Monitors	# Active Monitors	# Additional Monitors Needed
Santa Barbara Municipal Airport	601 Firestone Rd. Santa Barbara, CA	0.23 ton/yr	National Emissions Inventory	N/A	N/A	0	0	0

Monitors required for SIP or Maintenance Plan: None
EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.5(c): None

2.8 Near-Roadway NO_2, CO, and $PM_{2.5}$ Monitors

40 CFR 58 Appendix D requires near-roadway NO_2, CO, and $PM_{2.5}$ monitors for CBSAs with populations greater than 1,000,000. The Santa Maria – Santa Barbara MSA/CBSA has a population of 446,475 (2021 census estimate), so no NO_2, CO, or $PM_{2.5}$ near-roadway monitors are required. Table 2.8 lists the near-roadway monitoring requirements in Santa Barbara County. No near-roadway monitors are required.

Table 2.8
Near-Roadway Monitor Requirements

CBSA	Population & Census year	Max AADT counts (year)	# Required NO_2 Mon.	# Active NO_2 Mon.	# Required $PM_{2.5}$ Mon.	# Active $PM_{2.5}$ Mon.	# Required CO Mon.	# Active CO Mon.	# Additional Monitors Needed
Santa Barbara-Goleta-Santa Maria	446,475 (2021)	N/A Below Pop. Threshold	0	0	0	0	0	0	0

2.9 Recent or Proposed Modifications to the Network

The District added a special purpose/non-regulatory PM_{10} monitor at the Santa Ynez Monitoring Station to collect one year of data to study levels of particulate pollution in the area. In August 2020, the District converted this monitor to collect $PM_{2.5}$ data for an additional period for continued study of the particulate pollution in the area. The PM data from this study are not being submitted to AQS.

In January 2020 the District took responsibility for the operation of the Santa Barbara site from CARB. The station is continuing with the same monitors and in the same location so there are no changes to the site and monitor AQS codes.

Beginning in September 2020 the District took responsibility for the operation of the Carpinteria site from a contractor. The O_3 monitor continues to operate as a SLAMS monitor while the NO_2 monitor continues to operate as a non-NAAQS industrial monitor.

As was noted in the District's 2020 Annual Network Plan, the CARB location of the Santa Maria O_3 and NO_2 monitors did not meet the siting requirements for distance to roadway/traffic counts for neighborhood or larger spatial scale monitors. As such, it was not included in the calculations of number of O_3 and NO_2 monitors in Tables 2-1 and 2-3. The District has agreed to take full responsibility for this monitoring station from CARB and is moving the station to a new location that will meet the siting criteria. CARB shut down the original Santa Maria station on February 28, 2021 and the relocation of the Santa Maria station was delayed due to supply chain, construction, and utility connection delays. The District expects operation in the new location to begin on July 1, 2022. EPA has already approved the shutdown of the NO_2 and CO monitors at the Santa Maria station; a copy of the letter is included in Appendix B. The new station will continue monitoring O_3, PM_{10}, and $PM_{2.5}$ as SLAMS monitors. Per California Assembly Bill 1647, the District is required to install and operate a refinery-related community air monitoring system downwind of the Santa Maria Asphalt Refinery. The new Santa Maria station will also function as the community air monitoring station and will monitor H_2S, SO_2, and BTEX pollutants. The new Santa Maria site location is 3700 Orcutt Rd, Santa Maria 93455 (Lat/Long is 34.890667/-120.4328444 elevation 294 ft.).

In response to public requests, the District intends to install an additional $PM_{2.5}$ FEM monitor, tentatively to be located at the Carpinteria City Hall or another nearby location in Carpinteria area. This monitor will operate initially as a special study site to assess the range of $PM_{2.5}$ concentrations and wildfire smoke impacts from this location. The Carpinteria City Hall is located at 5775 Carpinteria Ave, Carpinteria, CA 93013 (Lat/Long is 34.3902194/-118.49328 elevation is 54 feet). The District will work with EPA on the siting of this monitor, and expects the monitor to begin measurements by February 2023.

2.10 Additional Monitors

Santa Barbara County operates some monitors that are not required by 40 CFR 58.10. These stations and monitors are included in the network review for reference only and are not used to demonstrate compliance with any requirements even though they are operated under the same quality assurance/control guidelines as the FRM monitors. These additional monitors are also listed in Table 2.10.

There are three stations that are set up near oil and gas processing facilities to monitor for two odorous compounds: Hydrogen sulfide (H_2S) and total reduced sulfur (TRS). These monitors are located at the following stations: Lompoc Odor, Las Flores Canyon Odor (temporarily shut down for 2019), and UCSB West Campus.

Total Hydrocarbon monitors (THC) are also located at some of the industrial monitoring stations located near oil and gas processing facilities. These sites are Exxon Las Flores Canyon #1, Lompoc HS&P, and West Campus.

All the monitoring stations listed in this report, with the exception of Santa Ynez, also measure wind speed, wind direction, and ambient temperature. These data are used for modeling and tracking purposes, and also help the public to understand the nature and origin of real-time air pollution measurements. Wind and temperature conditions for the Santa Ynez location are measured and reported by the NOAA National Weather Service.

3.0 Additional information on $PM_{2.5}$ monitors

This section includes information for elements required to be in the annual network plan that relate specifically to $PM_{2.5}$. One required element relates to whether data for a $PM_{2.5}$ monitor can be used to determine compliance with the national annual $PM_{2.5}$ air quality standard. This is termed as the suitability for comparison to the annual standard. The other element requires information regarding the review process followed by air agencies when changes are made to the location of a $PM_{2.5}$ monitor that is violating a $PM_{2.5}$ NAAQS.

3.1 Comparison to Annual $PM_{2.5}$ NAAQS

Only data from a $PM_{2.5}$ FRM or FEM can be used in regulatory determinations of compliance with the annual $PM_{2.5}$ NAAQS, and the monitor must be located at a neighborhood scale. For a $PM_{2.5}$ monitor to be representative at a neighborhood scale, the concentration values measured by the monitor should be representative of concentrations expected over an area with dimensions of a few kilometers. Therefore, the monitor should not be located too close to a hot spot of $PM_{2.5}$ concentrations that extends over distances of less than a few hundred meters. The $PM_{2.5}$ FRM and FEM monitors in Santa Barbara County are sited to be representative of a neighborhood scale and meet this suitability requirement.

3.2 Review of Changes to $PM_{2.5}$ network

As required by regulation, prior to any changes to the $PM_{2.5}$ network being made, a formal request is drafted outlining the reason for the change, when the change will occur, and any other relevant information about the proposed changes. The proposal (either as part of an annual network review or between reviews) will be posted on the District website for a 30-day public comment period. Following the comment period, the District will forward the request with comments and District responses to EPA for consideration. Only after EPA has granted approval of the proposed change, will the District make the changes to the $PM_{2.5}$ monitoring network.

4.0 Quality Assurance and Data Submittal

All data collected from the monitors in the Santa Barbara County network are reviewed for quality assurance by the District. All SLAMS and industrial monitors meet the requirements of 40 CFR 58.

4.1 Annual Performance Evaluation

Annual performance evaluations challenge the monitors with known concentrations of audit gases to evaluate the accuracy of the monitors. The SLAMS sites in Santa Barbara County are audited on an annual basis by CARB. The industrial and other stations (e.g., odor monitoring stations) operated by the District and contractors are evaluated by an independent contractor who audits the monitors on a quarterly basis.

4.2 Data Submittal

Digital records of the data, including precision and accuracy data, are submitted to EPA by uploading the records to their air quality system (AQS) database. These records are submitted within 90 days following the end of each quarterly reporting period.

4.3 Annual Certification

The SLAMS data are certified for their accuracy and completeness on an annual basis and a certification letter is required to be submitted to the regional EPA administrator by May 1 of each year. The data for calendar year 2021 was certified by letter submitted to the regional EPA administrator on April 30, 2022.

5.0 Detailed Site Information

The tables in this section give detailed information relating to the sites and monitors. They are presented to show compliance with the monitoring requirements found in 40 CFR 58.10. Please note the following in relation to the detailed site information tables:

1. All glass used for inlet/manifold is borosilicate or equivalent.
2. There are no collocated monitors at the SLAMS or industrial stations in Santa Barbara County, therefore information in detailed station information tables do not include fields relating to collocated monitors.
3. All collocation requirements are being met by CARB, see the CARB Annual Network Plan for details.
4. All sample probes, including low-volume PM samplers, are separated horizontally from other station probes by at least one meter.
5. “Distance to Trees” entries represent the distance from the probe to the tree dripline.
6. CARB gaseous performance audits in 2020 only included ozone due to COVID restrictions.

Table 5.1
Carpinteria Monitoring Station Details

Site Name	**Carpinteria**	
AQS ID	060831021	
GIS coordinates	34.403047-119.45795	
Location	Located in a rural setting NE of the City of Carpinteria	
Address	Gobernador Road, Carpinteria, CA 93013	
County	Santa Barbara County	
Dist. To road	Gobernador Canyon Road, 115 meters	
Traffic count (AADT, year)	Gobernador Canyon Road - 50 est.	
Groundcover	Grass	
Representative area	MSA (Santa Barbara – Santa Maria, CA)	
Pollutant, POC	**O_3,1**	**NO_2,1**
Monitor Type	SLAMS[1]	Industrial Non-NAAQS[1]
Network Affiliation	NA	NA
Parameter Code	44201	42602
Monitoring Objective	NAAQS	Public
Site type(s)	Highest conc.	Gen. background
Mfg/Model	TAPI T400	TEI 42C
Method Code	087	074
FRM/FEM or other	FEM	FRM
Collecting Agency	Santa Barbara County[2]	Santa Barbara County[2]
Reporting Agency	Santa Barbara County	Santa Barbara County
Spatial Scale	Regional	Regional
Start date	1/1/86	1/1/86
Operation schedule	Continuous	Continuous
Sampling season	All Year	All Year
Probe height	4.3 m	4.3 m
Distance from supporting structure	1.5 m	1.5 m
Distance from obstructions on roof	None	None
Distance from obstructions not on roof	13m/3m-tree	13m/3m-tree
Distance from trees	13m	13m
Distance to furnace or incinerator	None	None
Unrestricted airflow	360°	360°
Probe material	Glass & Teflon	Glass & Teflon
Residence time	6.6 s	6.6 s
Will there be changes in next 18 months?	No	No
Frequency of one-point QC check (gaseous)	Daily	Daily
Last annual performance evaluation (gaseous)	11/16/21	12/15/21 - contractor

[1] Ozone changed from Industrial to SLAMS and NO_2 changed to Non-NAAQS on February 26, 2019.

[2] The District took responsibility for the operation of the Carpinteria site from a contractor beginning September 2020

Table 5.2
Goleta Monitoring Station Details

Site Name	**Goleta**		
AQS ID	060832011		
GIS coordinates	34.4455 -119.828333		
Location	In field behind Lutheran Church		
Address	380 N. Fairview Ave., Goleta, CA		
County	Santa Barbara County		
Dist. to road	Berkley Road, 60 meters; Fairview Ave, 200 meters; Alli Way 100 meters		
Traffic count (AADT, year)	Fairview - 12546 (2003); Berkley Rd - 3480 (2003); Ali Way - 25 est.		
Groundcover	Grass		
Representative area	MSA (Santa Barbara – Santa Maria, CA)		
Pollutant, POC	**O_3,1**	**PM_{10},1**	**$PM_{2.5}$,1**
Monitor Type	SLAMS	SLAMS	SLAMS
Network Affiliation	NA	NA	NA
Parameter Code	44201	81102	88101
Monitoring Objective	NAAQS, Public Info	NAAQS, Public Info	NAAQS, public Info
Site type(s)	Population	Population	Population
MFG/ Model	TAPI T400	BAM 1020	BAM 1020
Method Code	087	122	170
FRM/FEM or other	FEM	FEM	FEM
Collecting Agency	Santa Barbara County	Santa Barbara County	Santa Barbara County
Reporting Agency	Santa Barbara County	Santa Barbara County	Santa Barbara County
Spatial Scale	Urban	Neighborhood	Neighborhood
Start date	1/1/1980	1/1/10	1/1/10
Operation schedule	Continuous	Continuous	Continuous
Sampling season	All Year	All Year	All Year
Probe height	3.5 m	4.5 m	4.5 m
Distance from supporting structure	1 m	2.0 m	2.0 m
Distance from obstructions on roof	None	None	None
Distance from obstructions not on roof	None	None	None
Distance from trees	None	None	None
Distance to furnace or incinerator	None	None	None
Unrestricted airflow	360°	360°	360°
For low volume PM instruments, is any PM instrument within 1 m of the lo-vol? If yes, please list distance (meters) and instrument(s).	NA	No	No
Probe material	Glass & Teflon	N/A	N/A
Residence time	5.4 s	N/A	N/A

Will there be changes in next 18 months?	No	No	No	
Frequency of one-point QC check (gaseous)	Daily	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	Bi-Weekly	Bi-Weekly	
Last annual performance evaluation (gaseous)	11/17/21	N/A	N/a	
Last two semi-annual flow rate audits for PM monitors		5/13/21 11/17/21	5/13/21 11/17/21	
Is it suitable for comparison against the annual $PM_{2.5}$?	N/A	N/A	Yes	

Table 5.3

Las Flores Canyon #1 Monitoring Station Details

Site Name	**Las Flores Canyon #1**				
AQS ID	060831025				
GIS coordinates	34.48975 -120.046917				
Location	North end of canyon behind an oil and gas facility				
Address	Calle Real US Hwy 101, El Capitan, CA				
County	Santa Barbara County				
Dist. to road	HWY 101, 2860 meters				
Traffic count (AADT, year)	Hwy 101 - 30,200 (2013)				
Groundcover	Grass and dirt				
Representative area	MSA (Santa Barbara – Santa Maria, CA)				
Pollutant, POC	**O_3,1**	**NO_2,1**	**SO_2,1**	**CO,1**	**PM_{10},3**
Monitor Type	SLAMS[1]	Industrial Non-NAAQS[1]	Industrial Non-NAAQS[1]	Industrial Non-NAAQS[1]	Industrial Non-NAAQS[1]
Network Affiliation	NA	NA	NA	NA	NA
Parameter Code	44201	42602	42401	42101	81102
Monitoring Objective	NAAQS, public	Public	Public	Public	Public
Site type(s)	Max O_3 conc.	Source	Source	Source	Source
MFG/ Model	TAPI 400e	TEI42i	TEI 43i	TEI 48i	BAM 1020
Method Code	087	074	060	054	122
FRM/FEM or other	FEM	FRM	FEM	FRM	FEM
Collecting Agency	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County
Reporting Agency	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County
Spatial Scale	Regional	Neighborhood	Neighborhood	Neighborhood	Neighborhood[2]
Start date	4/1/88	4/1/88	4/1/88	4/1/88	4/1/88
Operation schedule	Continuous	Continuous	Continuous	Continuous	Continuous
Sampling season	All Year	All Year	All Year	All Year	All Year
Probe height	3.5 m	3.5 m	3.5 m	3.5 m	4.6 m
Distance from supporting structure	1.2 m	1.2 m	1.2 m	1.2 m	2.1 m
Distance from obstructions on roof	None	None	None	None	None
Distance from obstructions not on roof	None	None	None	None	None
Distance from trees	None	None	None	None	None
Distance to furnace or incinerator	None	None	None	None	None
Unrestricted airflow	360°	360°	360°	360°	360°

For low volume PM instruments, is any PM instrument within 1 m of the lo-vol? If yes, please list distance (meters) and instrument(s).	NA	NA	NA	NA	No
Probe material	Glass & Teflon	Glass & Teflon	Glass & Teflon	Glass & Teflon	N/A
Residence time	9.0 s	9.5 s	9.4 s	7.4 s	N/A
Will there be changes in next 18 months?	No	No	No	No	No
Frequency of flow rate verification for automated PM samplers	N/A	N/A	N/A	N/A	Bi-Weekly
Frequency of one-point QC check (gaseous)	Daily	Daily	Daily	Daily	N/A
Last annual performance evaluation (gaseous)	11/18/21	Not Performed[3]	Not Performed[3]	Not Performed[3]	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	Not performed[3]

[1] Ozone changed from Industrial to SLAMS and NO_2, SO_2, CO, and PM_{10} changed to Non-NAAQS on February 26, 2019.

[2] Las Flores Canyon #1 PM_{10} monitor is classified as Neighborhood Scale due to the dominant source being the nearby oil and gas facility.

[3] Performance audit not conducted due to Covid travel restrictions/scheduling.

Table 5.4

Las Flores Canyon Odor Monitoring Station Details

(Temporarily Shut Down all of 2021)

Site Name	**Las Flores Canyon Odor**				
AQS ID	060831037				
GIS coordinates	34.464528 -120.044972				
Location	Located in a parking lot at the entrance to Las Flores Canyon				
Address	Calle Real US Hwy 101, El Capitan, CA				
County	Santa Barbara County				
Dist. to road	HWY 101,75 meters; Calle Real, 44 meters;				
Traffic count (AADT, year)	Hwy 101 - 30,200 (2013)				
Groundcover	Gravel				
Representative area	MSA (Santa Barbara – Santa Maria, CA)				
Pollutant, POC	**H_2S,1**				
Monitor Type	Other				
Network Affiliation	NA				
Parameter Code	42402				
Monitoring Objective	Public				
Site type(s)	Source				
MFG/ Model	API 101e				
Method Code	020				
FRM/FEM or other	N/A				
Collecting Agency	Santa Barbara County				
Reporting Agency	Santa Barbara County				
Spatial Scale	Neighborhood				
Start date	2/1/88				
Operation schedule	Continuous				
Sampling season	All Year				
Probe height	3.5				
Distance from supporting structure	1.1				
Distance from obstructions on roof	None				
Distance from obstructions not on roof	None				
Distance from trees	None				
Distance to furnace or incinerator	None				
Unrestricted airflow	360°				
Probe material	Glass & Teflon				
Residence time	12.3 s				
Will there be changes in next 18 months?	No				
Frequency of one-point QC check (gaseous)	Bi-Weekly or more often				
Last annual performance evaluation (gaseous)	Did Not Operate in 2021				

Table 5.5
Lompoc HS&P Monitoring Station Details

Site Name	**Lompoc HS&P**				
AQS ID	060831013				
GIS coordinates	34.725331 -120.428689				
Location	Located North of Lompoc near an oil processing facility				
Address	2988 Harris Grade Rd, Lompoc, CA 93436				
County	Santa Barbara County				
Dist. to road	Harris Grade Road,700 meters				
Traffic count (AADT, year)	Harris Grade Road - 100 est.				
Groundcover	Dirt				
Representative area	MSA (Santa Barbara – Santa Maria, CA)				
Pollutant, POC	**O_3,1**	**NO_2,1**	**SO_2,1**	**THC,1**	
Monitor Type	Industrial Non-NAAQS[1]	Industrial Non-NAAQS[1]	Industrial Non-NAAQS[1]	Industrial Non-NAAQS[2]	
Network Affiliation	NA	NA	NA	NA	
Parameter Code	44201	42602	42401	43101	
Monitoring Objective	Public	Public	Public	Public	
Site type(s)	General Background	Source	Source	Source	
MFG/ Model	TEI 49i	TEI 42c	TEI 43i	TEI 51 Clt	
Method Code	047	074	060	011	
FRM/FEM or other	FEM	FRM	FEM	N/A	
Collecting Agency	Consultant	Consultant	Consultant	Consultant	
Reporting Agency	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County	
Spatial Scale	Regional	Neighborhood	Neighborhood	Neighborhood	
Start date	1/1/86	1/1/86	1/1/86	1/1/86	
Operation schedule	Continuous	Continuous	Continuous	Continuous	
Sampling season	All Year	All Year	All Year	All Year	
Probe height	4.9	4.9	4.9	4.9	
Distance from supporting structure	1.7	1.7	1.7	1.7	
Distance from obstructions on roof	None	None	None	None	
Distance from obstructions not on roof	None	None	None	None	
Distance from trees	None	None	None	None	
Distance to furnace or incinerator	None	None	None	None	
Unrestricted airflow	360°	360°	360°	360°	
Probe material	Glass & Teflon	Glass & Teflon	Glass & Teflon	Glass & Teflon	
Residence time	11.7 s	12.5 s	14.3 s	13.8 s	
Will there be changes in next 18 months?	No	No	No	No	
Frequency of one-point QC check (gaseous)	Bi-weekly	Bi-weekly	Bi-Weekly	Bi-Weekly	

Last annual performance evaluation (gaseous)	12/23/21	12/23/21	12/23/21	12/23/21	

[1] O_3, NO_2, SO_2, and CO changed to Non-NAAQS on February 26, 2019.

[2] THC is not a criteria pollutant.

Table 5.6

Lompoc H Street Monitoring Station Details

Site Name	**Lompoc H Street**					
AQS ID	060832004					
GIS coordinates	34.637833 -120.4575					
Location	Parking lot behind gas company					
Address	128 S. H Street, Lompoc CA 93436					
County	Santa Barbara County					
Dist. to road	H Street, 28 meters; E. Cyprus, 57 meters; Ocean Ave, 120 meters; Alley,13 meters					
Traffic count (AADT, year)	Ocean Ave (Hwy 246) - 11200 (2013); H Street 12900 (2010); Cyprus - 500 est.; Alley - 20 est.					
Groundcover	Asphalt					
Representative area	MSA (Santa Barbara – Santa Maria, CA)					
Pollutant, POC	**O_3,1**	**NO_2,1**	**SO_2,1**	**CO,1**	**PM_{10},2**	**$PM_{2.5}$,1**
Monitor Type	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	NA	NA	NA	NA	NA	NA
Parameter Code	44201	42602	42401	42101	81102	88101
Monitoring Objective	NAAQS, Public	NAAQS, Public	NAAQS, Public	NAAQS, Public	NAAQS, Public	NAAQS, public
Site type(s)	Population	Population	Population	Population	Population	Population
MFG/ Model	TAPI 400e	TEI 42i	TEI 43i	TEI 48i	BAM 1020	BAM 1020
Method Code	087	074	060	054	122	170
FRM/FEM or other	FEM	FRM	FEM	FRM	FEM	FEM
Collecting Agency	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County
Reporting Agency	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County
Spatial Scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	1/1/84	5/1/91	1/1/84	1/1/84	8/1/09	9/1/08
Operation schedule	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Sampling season	All Year	All Year	All Year	All Year	All Year	All Year
Probe height	4.4 m	4.4 m	4.4 m	4.4 m	5.3 m	5.3 m
Distance from supporting structure	1.0 m	1.0 m	1.0 m	1.0 m	1.9 m	1.9 m
Distance from obstructions on roof	None	None	None	None	None	None
Distance from obstructions not on roof/Obs. Height above inlet	15m/1m-building 16m/2m-tree	15m/1m-building 16m/2m-tree	15m/1m-building 16m/2m-tree	15m/1m-building 16m/2m-tree	15m/1m-building 16m/2m-tree	15m/1m-building 16m/2m-tree
Distance from trees	16m	16m	16m	16m	16m	16m
Distance to furnace or incinerator	None	None	None	None	None	None
Unrestricted airflow	360°	360°	360°	360°	360°	360°
For low volume PM instruments, is any PM	NA	NA	NA	NA	No	No

instrument within 1 m of the lo-vol? If yes, please list distance (meters) and instrument(s).						
Probe material	Glass & Teflon	Glass & Teflon	Glass & Teflon	Glass & Teflon	N/A	N/A
Residence time	11.5 s	12 s	12.4 s	17.5 s	N/A	N/A
Will there be changes in next 18 months?	No	No	No	No	No	No
Is it suitable for comparison against the annual $PM_{2.5}$?	N/A	N/A	N/A	N/A	N/A	No
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A	Bi-Weekly	Bi-Weekly
Frequency of one-point QC check (gaseous)	Daily	Daily	Daily	Daily	N/A	N/A
Last annual performance evaluation (gaseous)	11/16/21	11/16/21	11/16/21	11/16/21	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	5/13/21 11/16/21	5/13/21 11/16/21
Is it suitable for comparison against the annual $PM_{2.5}$?	N/A	N/A	N/A	N/A	N/A	Yes

Table 5.7
Lompoc Odor Monitoring Station Details

Site Name	**Lompoc Odor**				
AQS ID	060831022				
GIS coordinates	34.718992 -120.432761				
Location	Located near an oil processing facility				
Address	2988 Harris Grade Rd, Lompoc, CA 93436				
County	Santa Barbara County				
Dist. to road	Harris Grade Rd., 100 meters				
Traffic count (AADT, year)	Harris Grade Road - 100 est				
Groundcover	Dirt				
Representative area	MSA (Santa Barbara – Santa Maria, CA)				
Pollutant, POC	**H_2S,1**	**TRS,1**			
Monitor Type	Other	Other			
Network Affiliation	NA	NA			
Parameter Code	42402	43911			
Monitoring Objective	Public	Public			
Site type(s)	Source	Source			
MFG/ Model	TEI 45C	TEI 43i			
Method Code	020	020			
FRM/FEM or other	N/A	N/A			
Collecting Agency	Consultant	Consultant			
Reporting Agency	Santa Barbara County	Santa Barbara County			
Spatial Scale	Neighborhood	Neighborhood			
Start date	2/1/88	2/1/88			
Operation schedule	Continuous	Continuous			
Sampling season	All Year	All Year			
Probe height	4.8	4.8			
Distance from supporting structure	2.0	2.0			
Distance from obstructions on roof	None	None			
Distance from obstructions not on roof	None	None			
Distance from trees	None	None			
Distance to furnace or incinerator	None	None			
Unrestricted airflow	360°	360°			
Probe material	Glass & Teflon	Glass & Teflon			
Residence time	18.7 s	18.7 s			
Will there be changes in next 18 months?	No	No			
Frequency of one-point QC check (gaseous)	Bi-Weekly	Bi-Weekly			
Last annual performance evaluation (gaseous)	12/17/21	12/17/21			

Table 5.8
Paradise Road Monitoring Station Details

Site Name	**Paradise Road**				
AQS ID	060831014				
GIS coordinates	34.54170 -119.79152				
Location	Located in Los Padres National Forest off of Paradise Rd				
Address	Paradise Road, Los Padres National Forrest CA 93105				
County	Santa Barbara County				
Dist. to road	Paradise Rd.,100 meters				
Traffic count (AADT, year)	Paradise Rd - 100 est.				
Groundcover	Trees and brush				
Representative area	MSA (Santa Barbara – Santa Maria, CA)				
Pollutant, POC	**O_3,1**	**NO_2,1**			
Monitor Type	SLAMS[1]	Industrial Non-NAAQS[1]			
Network Affiliation	NA	NA			
Parameter Code	44201	42602			
Monitoring Objective	NAAQS, Public	Public			
Site type(s)	Max O_3 Conc.	Background			
MFG/ Model	TEI 49i	TEI 42i			
Method Code	047	074			
FRM/FEM or other	FEM	FRM			
Collecting Agency	Consultant	Consultant			
Reporting Agency	Santa Barbara County	Santa Barbara County			
Spatial Scale	Regional	Regional			
Start date	1/1/86	1/1/86			
Operation schedule	Continuous	Continuous			
Sampling season	All Year	All Year			
Probe height	4.6 m	4.6 m			
Distance from supporting structure	1.5 m	1.5 m			
Distance from obstructions on roof	None	None			
Distance from obstructions not on roof	20m/2m-tree	20m/2m-tree			
Distance from trees	20 m	20 m			
Distance to furnace or incinerator	None	None			
Unrestricted airflow	360°	360°			
Probe material	Glass & Teflon	Glass & Teflon			
Residence time	19.5 s	19.0 s			
Will there be changes in next 18 months?	No	No			
Frequency of one-point QC check (gaseous)	Bi-weekly	Bi-weekly			
Last annual performance evaluation (gaseous)	11/18/21-CARB	12/21/21-Contractor			

[1] Ozone changed from Industrial to SLAMS and NO_2 changed to Non-NAAQS on February 26, 2019.

Table 5.9
Santa Barbara Monitoring Station Details

Site Name	**Santa Barbara**		
AQS ID	060830011		
GIS coordinates	34.427711 -119.690844		
Location	In parking lot of the National Guard Armory		
Address	700 E. Canon Perdido, Santa Barbara CA 93103		
County	Santa Barbara County		
Dist. to road	De La Guerra, 10 meters; N Quarantina, 85 meters; N. Nopal, 60 meters; E. Canon Perdido, 140 meters; N. Milpas, 200 meters		
Traffic count (AADT, year)	De La Guerra - 4500 (1996); Canon Perdido - 7300 (1996); Quarantina - 100 est.; Milpas - 14600 (1996) N. Nopal – 100 est.		
Groundcover	Asphalt		
Representative area	MSA (Santa Barbara – Santa Maria, CA)		
Pollutant, POC	**O_3,1**	**$PM_{2.5}$,3**	**PM_{10},3**
Monitor Type	SLAMS	SLAMS	SLAMS
Network Affiliation	NA	NA	NA
Parameter Code	44201	88101	81102
Monitoring Objective	NAAQS, public	NAAQS, public	NAAQS, public
Site type(s)	population	Highest concentration	population
MFG/ Model	TAPI T400	BAM 1020	BAM 1020
Method Code	087	170	122
FRM/FEM or other	FEM	FEM	FEM
Collecting Agency	DISTRICT	District	District
Reporting Agency	District	District	District
Spatial Scale	Urban	Neighborhood	Neighborhood
Start date	5/1/02	7/1/10	5/1/02
Operation schedule	Continuous	Continuous	Continuous
Sampling season	All Year	All Year	All Year
Probe height	4.8 m	4.5 m	4.5 m
Distance from supporting structure	2.1 m	1.8 m	1.8 m
Distance from obstructions on roof	None	None	None
Distance from obstructions not on roof	10m/3m-tree	10m/3m-tree	10m/3m-tree
Distance from trees	10m	10m	10m
Distance to furnace or incinerator	None	None	None
Unrestricted airflow	360^o	360^o	360^o
For low volume PM instruments, is any PM instrument within 1 m of the lo-vol? If yes, please list distance (meters) and instrument(s).	NA	No	No
Probe material	Glass & Teflon	N/A	N/A
Residence time	14.9 s	N/A	N/A

Will there be changes in next 18 months?	No	No	No
Frequency of one-point QC check (gaseous)	Daily		
Frequency of flow rate verification for automated PM analyzers		Bi-Weekly	Bi-Weekly
Last annual performance evaluation (gaseous)	11/9/21		
Last two semi-annual flow rate audits for PM monitors		5/13/21 11/9/21	5/13/21 11/9/21
Is it suitable for comparison against the annual $PM_{2.5}$?	N/A	Yes	N/A

Note: The District took over responsibility for this site from CARB in January 2020.

Table 5.10
Santa Maria Monitoring Station Details – Shut Down Most of 2021

Site Name	**Santa Maria**				
AQS ID	060831008				
GIS coordinates	34.942864 -120.435625				
Location	Located on second floor of small office building				
Address	906 S. Broadway, Santa Maria CA 93454				
County	Santa Barbara County				
Dist. to road	S. Broadway,25 meters; W. Morrison, 25 meters; El Camino Colegio, 120 meters; McClelland St., 100 meters				
Traffic count (AADT, year)	S. Broadway - 24000 (2010); Morrison - 4016 (2010); El Camino Colegio 769 (2010); McClelland - 500 (est.)				
Groundcover	Parking lot paving				
Representative area	MSA (Santa Barbara – Santa Maria, CA)				
Pollutant, POC	**O_3, 1**	**NO_2, 1**	**CO, 3**	**PM_{10}, 2**	**$PM_{2.5}$, 3**
Monitor Type	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	NA	NA	NA	NA	NA
Parameter Code	44201	42602	42101	81102	88101
Monitoring Objective	NAAQS, public	NAAQS, public	NAAQS, public	NAAQS, public	NAAQS, public
Site type(s)	Population	Population	Highest Conc.	Population	Population
MFG/ Model	TAPI T400	TAPI 200	TAPI T300eu	BAM 1020	BAM 1020
Method Code	087	099	593	122	170
FRM/FEM or other	FEM	FRM	FRM	FEM	FEM
Collecting Agency	CARB*	CARB*	CARB*	CARB*	CARB*
Reporting Agency	CARB*	CARB*	CARB*	CARB*	CARB*
Spatial Scale	Urban	Urban	Middle Scale	Neighborhood	Neighborhood
Start date	5/1/99	5/1/99	5/1/99	7/1/09	7/1/10
Operation schedule	Continuous	Continuous	Continuous	Continuous	Continuous
Sampling season	All Year	All Year	All Year	All Year	All Year
Probe height	8.4 m	8.2 m	8.2 m	8.0 m	8.0 m
Distance from supporting structure	2.2 m	2.2 m	2.2 m	1.8 m	2.0 m
Distance from obstructions on roof	None	None	None	None	None
Distance from obstructions not on roof	16m/2m-tree	16m/2m-tree	16m/2m-tree	16m/2m-tree	16m/2m-tree
Distance from trees	16m	16m	16m	16m	16m
Distance to furnace or incinerator	None	None	None	None	None
Unrestricted airflow	360°	360°	360°	360°	360°
For low volume PM instruments, is any PM instrument within 1 m of the lo-vol? If yes, please list distance (meters) and instrument(s).	NA	NA	NA	No	No
Probe material	Glass & Teflon	Glass & Teflon	Glass & Teflon	N/A	N/A

Residence time	7.8 s	9.6 s	4.8 s	N/A	N/A
Will there be changes in next 18 months?	No	No	No	No	No
Frequency of one-point QC check (gaseous)	Bi-Weekly or more often	Bi-Weekly or more often	Bi-Weekly or more often		
Frequency of flow rate verification for automated PM analyzers				Bi-Weekly	Bi-Weekly
Last annual performance evaluation (gaseous)	CARB did not perform	CARB did not perform	CARB did not perform		
Last two semi-annual flow rate audits for PM monitors				CARB did not perform	CARB did not perform
Is it suitable for comparison against the annual $PM_{2.5}$?	N/A	N/A	N/A	N/A	Yes

Note: As noted in the 2020 ANP, the O_3 and NO_2 monitors traffic/roadway distance do not meet siting criteria and were not included in the minimum number of O_3 and NO_2 monitors on Table 2.1. The site was shutdown by CARB on February 28, 2021 with a new District replacement site scheduled to begin operation on July 1, 2022.

Table 5.11
Santa Ynez Monitoring Station Details

Site Name	**Santa Ynez**				
AQS ID	060833001				
GIS coordinates	34.605819 -120.075069				
Location	South side of Santa Ynez airport runway				
Address	900 Airport Rd., Santa Ynez, CA				
County	Santa Barbara County				
Dist. to road	HWY 246, 550 meters				
Traffic count (AADT, year)	Hwy 246 - 8050 (2013)				
Groundcover	Grass/Dirt				
Representative area	MSA (Santa Barbara – Santa Maria, CA)				
Pollutant, POC	**O_3,1**				
Monitor Type	SLAMS				
Network Affiliation	NA				
Parameter Code	44201				
Monitoring Objective	NAQQS, public				
Site type(s)	Population				
MFG/ Model	TAPI T400				
Method Code	087				
FRM/FEM or other	FEM				
Collecting Agency	Santa Barbara County				
Reporting Agency	Santa Barbara County				
Spatial Scale	Urban				
Start date	7/1/2013				
Operation schedule	Continuous				
Sampling season	All Year				
Probe height	3.5 m				
Distance from supporting structure	1.0 m				
Distance from obstructions on roof	None				
Distance from obstructions not on roof	None				
Distance from trees	None				
Distance to furnace or incinerator	None				
Unrestricted airflow	360°				
Probe material	Teflon				
Residence time	6.2 s				
Will there be changes in next 18 months?	No				
Frequency of one-point QC check (gaseous)	Daily				
Last annual performance evaluation (gaseous)	11/17/21				

Table 5.12

UCSB West Campus Monitoring Station Details

Site Name	**UCSB West Campus**			
AQS ID	060831020			
GIS coordinates	34.414942 -119.879511			
Location	Located West of Devereux slough near UCSB			
Address	UCSB West Campus, Santa Barbara, CA			
County	Santa Barbara County			
Dist. to road	Slough Road, 425 meters			
Traffic cnt (AADT, Yr)	Slough Road - 50 est			
Groundcover	Grass			
Representative area	MSA (Santa Barbara – Santa Maria, CA)			
Pollutant, POC	**SO_2,2**	**H_2S,1**	**TRS,1**	**THC,1**
Monitor Type	Industrial Non-NAAQS[1]	Industrial Non-NAAQS[2]	Industrial Non-NAAQS[2]	Industrial Non-NAAQS[2]
Network Affiliation	NA	NA	NA	NA
Parameter Code	42401	42402	43911	43101
Monitoring Objective	Public	Public	Public	Public
Site type(s)	Source	Source	Source	Source
MFG/ Model	TEI 43i	TEI 43i	TEI 43i	51i-HT
Method Code	060	020	020	011
FRM/FEM or other	FEM	N/A	N/A	N/A
Collecting Agency	Consultant	Consultant	Consultant	Consultant
Reporting Agency	Santa Barbara County	Santa Barbara County	Santa Barbara County	Santa Barbara County
Spatial Scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Start date	6/1/99	6/1/99	6/1/99	6/1/99
Operation schedule	Continuous	Continuous	Continuous	Continuous
Sampling season	All Year	All Year	All Year	All Year
Probe height	3.5	3.5	3.5	3.5
Distance from supporting structure	1.0	1.0	1.0	1.0
Distance from obstructions on roof	None	None	None	None
Distance from obstructions not on roof	None	None	None	None
Distance from trees	None	None	None	None
Distance to furnace or incinerator	None	None	None	None
Unrestricted airflow	360°	360°	360°	360°
Probe material	Glass & Teflon	Glass & Teflon	Glass & Teflon	Glass & Teflon
Residence time	16.1 s	15.3 s	15.3 s	9.7 s
Will there be changes in next 18 months?	NO	No	No	No
Frequency of one-point QC check (gaseous)	Bi-Weekly	Bi-Weekly	Bi-Weekly	Bi-Weekly

Last annual performance evaluation (gaseous)	12/23/21	12/23/21	12/23/21	12/23/21

[1] SO_2 changed to Non-NAAQS on February 26, 2019.

[2] THC, H_2S, and TRS are not criteria pollutants.

Glossary of Acronyms

AQS	Air quality system
ARB	Air Resources Board
ARM	Approved regional method
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CO	Carbon monoxide
FEM	Federal equivalent method
FRM	Federal reference method
H_2S	Hydrogen Sulfide
MSA	Metropolitan statistical area
NAAQS	National ambient air quality standard
NO_2	Nitrogen dioxide
O_3	Ozone
PM_{10}	Particulate matter less than 10 microns in diameter
$PM_{2.5}$	Particulate matter less than 2.5 microns in diameter
PSD	Prevention of significant deterioration
SBCAPCD	Santa Barbara County Air Pollution Control District
SLAMS	State and Local Air Monitoring Station
SO_2	Sulfur dioxide
SPM	Special purpose monitor
THC	Total hydrocarbons
TRS	Total reduced sulfur
US EPA	United States Environmental Protection Agency

APPENDIX A

Regulatory language of 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 O_3 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 multi-pollutant 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 §58.1

APPENDIX B
DISCONTINUATION OF SANTA MARIA SLAMS STATION ON BROADWAY

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

March 29, 2021

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

Dear Chief Gill:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board's (CARB) discontinuation of the O_3, CO, NO_2, $PM_{2.5}$, and PM_{10} State/Local Air Monitoring Station (SLAMS) monitors at the Santa Maria – South Broadway site (Air Quality System (AQS) Site ID: 06-083-1008). A request for EPA approval of this network change was submitted to EPA on December 30, 2020. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors.

Discontinuation of the O_3, CO, NO_2, and $PM_{2.5}$ SLAMS monitors were reviewed by EPA against criteria contained in 40 CFR 58.14(c)(1), based on certified data submitted to EPA's AQS. The Santa Maria O_3 monitor was in attainment of the 2008 and 2015 8-hour O_3 National Ambient Air Quality Standards (NAAQS) for design value years 2015-2019. The EPA has determined that, based on design values from 2015-2019, there is less than a 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at this site. During 2015-2019, the 4th maximum daily 8-hour O_3 concentrations were generally at least 10 parts per billion (ppb) below the 2015 NAAQS. Preliminary 2020 data are consistent with the historical trend and continue to show low concentrations. This O_3 SLAMS monitor is not specifically required by an attainment or maintenance plan and is not the maximum O_3 concentration site in the Santa Barbara-Santa Maria Metropolitan Statistical Area (MSA). The Santa Barbara County Air Pollution Control District (SBCAPCD) currently operates seven other O_3 SLAMS monitors in the Santa Barbara-Santa Maria MSA. Furthermore, discontinuance of this monitor does not compromise data collection needed for implementation of the NAAQS and will not prevent SBCAPCD from meeting 40 CFR 58 Appendix D requirements. As elaborated upon below, SBCAPCD plans to establish O_3 SLAMS monitoring at a new site in the MSA.

The Santa Maria CO monitor was in attainment of the 1971 1-hour CO and 8-hour CO NAAQS for design value years 2015-2019. The EPA has determined that, based on design values from 2015-2019, there is less than a 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at this site. Preliminary 2020 data are consistent with the historical trend and continue to show low

concentrations. This CO monitor is not specifically required by an attainment or maintenance plan, and SBCAPCD currently operates another CO SLAMS monitor in the Santa Barbara-Santa Maria MSA. Furthermore, discontinuance of this monitor does not compromise data collection needed for implementation of the NAAQS and will not prevent SBCAPCD from meeting 40 CFR 58 Appendix D requirements.

The Santa Maria NO_2 monitor was in attainment of the 1971 annual and 2010 1-hour NO_2 NAAQS for design value years 2015-2019. The EPA has determined that, based on design values from 2015-2019, there is less than a 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at this site. Preliminary 2020 data are consistent with the historical trend and continue to show low concentrations. This NO_2 monitor is not specifically required by an attainment or maintenance plan, and SBCAPCD currently operates another NO_2 SLAMS monitor in the Santa Barbara-Santa Maria MSA. Furthermore, discontinuance of this monitor does not compromise data collection needed for implementation of the NAAQS and will not prevent SBCAPCD from meeting 40 CFR 58 Appendix D requirements.

The $PM_{2.5}$ monitor was in attainment of the 2012 annual and 2006 24-hour $PM_{2.5}$ NAAQS for design value years 2015-2019. The EPA has determined that, based on design values from 2015-2019, there is less than a 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at this site. Preliminary 2020 data are consistent with the historical trend and continue to show low concentrations. As demonstrated in CARB's letter and supporting documentation, the Santa Maria site is not and is unlikely to become the maximum $PM_{2.5}$ concentration site for the County, and all annual $PM_{2.5}$ averages, annual $PM_{2.5}$ 98th percentile values, and $PM_{2.5}$ design values for the site between 2015 and 2019 are below the corresponding NAAQS. Furthermore, discontinuance of this monitor does not compromise data collection needed for implementation of the NAAQS and will not prevent SBCAPCD from meeting 40 CFR 58 Appendix D requirements. SBCAPCD currently operates three other $PM_{2.5}$ SLAMS monitors in the Santa Barbara-Santa Maria MSA. As elaborated upon below, SBCAPCD plans to establish $PM_{2.5}$ SLAMS monitoring at a new site in the MSA.

Discontinuation of the PM_{10} SLAMS monitor was reviewed by EPA against criteria contained in 40 CFR 58.14(c), which states that requests for discontinuation "may also be approved on a case-by-case basis if discontinuance does not compromise data collection needed for implementation of a NAAQS and if the requirements of appendix D to this part, if any, continue to be met." The Santa Maria PM_{10} monitor was in attainment of the 1987 24-hour PM_{10} NAAQS for the 2016 design value; 2015 and 2017-2019 design values were invalid due to incomplete data. The PM_{10} monitor began reporting data in standard conditions on June 1, 2013; the 2013 data were therefore not comparable to the NAAQS prior to this date, resulting in an invalid 2015 design value. More recently, the PM_{10} monitor had 58% data completeness in the second quarter of 2017 due to instrumentation issues that resulted in invalid 2017-2019 design values. Preliminary 2020 data are consistent with the historical trend and continue to show low concentrations. As demonstrated in CARB's letter and supporting documentation, no 24-hr PM_{10} exceedances were recorded in the last five years at the PM_{10} monitor. Furthermore, discontinuance of this monitor does not compromise data collection needed for implementation of the PM_{10} NAAQS and will not prevent SBCAPCD from meeting 40 CFR 58 Appendix D requirements. SBCAPCD currently operates three other PM_{10} SLAMS monitors in the Santa Barbara-Santa Maria MSA. As elaborated upon below, SBCAPCD plans to establish PM_{10} SLAMS monitoring at a new site in the MSA.

Based on these analyses, EPA approves CARB's discontinuation of the Santa Maria O_3, CO, NO_2, $PM_{2.5}$, and PM_{10} SLAMS monitors. Please include this letter and the relevant monitor and site information in the next CARB and SBCAPCD annual monitoring network plans.

EPA further notes that, as stated in SBCAPCD's 2020 Annual Network Plan, SBCAPCD intends to establish O_3, $PM_{2.5}$, and PM_{10} SLAMS monitors at a new site within the Santa Barbara-Santa Maria MSA in 2021. The site location has not yet been determined, but SBCAPCD intends to establish a site with similar monitoring objectives and spatial scales as the current Santa Maria site location. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the establishment of new SLAMS monitors. EPA recommends that SBCAPCD work with the EPA on this request and to ensure that the new monitors meet all relevant requirements.

If you have any questions, please feel free to contact me at (415) 947-4134 or Dena Vallano of my staff at (415) 972-3134.

Sincerely,

Yoshimura, Gwen Digitally signed by Yoshimura, Gwen
Date: 2021.03.29 12:57:27 -07'00'

Gwen Yoshimura
Manager, Air Quality Analysis Office

cc (via email): Manisha Singh, CARB
Greg Gilani, CARB
Kathleen Gill, CARB
Sylvia Vanderspek, CARB
Adolfo Garcia, CARB
Laura Carr, CARB
Ravi Ramalingam, CARB
Craig Anderson, CARB
Reggie Smith, CARB
Thomas Lovejoy, CARB
Andrea McStocker, CARB
Joel Cordes, SBCAPCD

APPENDIX C
Public Noticing

To be added when available

APPENDIX D
Public Comments

Comments to be added after public review period