

Annual Air Monitoring Network Plan for Santa Barbara County Public Draft

May 31, 2020

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1.0 Introduction

This report describes the network of ambient air quality monitors in Santa Barbara County. This report was prepared to meet the requirements for an annual network plan as listed in Title 40, Part 58, Section 10 of the Code of Federal Regulations (40 CFR 58.10). 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 inspections for at least 30 days prior to submission to EPA. This draft plan is available for public review and comment from May 31 through June 29, 2020.

This review is used to determine if 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. This network review ensures that the data collected by the SLAMS air monitoring network in Santa Barbara County is representative and will satisfy the data needs 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). Industrial and "other" monitors are also included in this plan. 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;
- Support compliance with ambient air quality standards and emissions strategy development; and,
- 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 in order 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 (O₃) monitors at Paradise Road, Carpinteria, and Las Flores Canyon #1 from Industrial to SLAMS monitors. The EPA approval letter is included as Appendix B. 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 are currently operated by CARB. The District

took responsibility for the Santa Barbara station in January 2020 and is expected to take responsibility for the Santa Maria station by the end of 2020. 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. O₃ monitors at three of these stations (Carpinteria, Paradise Road, and Las Flores Canyon #1) have recorded the highest O₃ 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.

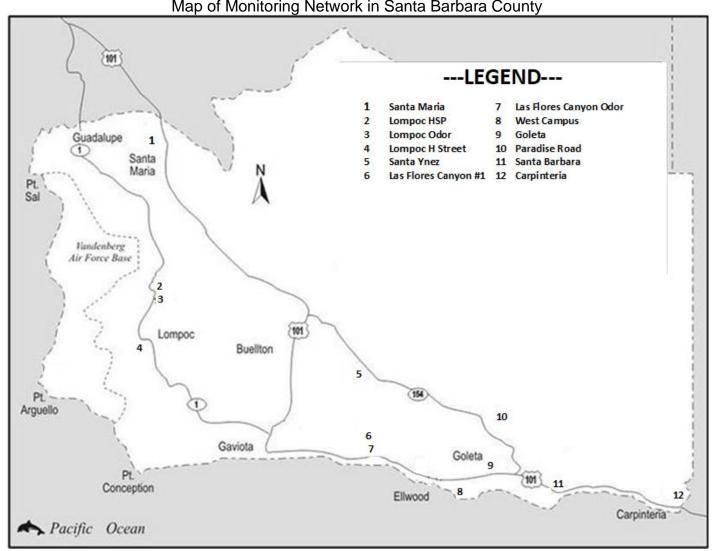


Figure 1.1 Map of Monitoring Network in Santa Barbara County

Table 1.1
Monitoring Network in Santa Barbara County after March 2019 Network
Modification

No.	Name	Site Code	Туре	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	CARB/District ²
12	Carpinteria	060831021	Industrial/SLAMS ¹	Contractor

¹ Ozone monitors at these locations are SLAMS; other monitors are Industrial.

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:

² The District took responsibility for the Santa Barbara station January 2020 and is scheduled to take responsibility for the Santa Maria station by the end of 2020.

- 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

Туре	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	Urban, regional
transport	
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	СО	PM _{2.5}	PM ₁₀	THC	H ₂ S	TRS
AIRS Pollutant	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 PM₁₀ 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 in order 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. Also, 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 O₃, PM_{2.5}, and PM₁₀, 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 446,499 based on the 2019 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 (O₃)

Data from O₃ 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 O₃ are listed in Table 2.1. Santa Barbara County has nine O₃ 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 O₃ standard, based on 2017 – 2019 data; this design value meets the federal 8-hour O₃ standard of 0.070 ppm. Santa Barbara County was recently re-designated as attainment for the state O₃ standard, effective July 1,

2020¹. There were three stations in Santa Barbara County that recorded concentrations of O₃ in excess of the federal and state 8-hour O₃ standards in 2019. The highest 8-hour O₃ value recorded in Santa Barbara County in 2019 was 0.072 ppm measured at the Las Flores Canyon #1 monitoring station on October 6, 2019. The Paradise Road and Carpinteria locations also exceeded the 8-hour standard with a recorded value of 0.071 ppm on the same day.

Table 2.1
Minimum Monitoring Requirements for Ozone

MSA	County	Pop.	8-hour Design	Design	Min. #	# Sites	Sites
		(year)	Value (years) ²	Value Site	Sites	Active ¹	Needed
				(name,	Required		
				AQS ID)			
Santa Barbara –	Santa	446,499	.065 ppm	LFC1	2	7	0
Santa Maria, CA	Barbara	(2019)	2017 - 2019	060831025			
	County						

Only SLAMS monitors are counted towards meeting minimum monitoring requirements. Also, O₃ 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 O₃ monitor does not currently meet traffic count/distance requirements, see Section 2.9 and Table 5.12 for more details.

Monitors required for State Implementation Plan (SIP) or Maintenance Plan: Santa Barbara County has a maintenance plan for O₃ that requires any modification to the existing O₃ 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 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.

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² DV Years = the three years over which the design value (DV) was calculated (e.g., 2017 – 2019).

¹ For additional information see <u>ww2.arb.ca.gov/rulemaking/2019/2019-state-area-designations-regulation</u>.

Table 2.2
Near-Roadway Monitoring Requirements

CBSA/MSA	Pop. (year)	# Required Near Roadway Monitors	# Active Near Roadway Monitors	# Additional Monitors Needed
		Roadway Monitors	Roadway Morillois	Needed
Santa Barbara Santa	446,499 (2019)	0	0	0
Maria, CA				

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 (NO2)

Ambient air monitoring and reporting requirements for NO₂ 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 NO₂ monitors are required. However, continued operation of existing SLAMS NO₂ sites is required until discontinuation is approved by the EPA. There are two SLAMS NO₂ monitors located at Lompoc H Street and Santa Maria that are used to measure the impacts of population exposure. There are four other sites that measure NO₂: 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 O₃ formation. Table 2.3 lists the minimum monitoring requirements for NO₂.

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	446,499 (2019)	N/A (below pop. Threshold)	0	0	0	0	1	0

Only SLAMS sites are counted for minimum monitoring requirements. Also, NO₂ 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 NO₂ monitor does not currently meet traffic count/distance requirements, 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 (SO₂)

Ambient air monitoring and reporting requirements for SO₂ are based on EPA's June 2, 2010 rule, where EPA strengthened the primary NAAQS for SO₂. 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 SO₂ sites is required until discontinuation is approved by the EPA. There is one SLAMS SO₂ monitor at Lompoc H Street that is used to measure the impacts of population exposure. There are three other sites that measure SO₂: 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 SO₂.

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	446,499 (2019)	1149.4	513.2	N/A below emissions threshold	0	1	0

¹ Using NEI data (2017).

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 (PM₁₀)

The minimum monitoring requirements for PM₁₀ are listed in Table 2.5. There are four SLAMS PM₁₀ monitors located at Santa Barbara, Goleta, Lompoc H Street, and Santa Maria. There is one industrial station that measures PM₁₀: 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.

² Calculated by multiplying CBSA population and total SO₂ and dividing product by one million.

³ Only SLAMS sites are counted for minimum monitoring requirement.

Table 2.5 Minimum Monitoring Requirements for PM₁₀

MSA	County	Pop. (year)	Max 24 Hour Concentration (ug/m3)	2019 Max Concentration Site (name, AQS ID)	# Required Sites	# Active Sites ¹	# Additional SitesNeeded
Santa Barbara – Santa Maria, CA	Santa Barbara County	446,499 (2019)	132 (10/28/19)	Santa Maria 060831008	1-2	4	0

¹ Only SLAMS sites are counted for minimum monitoring requirement.

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, Goleta, and Lompoc H Street. The Santa Barbara PM_{2.5} monitor was not operational during the months of January through July 2017 due to site safety issues (See Appendix B). The Lompoc H Street PM_{2.5} monitor experienced excessive downtime due to equipment problems during the first quarter of 2017. Because there is insufficient PM_{2.5} data for the period of 2017-2019, the monitors at Santa Barbara and Lompoc H Street are not included in the annual design value calculations 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 ³ (years ¹)	Annual Design Value Site (name, AQS ID)	Daily Design Value ⁴ (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	446,499 (2019)	7.4 ug/m3 2017 – 2019	Goleta 06-083- 2011	47 ug/m3 2017 - 2019	Santa Barbara0 6-083- 0011	0	4	0

¹ DV Years = the three years over which the design value (DV) was calculated (e.g., 2017-2019).

² Only SLAMS sites are counted for minimum monitoring requirement.

³ Santa Barbara and Lompoc H monitors did not meet completeness requirement for Annual Design Day Calculations.

⁴ Lompoc H monitor did not meet completeness requirement for Daily Design Day Calculations. 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 ⁴ (years ¹	Annual Design Value Site (name, AQS ID)	Daily Design Value (years)	Daily Design Value⁵ Site (name, AQS ID)	# Required Cont. Monitors	# Active Cont. Monitors ³	# Addition al Cont. Monitor s ² Needed
Santa Barbara – Santa Maria, Ca	Santa Barbara County	446,499 (2019)	7.4 ug/m3 2017 – 2019	Goleta 06-083- 2011	47 ug/m3 2017 - 2019	Santa Barbara 06-083- 0011	0	4	0

- ¹ DV Years = the three years over which the design value (DV) was calculated (e.g., 2017-2019).
- ² Only count one continuous monitor per site.
- ³ Only SLAMS sites are counted for minimum monitoring requirement.
- ⁴ Santa Barbara and Lompoc H monitors did not meet completeness requirement for Annual Design Day Calculations.
- ⁵ Lompoc H monitor did not meet completeness requirement for Daily Design Day Calculations. **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 $0.15~\mu g/m^3$ 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	# Active Near	# Additional
		Road Monitors	Road Monitors	Monitors Needed
Santa Barbara –	446,499	0	0	0
Santa Maria, Ca	(2019)			

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 NO₂, CO, and PM_{2.5} Monitors

40 CFR 58 Appendix D requires near-roadway NO₂, 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 446,527 (2018 census estimate), so no NO₂, 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	Max AADT	#	#	#	#	#	#	#
	& Census	counts	Required	Active	Required	Active	Required	Active	Additional
	year	(year)	NO_2	NO_2	$PM_{2.5}$	$PM_{2.5}$	ĊO	CO	Monitors
			Mon.	Mon.	Mon.	Mon.	Mon.	Mon.	Needed
Santa	446,499	N/A	0	0	0	0	0	0	0
Barbara	(2019)	Below							
-Goleta-		Pop.							
Santa		Threshold							
Maria									

2.9 Recent or Proposed Modifications to the Network

The permit holders responsible for the operation of the Las Flores Canyon Odor site received approval from the District to temporarily shut down the site while production at the associated ExxonMobil Las Flores Canyon processing facility is shutdown. The site was temporarily shut down in July 2018 and will be re-started when production at the ExxonMobil Las Flores Canyon processing facility resumes. As this change is for non-criteria pollutants (H₂S and TRS), approval from EPA is not required.

The District has added a special purpose/non-regulatory PM₁₀ 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 plans to convert this

monitor to collect PM_{2.5} data for an additional year for continual study of the particulate pollution in the area.

As was noted in EPA's review of the District's 2018 and 2019 Annual Network Plans, the Santa Maria O₃ and NO₂ monitors do 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 O₃ and NO₂ monitors in Tables 2-1 and 2-3. The District has agreed to take full responsibility for this monitoring station from CARB and is currently exploring possible new locations that will meet the siting criteria. 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 District is evaluating locations to move the Santa Maria station that could function as a co-located community air monitoring station and Santa Maria SLAMS station.

In 2017 and 2018 EPA, CARB and the District discussed various options for changing the District's monitoring network to free up District, CARB, and EPA resources so that they could be used elsewhere, while still providing appropriate monitoring to the community. In February 2019, EPA approved changes to the network and the District implemented those changes in March 2019. For additional information, see Appendix D. Monitors that were approved for shutdown are listed in Table 2.9.

Table 2.9 EPA Approved Monitor Shutdown

AQS#	Site Name	Site	CO	NO ₂	SO ₂	О3	PM ₁₀
		Type					
06-083-0008	El Capitan	SLAMS		Χ	X	Χ	Χ
06-083-2011	Goleta	SLAMS	Χ				
06-083-1018	Nojoqui	Industrial		Х		Χ	
06-083-1021	Carpinteria	Industrial		Х		Χ	
06-083-1025	Las Flores Canyon 1	Industrial	Χ	Х	Х		Χ
06-083-1014	Paradise Road	Industrial		Χ			
06-083-1013	Lompoc HSP	Industrial		Χ	X	Χ	
06-083-4003	VAFB STS	Industrial	Χ	Χ	X	Χ	Χ
06-083-1020	West Campus	Industrial			X		

EPA also approved changing the O₃ monitors at Carpinteria, Las Flores Canyon #1, and Paradise Road from Industrial to SLAMS monitors. This change was proposed because these O₃ monitors historically record the highest O₃ concentrations in Santa Barbara County.

Some of the monitors approved by EPA for shutdown were classified as non-NAAQS Industrial monitors and continue to operate. Other non-essential or

redundant Industrial and SLAMS monitors were eliminated. The resulting non-NAAQS Industrial or Other (e.g., odor site) monitoring network in Santa Barbara County is listed in Table 2.10.

Table 2.10
Non-NAAQS Industrial or Other Monitors

AQS#	Site Name	CO	NO ₂	SO ₂	O ₃	PM ₁₀	THC	H ₂ S	TRS
06-083-1021	Carpinteria		Χ						
06-083-1025	Las Flores	Χ	X	X		X	X		
	Canyon #1								
06-083-1014	Paradise		X						
	Road								
06-083-1013	Lompoc		X	X	Χ		X		
	HSP								
06-083-1020	West			X			X	Х	X
	Campus								
06-083-1022	Lompoc							Х	X
	Odor								
06-083-1037	Las Flores							X	
	Canyon								
	Odor								

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 (H₂S) 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 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.

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. One exceptions is the Santa Maria monitoring station, which is currently reviewed and processed by CARB. 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 submitted to the regional EPA administrator by May 1 of each year.

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.

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 N	F of the City of Carpinteria					
Address		Gobernador Road, Carpinteria, CA 93013					
	Santa Barbara County						
County Dist. To road	-	115 motors					
	Gobernador Canyon Road,						
Traffic count (AADT,	Gobernador Canyon Road	- 50 est.					
year) Groundcover	Grass						
Representative area		oto Maria CA)					
•	MSA (Santa Barbara – Sar	. ,					
Pollutant, POC	O ₃ ,1	NO ₂ ,1					
Monitor Type	SLAMS ¹	Industrial Non-NAAQS¹					
Network Affiliation	NA 11001	NA 10000					
Parameter Code	44201	42602					
Monitoring Objective	NAAQS	Public					
Site type(s)	Highest conc.	Gen. background					
Mfg/Model	TAPI 400e	TEI 42C					
Method Code	087	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	4.3 m	4.3 m					
Distance from	1.5 m	1.5 m					
supporting structure							
Distance from	None	None					
obstructions on roof							
Distance from	13m/3m-tree	13m/3m-tree					
obstructions not on							
roof							
Distance from trees	13m	13m					
Distance to furnace or	None	None					
incinerator							
Unrestricted airflow	360°	360°					
Probe material	Glass & Teflon	Glass & Teflon					
Residence time	13.6 s	13.9 s					
Will there be changes	No	No					
in next 18 months?							
Frequency of one-	Daily	Daily					
point QC check		-					
(gaseous)							
Last annual	12/12/19	12/12/19					
performance							
evaluation (gaseous)							
	dustrial to SLAMS and NO. a	hanged to Non-NAAOS on Febru	10m/ 26				

¹Ozone changed from Industrial to SLAMS and NO₂ changed to Non-NAAQS on February 26, 2019.

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., Go		
County	Santa Barbara County	10ta, 0/1	
Dist. to road		; Fairview Ave, 200 meter	s: Alli Way 100 meters
Traffic count (AADT,		Berkley Rd - 3480 (2003)	
year)	Tall view 12546 (2005),	Definitely 11.0 3400 (2003)	, All Way 20 CSt.
Groundcover	Grass		
Representative area	MSA (Santa Barbara – S	anta Maria CA)	
Pollutant, POC	O ₃ ,1	PM ₁₀ ,1	PM _{2.5} ,1
Monitor Type	SLAMS	SLAMS	SLAMS
Network Affiliation	NA	NA NA	NA
Parameter Code	44201	81102	88101
Monitoring Objective	NAAQS,	NAAQS,	NAAQS, public Info
Wilding Objective	Public Info	Public Info	147 (1905, public lillo
Site type(s)	Population	Population	Population
MFG/ Model	TAPI 400e	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	4.1 m	4.5 m	4.5 m
Distance from	1.6 m	2.0 m	2.0 m
supporting structure	1.0 111	2.0 111	2.0 111
Distance from	None	None	None
obstructions on roof	None	None	None
Distance from	None	None	None
obstructions not on	110110	140110	110110
roof			
Distance from trees	None	None	None
Distance to furnace or	None	None	None
incinerator			133
Unrestricted airflow	360°	360°	360°
For low volume PM	NA	No	No
instruments, is any PM			
instrument within 1 m			
of the lo-vol? If yes,			
please list distance			
(meters) and			
instrument(s).			
Probe material	Glass & Teflon	N/A	N/A
Residence time	16.1 s	N/A	N/A
Will there be changes	No	No	No
in next 18 months?			

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)	4/10/19	N/A	N/a
Last two semi-annual flow rate audits for PM monitors		4/10/19 10/10/19	4/10/19 10/10/19
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	060831025					
GIS coordinates		34.48975 -120.046917					
Location	North end of	canyon behind a	n oil and gas facil	ity			
Address		S Hwy 101, El Ca	pitan, CA				
County	Santa Barba						
Dist. to road	HWY 101, 28						
Traffic count (AADT, year)	Hwy 101 - 30	, ,					
Groundcover	Grass and di	rt					
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-	Industrial Non-	Industrial Non-	Industrial Non-		
		NAAQS ¹	NAAQS ¹	NAAQS ¹	NAAQS ¹		
Network Affiliation	NA	NA	NA	NA	NA		
Parameter Code	44201	42602	42401	42101	81102		
Monitoring	NAAQS,	Public	Public	Public	Public		
Objective	public						
Site type(s)	Max O₃ 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	7.3 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)	4/11/19				N/A
Last two semi- annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	

Ozone changed from Industrial to SLAMS and NO₂, SO₂, CO, and PM₁₀ changed to Non-NAAQS on February 26, 2019.
 Las Flores Canyon #1 PM₁₀ monitor is classified as Neighborhood Scale due to the dominant source being the nearby oil and gas facility.

Table 5.4
Las Flores Canyon Odor Monitoring Station Details
(Temporarily Shut Down)

(Temporarily Shut Down)							
Site Name	Las Flores Canyon Odd	or					
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, C	SA .				
County	Santa Barbara County						
Dist. to road	HWY 101,75 meters; Ca		neters;				
Traffic count (AADT,	Hwy 101 - 30,200 (2013)						
year)							
Groundcover	Gravel						
Representative area	MSA (Santa Barbara – S	anta Maria, C	(A)				
Pollutant, POC	H₂S,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	1.1						
supporting structure							
Distance from	None						
obstructions on roof							
Distance from	None						
obstructions not on							
roof							
Distance from trees	None						
Distance to furnace or	None						
incinerator							
Unrestricted airflow	360°						
Probe material	Glass & Teflon						
Residence time	12.3 s						
Will there be changes	No						
in next 18 months?							
Frequency of one-	Bi-Weekly or more						
point QC check	often						
(gaseous)							
Last annual	Did Not Operate						
performance							
evaluation (gaseous)							

Table 5.5 Lompoc HS&P Monitoring Station Details

Site Name	Lompoc HS&P							
AQS ID	060831013							
GIS coordinates	34.725331 -120.4	428689						
Location	Located North of	Located North of Lompoc near an oil processing facility						
Address		2988 Harris Grade Rd, Lompoc, CA 93436						
County	Santa Barbara C	Santa Barbara County						
Dist. to road	Harris Grade Roa							
Traffic count (AADT,	Harris Grade Roa							
year)								
Groundcover	Dirt							
Representative area	MSA (Santa Bark	oara – Santa Maria	a, CA)					
Pollutant, POC	O ₃ ,1	NO ₂ ,1	SO ₂ ,1	THC,1				
Monitor Type	Industrial Non-	Industrial	Industrial	Industrial				
2.	NAAQS1	Non-NAAQS ¹	Non-NAAQS1	Non-NAAQS ²	1			
Network Affiliation	NA	NA	NA	NA				
Parameter Code	44201	42602	42401	43101				
Monitoring Objective	Public	Public	Public	Public				
Site type(s)	General	Source	Source	Source				
	Background				i			
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	Santa Barbara	Santa Barbara	Santa Barbara				
	County	County	County	County	i			
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	1.7	1.7	1.7	1.7	i			
structure								
Distance from	None	None	None	None	i			
obstructions on roof								
Distance from	None	None	None	None	i			
obstructions not on roof								
Distance from trees	None	None	None	None				
Distance to furnace or	None	None	None	None	i			
incinerator								
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	No	No	No	No	ı			
next 18 months?								
Frequency of one-point	Bi-weekly	Bi-weekly	Bi-Weekly	Bi-Weekly	ı			
QC check (gaseous)	40/40/40	40/40/40	40/40/40	40/40/40				
Last annual performance	12/18/19	12/18/19	12/18/19	12/18/19	İ			
evaluation (gaseous)		 QS on February 26						

¹ O₃, NO₂, SO₂, 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 Str	eet						
AQS ID	060832004							
GIS coordinates	34.637833 -12	34.637833 -120.4575						
Location	Parking lot beh	nind gas compa	ny					
Address	128 S. H Stree	t, Lompoc CA	93436					
County	Santa Barbara	Santa Barbara County						
Dist. to road	H Street, 28 m	eters; E. Cyprus	s, 57 meters; Oc	ean Ave, 120 m	neters; Alley,13	meters		
Traffic count (AADT,								
year)	est.	Ocean Ave (Hwy 246) - 11200 (2013); H Street 12900 (2010); Cyprus - 500 est.; Alley - 20 est.						
Groundcover	Asphalt							
Representative area	MSA (Santa B	arbara – 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,	NAAQS,	NAAQS,	NAAQS,	NAAQS,	NAAQS,		
	Public	Public	Public	Public	Public	public		
Site type(s)	Population	Population	Population	Population	Population	Population		
MFG/ Model	TAPI 400e							
Method Code	087	074	060	054	122	170		
FRM/FEM or other	FEM	FRM	FEM	FRM	FEM	FEM		
Collecting Agency	Santa	Santa	Santa	Santa	Santa	Santa		
	Barbara	Barbara	Barbara	Barbara	Barbara	Barbara		
	County	County	County	County	County	County		
Reporting Agency	Santa	Santa	Santa	Santa	Santa	Santa		
	Barbara	Barbara	Barbara	Barbara	Barbara	Barbara		
	County	County	County	County	County	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	1.0 m	1.0 m	1.0 m	1.0 m	1.9 m	1.9 m		
supporting structure								
Distance from obstructions on roof	None	None	None	None	None	None		
Distance from	15m/1m-	15m/1m-	15m/1m-	15m/1m-	15m/1m-	15m/1m-		
obstructions not on	building	building	building	building	building	building		
roof/Obs. Height	16m/2m-tree	16m/2m-tree	16m/2m-tree	16m/2m-tree	16m/2m-tree	16m/2m-tree		
above inlet	10111/2111 (100	1011//2111 (100	10111/2111 1100	10111/2111 (100	10111/2111 1100	10111/2111 1100		
Distance from trees	16m	16m	16m	16m	16m	16m		
Distance to furnace or	None	None	None	None	None	None		
incinerator	1.51.0			110110				
Unrestricted airflow	360°	360°	360°	360°	360°	360°		
For low volume PM	NA	NA NA	NA	NA NA	No	No		
instruments, is any PM			1 4/ 1		140	140		
instrument within 1 m								
of the lo-vol? If yes,								
please list distance								
p.odoo not diotarioo	l	l		l				

(meters) and instrument(s).						
Probe material	Glass & Teflon	Glass & Teflon	Glass & Teflon	Glass & Teflon	N/A	N/A
Residence time	8.6 s	10.1 s	10.3 s	14.1 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)	4/9/19	4/9/19	4/9/19	4/9/19	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	4/9/19 10/11/19	4/9/19 10/11/19
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	1 ,					
Dist. to road	Harris Grade Rd., 100 met	ers					
Traffic count (AADT,	Harris Grade Road - 100 e						
year)							
Groundcover	Dirt						
Representative area	MSA (Santa Barbara - Sai	nta Maria. CA)					
Pollutant, POC	H ₂ S,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						
Spatial Scale	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	2.0	2.0					
supporting structure	2.0	2.0					
Distance from	None	None					
obstructions on roof	None	None					
Distance from	None	None					
obstructions not on	None	140116					
roof							
Distance from trees	None	None					
Distance to furnace or	None	None					
incinerator	146116	140110					
Unrestricted airflow	360°	360°					
Probe material	Glass & Teflon	Glass & Teflon					
Residence time	18.7 s	18.7 s					
Will there be changes	No	No					
in next 18 months?	110	110					
Frequency of one-	Bi-Weekly	Bi-Weekly					
point QC check		2					
(gaseous)							
Last annual	12/13/19	12/13/19					
performance	1 7						
evaluation (gaseous)							
	1	ı	1 1				

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	<u> </u>						
Traffic count (AADT, year)	Paradise Rd - 100 est.							
Groundcover	Trees and brush							
Representative area	MSA (Santa Barbara – S	Santa Maria, CA)						
Pollutant, POC	O ₃ ,1							
Monitor Type	SLAMS ¹	Industrial Non-NAAQS1						
Network Affiliation	NA	NA						
Parameter Code	44201	42602						
Monitoring Objective	NAAQS, Public	Public						
Site type(s)	Max O₃ Conc.	Background						
MFG/ Model	TEI 49i	TEÏ 42i						
Method Code	047	074						
FRM/FEM or other	FEM	FRM						
Collecting Agency	Consultant	Consultant						
Reporting Agency	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	5.2 m	5.2 m						
Distance from supporting	2.2 m	2.2 m						
structure								
Distance from obstructions	None	None						
on roof								
Distance from obstructions	20m/2m-tree	20m/2m-tree						
not on roof								
Distance from trees	20 m	20 m						
Distance to furnace or	None	None						
incinerator								
Unrestricted airflow	360°	360°						
Probe material	Glass & Teflon	Glass & Teflon						
Residence time	13.0 s	13.1 s						
Will there be changes in	No	No						
next 18 months?								
Frequency of one-point	Bi-weekly	Bi-weekly						
QC check (gaseous)								
Last annual performance	12/11/19	12/11/19						
evaluation (gaseous)								

¹Ozone changed from Industrial to SLAMS and NO₂ 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 -119.6908	844						
Location		National Guard Armory						
Address		lo, 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.						
Dist. to road		meters; N. Milpas, 200 meters						
Traffic count (AADT,		(1996); Canon Perdido - 7300						
year)		(1996) N. Nopal – 100 est.	(1990), Quarantina - 100					
Groundcover	Asphalt	(1556) 14. 146pai - 166 Cst.						
Representative area	MSA (Santa Barbara	– Santa Maria, CΔ)						
Pollutant, POC	O ₃ ,1	PM _{2.5} ,3	PM ₁₀ ,3					
Monitor Type	SLAMS	SLAMS	SLAMS					
Network Affiliation	NA NA	NA NA	NA NA					
Parameter Code	44201	88101	81102					
Monitoring Objective	NAAQS, public	NAAQS, public	NAAQS, public					
Site type(s) MFG/ Model	population	Highest concentration BAM 1020	population					
	TAPI 400		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 5/1/02					
Start date		5/1/02 7/1/10						
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	2.1 m	1.8 m	1.8 m					
supporting structure								
Distance from	None	None	None					
obstructions on roof								
Distance from	10m/3m-tree	10m/3m-tree	10m/3m-tree					
obstructions not on								
roof								
Distance from trees	10m	10m	10m					
Distance to furnace or	None	None	None					
incinerator	200-	000	0000					
Unrestricted airflow	360°	360°	360°					
For low volume PM	NA	No	No					
instruments, is any PM								
instrument within 1 m								
of the lo-vol? If yes,								
please list distance								
(meters) and								
instrument(s).	Olean C.T. (I	N1/A	N1/A					
Probe material	Glass & Teflon	N/A	N/A					
Residence time	7.8 s	N/A	N/A					
Will there be changes	No	No	No					
in next 18 months?								

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)	10/10/19		
Last two semi-annual flow rate audits for PM monitors		5/2/19 10/10/19	5/2/19 10/10/19
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

Site Name	Santa Maria						
AQS ID	060831008						
GIS coordinates	34.942864 -12	34.942864 -120.435625					
Location	Located on se	cond floor of sr	nall office buildi	ng			
Address	906 S. Broadv	vay, Santa Mar	ia CA 93454	<u> </u>			
County	Santa Barbara						
Dist. to road		S. Broadway,25 meters; W. Morrison, 25 meters; El Camino Colegio, 120					
		elland St., 100 r		•	J ,		
Traffic count (AADT, year)		S. Broadway - 24000 (2010); Morrison - 4016 (2010); El Camino Colegio 769 (2010); McClelland - 500 (est.)					
Groundcover	Parking lot par	ving					
Representative area	MSA (Santa B	arbara – 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,	NAAQS,	NAAQS,	NAAQS,	NAAQS,		
,	public	public	public	public	public		
Site type(s)	Population	Population	Highest Conc.	Population	Population		
MFG/ Model	TAPI 400						
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	2.2 m	2.2 m	2.2 m	1.8 m	2.0 m		
supporting structure							
Distance from	None	None	None	None	None		
obstructions on roof							
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	None	None	None	None	None		
incinerator		1,10110			1,10110		
Unrestricted airflow	360°	360°	360°	360°	360°		
For low volume PM	NA	NA	NA	No	No		
instruments, is any PM 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	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)	5/9/19	5/9/19	2/6/19		
Last two semi-annual flow rate audits for PM monitors				5/9/1911/14/19	5/9/1911/14/1 9
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 EPA review of the 2018/2019 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. When the District takes full responsibility for operation of this site from CARB, District will consider re-locating to meet this requirement.

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.,						
County	Santa Barbara		<u> </u>				
Dist. to road	HWY 246, 550						
Traffic count (AADT,	Hwy 246 - 8050						
year)	11111/210 0000	(2010)					
Groundcover	Grass/Dirt						
Representative area	MSA (Santa Ba	rbara – 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	1.0 m						
supporting structure							
Distance from	None						
obstructions on roof							
Distance from	None						
obstructions not on							
Piotonoo from tropo	None						
Distance from trees Distance to furnace or	None None						
incinerator	none						
Unrestricted airflow	360°						
Probe material	Teflon						
Residence time	3.4 s						
Will there be changes	No						
in next 18 months?	140						
Frequency of one-	Daily						
point QC check							
(gaseous)							
Last annual	4/10/19						
performance							
evaluation (gaseous)							

Table 5.12 UCSB West Campus Monitoring Station Details

Site Name	UCSB West Ca	mpus						
AQS ID	060831020	•						
GIS coordinates	34.414942 -119	34.414942 -119.879511						
Location	Located West of	Devereux slough r	near UCSB					
Address		mpus, Santa Barba						
County	Santa Barbara County							
Dist. to road	Slough Road, 42	25 meters						
Traffic cnt (AADT, Yr)	Slough Road - 5							
Groundcover	Grass							
Representative area	MSA (Santa Bar	bara – Santa Maria	a, CA)					
Pollutant, POC	SO ₂ ,2	H₂S,1	TRS,1	THC,1				
Monitor Type	Industrial	Industrial	Industrial	Industrial				
,,	Non-NAAQS1	Non-NAAQS ²	Non-NAAQS ²	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							
Collecting Agency	Consultant							
Reporting Agency	Santa Barbara							
l repermigrigency	County	County	County	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	1.0	1.0	1.0	1.0				
structure								
Distance from	None	None	None	None				
obstructions on roof								
Distance from	None	None	None	None				
obstructions not on roof								
Distance from trees	None	None	None	None				
Distance to furnace or	None	None	None	None				
incinerator								
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	NO	No	No	No				
next 18 months?								
Frequency of one-point	Bi-Weekly	Bi-Weekly	Bi-Weekly	Bi-Weekly				
QC check (gaseous)								
Last annual performance	12/16/2019	12/16/2019	12/16/2019	12/16/2019				
evaluation (gaseous)								

¹ SO₂ changed to Non-NAAQS on February 26, 2019. ²THC, H₂S, 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

H₂S Hydrogen Sulfide

MSA Metropolitan statistical area

NAAQS National ambient air quality standard

NO₂ Nitrogen dioxide

O₃ Ozone

PM₁₀ 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

SO₂ 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 O₃ 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

EPA Shutdown Approval and Network Reconfiguration



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

FEB 2 6 2019

Mr. Joel S. Cordes Air Monitoring Supervisor Santa Barbara County Air Pollution Control District 260 North San Antonio Road, Suite A Santa Barbara, California 93110

Dear Mr. Cordes:

This letter provides the Environmental Protection Agency's (EPA's) review and approval for Santa Barbara County Air Pollution Control District's (SBCAPCD's) discontinuation of the following State or Local Air Monitoring Station (SLAMS) or industrial monitors:

AQS ID	Site Name	SLAMS/ Industrial	carbon monoxide (CO)	nitrogen dioxide (NO ₂)	sulfur dioxide (SO ₂)	ozone (O₃)	particulate matter 10 microns or less in aerodynamic diameter (PM ₁₀)
06-083-0008	El Capitan	SLAMS		X1	X	Х	X
06-083-2011	Goleta	SLAMS	X	X			
06-083-1018	Nojoqui	Industrial		Х		Х	
06-083-1021	Carpinteria	Industrial		Х			
06-083-1025	Los Flores Canyon #1 (LFC1)	Industrial	Х	Х	Х		Х
06-083-1014	Paradise Road	Industrial		Х			
06-083-1013	Lompoc HSP	Industrial		X	X	Х	
06-083-4003	VAFB South Base (VAFB)	Industrial	Х	Х	Х	Х	Х
06-083-1020	UCSB West Campus	Industrial			Х		

¹ Discontinuations noted by X

On August 7, 2018, SBCAPCD sent the request letter to the EPA. Detailed conversations between SBCAPCD and the Primary Quality Assurance Organization, California Air Resources Board (CARB), followed. On December 4, 2018, EPA received a copy of a letter from CARB to SBCAPCD conveying CARB's support for SBCAPCD's August 7, 2018 request. We recognize that SBCAPCD requested an expedited review, and appreciate SBCAPCD's understanding as the EPA's response was delayed due to lack of staff over the holidays followed by the lengthy government shutdown.

Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors. Discontinuation of all NO₂, SO₂, and CO monitors listed above were reviewed by the EPA against criteria contained in 40 CFR 58.14(c)(1). According to data submitted to the EPA's Air Quality System (AQS), the aforementioned monitors were in attainment of the respective National Ambient Air Quality Standards (NAAQS) from 2013-2017. Based on these five design values, there is

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less than 10 percent probability of exceeding 80 percent of the respective NAAQS during the next three years at these monitors. These monitors are not specifically required by an attainment or maintenance plan and are not the last monitors in a nonattainment or maintenance area. Furthermore, discontinuation of these monitors does not compromise data collection needed for implementation of the respective NAAQS and will not prevent SBCAPCD and CARB from meeting 40 CFR 58 Appendix D requirements. Based on these analyses, the EPA approves the discontinuation of the aforementioned NO₂, SO₂, and CO monitors. Please include these network modifications and the EPA's approval in your next Annual Network Plan.

Discontinuation of the El Capitan, Nojoqui, Lompoc HSP, and VAFB O₃ monitors was specifically reviewed under 40 CFR 58.14(c). All of these monitors were in attainment of the 2015 8-hour O₃ NAAQS for the period of 2013-2017 and were found to have lower 2017 design values than the highest monitoring site in the County, LFC1. With discontinuation of O₃ monitoring at these sites, SBCAPCD will continue to operate eight O₃ SLAMS monitors in the County. Based on these analyses, discontinuation of these monitors does not compromise data collection needed for implementation of the 2015 O₃ NAAQS and will not prevent SBCAPCD and CARB from meeting 40 CFR 58 Appendix D requirements.

Discontinuation of the El Capitan, LFC1, and VAFB PM₁₀ monitors was also reviewed under 40 CFR 58.14(c). The El Capitan monitor was in attainment of the 1987 24-hour PM₁₀ NAAQS for the years of 2013-2017. VAFB and LFC1 were in attainment of the 1987 24-hour PM₁₀ NAAQS for years 2013-2015, but had violating design values in 2016 and 2017. Review of the 24-hour PM₁₀ averages for all three of these monitors for the period 2013-2017 showed spikes in concentrations that appeared to correlate with the 2016 and 2017 wildfires noted in SBCAPCD's Exceptional Events Initial Notification submitted to the EPA on July 11, 2018. These monitors are not the PM₁₀ design value monitors for the County based on review of the latest certified data (i.e. 2017 design values). Even with discontinuation of monitoring at these sites, SBCAPCD will still be operating four PM₁₀ SLAMS monitors in the County. Based on these analyses, discontinuation of these monitors does not compromise data collection needed for implementation of the1987 24-hour PM₁₀ NAAQS and will not prevent SBCAPCD and CARB from meeting 40 CFR 58 Appendix D requirements.

The EPA approves the discontinuation of the aforementioned O_3 and PM_{10} monitors per 40 CFR 58.14(c). Please include these network modifications and EPA's approval in your next Annual Network Plan. The EPA also approves reclassification of the O_3 monitors at Carpinteria, LFC1, and Paradise Road from industrial to SLAMS. This approval assumes that these monitors meet all 40 CFR 58 requirements.

In addition to approval of the proposed modifications discussed above, the EPA acknowledges that SBCAPCD will take over ownership and operation of the Santa Barbara (AQS ID: 06-083-0011) and Santa Maria (AQS ID: 06-083-1008) SLAMS sites from CARB.

The EPA also acknowledges that SBCAPCD has expressed the intention to operate non-regulatory monitoring at some of its sites. If SBCAPCD reports data from non-regulatory monitors to AQS, please let us know, and we will apply NAAQS exclusion flags to these monitors and associated data if it is not apparent from the parameter code that these are non-regulatory data.

We appreciate SBCAPCD's and CARB's efforts to utilize their resources effectively and efficiently, in support of understanding air quality and protecting public health and the environment in Santa Barbara County. If you have any questions regarding this letter or the enclosed comments, please feel free to contact me at (415) 947-4134 or Randall Chang (415) 947-4180.

Sincerely,

Gwen Yoshimura, Manager Air Quality Analysis Office

cc (via email): Jin Xu, CARB
Kathy Gill, CARB
Michael Miguel, CARB
Michael Werst, CARB
Sylvia Vanderspek, CARB
Webster Tasat, CARB
Andrea McStocker, CARB