Appendices to the 2024 Annual Network Plan

List of Appendices

Appendix A

Detailed Site Reports

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Amador County APCD

Local Site Name	Jackson-Clinton Road				
AQS ID	06-005-0002				
GPS Coordinates	38.34261, -120.76443				
Street Address	201 Clinton Rd, Jackson, 95642				
County	Amador				
Distance to roadways (meters)	270 to CA-49				
Traffic Count (AADT,year)	7,300 (2,500)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	5/1/1992				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.9				
Distance from supporting structure (meters)	2.6				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.3				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/21/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Antelope Valley AQMD

Local Site Name	Lancaster-Fairgrounds				
AQS ID	06-037-9035				
GPS Coordinates	34.725389, -118.178601				
Street Address	2551 W. Avenue H , Lancaster, 93535				
County	Los Angeles				
Distance to roadways (meters)	48m to Avenue G8, 730m to Avenue H				
Traffic Count (AADT,year)	Avenue G8 - 50 estimate, Avenue H - 3,750 (2014)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Los Angeles-Long Beach-Anaheim Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 1	PM2.5, 1	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	
Parameter Code	42602	44201	81102	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS, Public Info.	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 200	Teledyne API 400	Met One BAM 1020	Met One BAM 1020	
Method code	99	87	122	170	
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	
Collecting Agency	Antelope Valley	Antelope Valley	Antelope Valley	Antelope Valley	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	Antelope Valley	Antelope Valley	Antelope Valley	Antelope Valley	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	12/28/2022	12/28/2022	12/22/2022	12/22/2022	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	4	4	6	6	
Distance from supporting structure (meters)	1	1	2	2	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.0	8.0	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	Monthly	
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/28/2023	2/28/2023	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	02/28/23 09/19/23	02/28/23 09/19/23	

Butte County AQMD

Local Site Name	Chico - East Avenue				
AQS ID	06-007-0008				
GPS Coordinates	39.76168, -121.84047				
Street Address	984 East Ave, Ste B4, Chico, 95926				
County	Butte				
Distance to roadways (meters)	895 to CA-99				
Traffic Count (AADT,year)	47,200 (2020)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Chico Metropolitan Statistical Area				
Pollutant, POC	CO, 3	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 3
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	Primary
Parameter Code	42101	42602	44201	81102	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS.
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 300	Thermo 42iQ	Teledyne API 400	Met One BAM 1020	Met One BAM 1020
Method code	593	74	87	122	170
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	FEM
Collecting Agency	CARB	CARB	CARB	CARB	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	CARB	CARB	CARB	CARB	CARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	06/01/2012	06/08/2012	06/01/2012	5/27/2012	6/1/2012
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	Continuous
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	6.3	6.3	6.3	6.5	6.5
Distance from supporting structure (meters)	2.0	2.0	2.0	2.5	2.5
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	2
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.8	18.6	13.4	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers, including Pb samplers	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	Monthly	Monthly
Frequency of one-point QC check for gaseous instruments	Daily	Daily	Daily	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	12/12/2022	12/12/2022	8/4/2022	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	9/7/2023	9/7/2023	9/7/2023	03/24/23 09/07/23	03/24/23 09/07/23

Local Site Name	Gridley				
AQS ID	06-007-4001				
GPS Coordinates	39.32756, -121.66881				
Street Address	608 Cowee Ave, Gridley, 95948				
County	Butte				
Distance to roadways (meters)	1,053 to CA-99				
Traffic Count (AADT,year)	19,200 (2015)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	Chico Metropolitan Statistical Area				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88502				
Basic monitoring objective(s)	Public Information				
Site type(s)	Population Exposure				
Monitor type(s)	Other				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	731				
FRM/FEM/ARM/Other	Other				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Neighborhood				
Monitoring start date	1/1/2001				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.8				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	No				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/09/23 10/23/23				

Local Site Name	Paradise - Clark				
AQS ID	06-007-2003				
GPS Coordinates	39.757861, -121.607908				
Street Address	5921 Clark Road, Paradise, 95969				
County	Butte				
Distance to roadways (meters)	72 to CA-191 (Clark Rd)				
Traffic Count (AADT,year)	9,500 (2021)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Chico Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	OTHER			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FEM	Other			
Collecting Agency	CARB	CARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	CARB	CARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	5/2/2023	5/16/2023			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	6.25	7.39			
Distance from supporting structure (meters)	2.08	3.23			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10 meters	>10 meters			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	No			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Semi-Monthly			
Frequency of one-point QC check for gaseous instruments	Daily	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/17/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/14/2024, 8/17/23			

Calaveras County APCD

Local Site Name	San Andreas-Gold Strike Road				
AQS ID	06-009-0001				
GPS Coordinates	38.20185, -120.68028				
Street Address	501 Gold Strike Rd, San Andreas, 95249				
County	Calaveras				
Distance to roadways (meters)	620 to CA-49				
Traffic Count (AADT,year)	10,900 (2015)				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM10, 3	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS, Public Information		
Site type(s)	Highest Concentration	General Background	General Background		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020N	Met One BAM 1020		
Method code	87	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	05/01/1994	10/6/2014	06/15/2010		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.4	5	4.8		
Distance from supporting structure (meters)	1.2	2.1	2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.4	N/A	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly	Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/22/2023	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/22/23 09/06/23	02/22/23 09/06/23		

Colusa County APCD

Local Site Name	Colusa-Sunrise Blvd				
AQS ID	06-011-1002				
GPS Coordinates	39.18919, -121.99887				
Street Address	100 Sunrise Blvd, Colusa, 95932				
County	Colusa				
Distance to roadways (meters)	642 to CA-20				
Traffic Count (AADT,year)	9,500 (2015)				
Ground Cover	Grass				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM10, 6	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	General Background	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	Regional	Neighborhood	Neighborhood		
Monitoring start date	07/01/1996	2/1/2016	7/1/2021		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	5.3	5.9	6.4		
Distance from supporting structure (meters)	2	2.2	4.2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.5	N/A	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly	Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/27/2023	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/27/23 10/12/23	04/27/23 10/12/23		

Eastern Kern APCD

Local Site Name	Canebrake				
AQS ID	06-029-0017				
GPS Coordinates	35.72775, -118.13770				
Street Address	3147 Highway 178, Canebrake, 93255				
County	Kern				
Distance to roadways (meters)	88 to CA-178				
Traffic Count (AADT,year)	2,250 (2015)				
Ground Cover	Sand				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	PM10, 2				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure; General Background				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	MetOne Ebam Plus				
Method code	226				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Eastern Kern APCD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Eastern Kern APCD				
Spatial scale	Regional				
Monitoring start date	1/1/2009				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	2.8				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	2 weeks				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	04/11/23 09/19/23				

Local Site Name	Ridgecrest - Ward Ave				
AQS ID	06-029-0018				
GPS Coordinates	35.64296, -117.71414				
Street Address	2051 Ward Av , Ridgecrest, 93555				
County	Kern				
Distance to roadways (meters)	N. Primavera Street (32m), Sydnor Ave (235m), West Ward Ave. (162m), Jacks Ranch Road (800m)				
Traffic Count	Primavera 5 (staff estimate), Sydnor 15 (staff estimate), Ward 15 (staff estimate), Jacks Ranch Rd 2,087 (July 25, 2018)				
Ground Cover	Sand				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	PM10, 1	PM2.5, 1			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	81102, 85101	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Highest Concentration	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	MET ONE BAM 1020	MET ONE BAM 1020			
Method code	122	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Eastern Kern APCD	Eastern Kern APCD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Eastern Kern APCD	Eastern Kern APCD			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	11/1/2017	11/1/2017			
Current sampling frequency	continuous	continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	5.5	5.5			
Distance from supporting structure (meters)	2.0	2.0			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	100	100			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	2 weeks	2 weeks			
Frequency of one-point QC check for gaseous instruments	N/A	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	03/01/23 09/19/23	03/01/23 09/19/23			

Local Site Name	Mojave - Pat Ave				
AQS ID	06-029-0020				
GPS Coordinates	35.04944, -118.18893				
Street Address	3200 Pat Avenue, Mojave, CA 93501				
County	Kern				
Distance to roadways (meters)	1,367 to SR-14				
Traffic Count (AADT,year)	17,000 (2017)				
Ground Cover	Dirt/Soil				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Highest Concentration	Population Exposure	Highest Concentration		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	Regional	Neighborhood	Neighborhood		
Monitoring start date	3/8/2023	3/8/2023	3/8/2023		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.1	4.4	4.5		
Distance from supporting structure (meters)	1.5	1.8	1.9		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.8	N/A	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Semi-Monthly	Semi-Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/11/2023	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/11/23 09/19/23	04/11/23 09/19/23		

El Dorado County AQMD

Local Site Name	Cool (seasonal)				
AQS ID	06-017-0020				
GPS Coordinates	38.89094, -121.00337				
Street Address	1400 American River Trail, Cool, 95614				
County	El Dorado				
Distance to roadways (meters)	183 to CA-193				
Traffic Count (AADT,year)	6,300 (2015)				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Regional				
Monitoring start date	06/01/1996				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	Apr-Oct				
Probe height (meters)	11.9				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.7				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/24/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Echo Summit (seasonal)				
AQS ID	06-017-0012				
GPS Coordinates	38.81161, -120.03308				
Street Address	21200 US Hwy 50, Little Norway, 95721				
County	El Dorado				
Distance to roadways (meters)	207 to US-50				
Traffic Count (AADT,year)	2,500				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Regional Transport				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Regional				
Monitoring start date	01/01/2000				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	Apr-Oct				
Probe height (meters)	3.9				
Distance from supporting structure (meters)	1.8				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	None				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.7				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/25/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Placerville - Canal				
AQS ID	06-017-2004				
GPS Coordinates	38.73319, -120.81372				
Street Address	561 Canal St, Placerville, CA 95667561 Canal St, Placerville, CA 95667				
County	El Dorado				
Distance to roadways (meters)	730 m to Route 50 /Canal Street intersection; 346 m to the closest Route 50				
Traffic Count (AADT,year)	42,000 (Caltrans Traffic AADT, 2022)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Neighborhood				
Monitoring start date	6/16/2022				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	10.4				
Distance from supporting structure (meters)	1.4				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	None				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.7				
Will there be changes within the next 18 months?	Yes				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/24/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	South Lake Tahoe-Sandy Way				
AQS ID	06-017-0011				
GPS Coordinates	38.94498, -119.97061				
Street Address	3337 Sandy Way, South Lake Tahoe, 96150				
County	El Dorado				
Distance to roadways (meters)	196 to US-50				
Traffic Count (AADT,year)	17,500				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	PM10, 5				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Middle				
Monitoring start date	12/1/1992				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6.0				
Distance from supporting structure (meters)	2.6				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	None				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/25/23 10/26/23				

Feather River AQMD

Local Site Name	Sutter Buttes (seasonal)				
AQS ID	06-101-0004				
GPS Coordinates	39.20556, -121.82046				
Street Address	Top of South Butte, Sutter Buttes, 95982				
County	Sutter				
Distance to roadways (meters)	6,100 to CA-20				
Traffic Count (AADT,year)	7,400 (2015)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	Yuba City Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration; Regional Transport				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Regional				
Monitoring start date	05/01/1993				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	Apr-Oct				
Probe height (meters)	6.7				
Distance from supporting structure (meters)	1.2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A (No trees)				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	26.5				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/23/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Yuba City				
AQS ID	06-101-0003				
GPS Coordinates	39.13876, -121.61872				
Street Address	773 Almond St, Yuba City, 95991				
County	Sutter				
Distance to roadways (meters)	275 to CA-20				
Traffic Count (AADT,year)	38,500 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Yuba City Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 3	PM2.5, 4
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	AQ-Audit
Parameter Code	42602	44201	81102	88101	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Highest Concentration	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Thermo 42iQ	Teledyne API 400	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020
Method code	74	87	122	170	170
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	FEM
Collecting Agency	CARB	CARB	CARB	CARB	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	CARB	CARB	CARB	CARB	CARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	1/1/1989	10/01/1989	6/11/2014	12/7/2020	3/24/2021
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	Continuous
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	8.4	8.4	9.6	9.7	9.7
Distance from supporting structure (meters)	1.1	1.1	2.3	2.4	2.4
Distance from obstructions on roof (meters)	1.8 (Wall)	1.8 (Wall)	1.8 (Wall)	1.8 (Wall)	1.8 (Wall)
Height above probe for obstructions on roof (meters)	0.9	0.9	0.9	0.9	0.9
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters	>10 meters	>10 meters
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	1.1	1.1
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	18.7	13.6	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	Yes
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	Monthly	Monthly
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/18/2023	8/18/2023	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	02/08/23 08/18/23	02/08/23 08/18/23	02/08/23 08/18/23

Glenn County APCD

Local Site Name	Willows-Colusa				
AQS ID	06-021-0003				
GPS Coordinates	39.53387, -122.19083				
Street Address	720 N. Colusa St., Willows, 95988				
County	Glenn				
Distance to roadways (meters)	1,092 to CA-162				
Traffic Count (AADT,year)	5,000 (2015)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM10, 3	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary		
Parameter Code	44201	81102	88502		
Basic monitoring objective(s)	NAAQS	NAAQS	Public Information		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	Other		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	731		
FRM/FEM/ARM/Other	FEM	FEM	Other		
Collecting Agency	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	09/13/2006	10/1/2013	09/13/2006		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.7	4.8	4.9		
Distance from supporting structure (meters)	1.9	2.0	2.1		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.3	N/A	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	No		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly	Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/24/2023	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/24/23 09/06/23	02/24/23 09/06/23		

Imperial County APCD

Local Site Name	Brawley-Main Street #2				
AQS ID	06-025-0007				
GPS Coordinates	32.97831, -115.53904				
Street Address	220 Main St., Brawley, 92227				
County	Imperial				
Distance to roadways (meters)	270 to CA-86				
Traffic Count (AADT,year)	16,400 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	El Centro Metropolitan Statistical Area				
Pollutant, POC	PM10, 3	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	81102	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1022			
Method code	122	209			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Imperial County	Imperial County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	8/11/2009	6/23/2021			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	12.4	12.1			
Distance from supporting structure (meters)	2.4	2.1			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	N/A (No trees)	N/A (No trees)			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	Monthly	Monthly			
Frequency of one-point QC check for gaseous instruments	N/A	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	03/06/23 09/26/23	03/06/23 09/26/23			

Local Site Name	El Centro-9th Street				
AQS ID	06-025-1003				
GPS Coordinates	32.79215, -115.56299				
Street Address	150 9th St, El Centro, 92243				
County	Imperial				
Distance to roadways (meters)	528 to CA-86				
Traffic Count (AADT,year)	17,000 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	El Centro Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 4	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	
Parameter Code	42602	44201	81102	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Highest Concentration	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 200	Teledyne API 400	Met One BAM 1020	Met One BAM 1022	
Method code	99	87	122	209	
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	
Collecting Agency	Imperial County	Imperial County	Imperial County	Imperial County	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	CARB	CARB	CARB	CARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	1/1/1980	02/01/1988	7/1/2015	11/13/2021	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	11.9	11.9	12.3	12.4	
Distance from supporting structure (meters)	1.9	1.9	2.3	2.4	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	N/A (No trees)	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.0	13.7	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	Monthly	
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/16/2023	3/16/2023	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	03/16/23 09/26/23	03/16/23 09/26/23	

Local Site Name:	Niland-English Road				
AQS ID:	06-025-4004				
GPS Coordinates:	33.21349, -115.54514				
Street Address:	7711 English Road, Niland, 92257				
County:	Imperial				
Distance to roadways (meters):	2,460 to CA-111				
Traffic Count (AADT,year)	2,950 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	El Centro Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020			
Method code	87	122			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Imperial County	Imperial County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	10/1/1997	8/10/2009			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.6	5.2			
Distance from supporting structure (meters)	1.6	2.2			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.5	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Daily	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/8/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/08/23 09/26/23			

Local Site Name:	Westmorland				
AQS ID:	06-025-4003				
GPS Coordinates:	33.03239, -115.62362				
Street Address:	570 Cook St., Westmorland, 92281				
County:	Imperial				
Distance to roadways (meters):	646 to CA-86				
Traffic Count (AADT,year)	13,300 (2015)				
Ground Cover:	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other):	El Centro Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary following POC 1 shutdown			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020			
Method code	87	122			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Imperial County	Imperial County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Regional	Middle			
Monitoring start date	04/01/1993	7/1/2015			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.3	5.5			
Distance from supporting structure (meters)	1.2	2.5			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.1	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Daily	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/8/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/08/23 09/26/23			

Local Site Name:	Calexico-Ethel Street				
AQS ID:	06-025-0005				
GPS Coordinates:	32.67887, -115.48292				
Street Address:	1085 Andrade Ave, Calexico, 92231				
County:	re				
Distance to roadways (meters):	26 to CA-98				
Traffic Count (AADT,year)	18,100 (2016)				
Ground Cover:	Concrete				
Representative statistical area name (i.e. MSA, CBSA, other):	El Centro Metropolitan Statistical Area				
Pollutant, POC	CO, 3	NO2, 1	Ozone, 1	SO2, 3	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	
Parameter Code	42101	42602	44201	42401	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 300	Thermo 42iQ	Teledyne API 400	Thermo 43i-TLE	
Method code	593	74	87	560	
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	
Collecting Agency	CARB	CARB	CARB	CARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	CARB	CARB	CARB	CARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	3/1/2013	3/1/1994	4/1/1994	3/1/2013	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	4.4	4.4	4.4	4.4	
Distance from supporting structure (meters)	1.9	1.9	1.9	1.9	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>19	>19	>19	>19	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	Teflon	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	4.3	5.1	4.5	5.9	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	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	
Frequency of one-point QC check for gaseous instruments	Precision S-Th*	Precision S-Th*	Precision S-Th*	Precision S-Th*	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/7/2023	3/7/2023	3/7/2023	3/7/2023	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	N/A	

*one-point. QC checks at the precision level (20% of scale) Sunday through Thursday; Span levels (80% of scale) are conducted Fridays and Saturdays.

(continued)

Local Site Name:	Calexico-Ethel Street				
AQS ID:	06-025-0005				
GPS Coordinates:	32.67887, -115.48292				
Street Address:	1085 Andrade Ave, Calexico, 92231				
County:	Imperial				
Distance to roadways (meters):	26 to CA-98				
Traffic Count (AADT,year)	18,100 (2016)				
Ground Cover:	Concrete				
Representative statistical area name (i.e. MSA, CBSA, other):	El Centro Metropolitan Statistical Area				
Pollutant, POC	PM10, 3	PM2.5, 2	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	QA-Audit	Primary		
Parameter Code	81102	88101	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Met One BAM 1020	Thermo 2000I	Met One BAM 1020 W VSCC		
Method code	122	143	170		
FRM/FEM/ARM/Other	FEM	FRM	FEM		
Collecting Agency	ARB	ARB	ARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	N/A		
Reporting Agency	ARB	ARB	ARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	01/15/2016	4/1/2021	12/1/2020		
Current sampling frequency	Continuous	1:12	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.7	4.9	5.9		
Distance from supporting structure (meters)	2.1	2.1	2.3		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	6 (tree)	N/A		
Height above probe for obstructions not on roof (meters)	3	3	3		
Distance to nearest tree drip line (meters)	>19	>19	>19		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	1.4	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A		
Will there be changes within the next 18 months?	Yes	Yes	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	No		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Monthly	N/A		
Frequency of flow rate verification for automated PM analyzers	Semi-Monthly	Monthly	Semi-Monthly		
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	03/07/23 09/26/23	03/07/23 09/26/23	03/07/23 09/26/23		

Lake County AQMD

Local Site Name	Lakeport-S. Main Street				
AQS ID	06-033-3002				
GPS Coordinates	39.018900, -122.913350				
Street Address	2617 South Main Street, Lakeport, CA 95453				
County	Lake				
Distance to roadways (meters)	30				
Traffic Count Notes	15,300 (2015)				
Ground Cover	Clearlake Micropolitan Statistical Area				
Representative statistical area name (i.e. MSA, CBSA, other)					
Pollutant, POC	Ozone, 1	PM10, 1	PM2.5, 1		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102 and 85101	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	General Background	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	R & P 2000	R & P 2000		
Method code	87	126	143		
FRM/FEM/ARM/Other	FEM	FRM	FRM		
Collecting Agency	Lake County AQMD	Lake County AQMD	Lake County AQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	Lake County AQMD	Lake County AQMD		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	Urban	Neighborhood	Neighborhood		
Monitoring start date	7/1/2017	7/1/2017	7/1/2017		
Current sampling frequency	Continuous	1:6	1:6		
Required sampling frequency including exceptional events	N/A	1:6	1:6		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.8	4.5	4.5		
Distance from supporting structure (meters)	2.2	2	2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10m	>10m	>10m		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.2	N/A	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	1/mo	1/mo		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	6/13/2023	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	06/13/23 11/16/23	06/13/23 11/16/23		

Note: The Lake County AQMD is working with EPA to resolve District staffing and funding issues, as well as identifying equipment options for PM10 & PM2.5 to resolve the sampling frequency notes for Lakeport.

Mariposa County APCD

Local Site Name:	Jerseydale (seasonal)				
AQS ID:	06-043-0006				
GPS Coordinates:	37.54377, -119.83957				
Street Address:	6440 Jerseydale, Mariposa, 95338				
County:	Mariposa				
Distance to roadways (meters):	184 to Jerseydale Road				
Traffic Count (AADT,year)	Not available				
Ground Cover:	Grass				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Regional				
Monitoring start date	07/01/1995				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Apr - 31-Oct				
Probe height (meters)	4				
Distance from supporting structure (meters)	1.4				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.2				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/9/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	Yosemite Village - Visitor Center				
AQS ID:	06-043-1001				
GPS Coordinates:	37.74871, -119.58709				
Street Address:	Visitors Center, Yosemite Village, Yosemite National Park, 95389				
County:	Mariposa				
Distance to roadways (meters):	220 to Northside Drive				
Traffic Count (AADT,year)	Not available				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM10, 3	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	81102	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	Other			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020			
Method code	122	731			
FRM/FEM/ARM/Other	FEM	Other			
Collecting Agency	CARB	CARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	CARB	CARB			
Spatial scale	Middle	Middle			
Monitoring start date	8/9/2014	2/1/2002			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	8.6	8.4			
Distance from supporting structure (meters)	2.2	2			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10*			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	No			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	Monthly	Monthly	Notes:		
Frequency of one-point QC check for gaseous instruments	N/A	N/A	* ARB and EPA concluded that the PM2.5 sampler is not FEM and is not subject to federal siting criteria of CFR Title 40, Part 58, Appendix E; see AQDA issued on 5-15-12.		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	04/13/23 10/10/23	04/13/23 10/10/23			

Local Site Name:	Yosemite NP - Turtleback Dome				
AQS ID:	06-043-0003				
GPS Coordinates:	37.713251, -119.706196				
Street Address:	Turtleback Dome, Yosemite National Park				
County:	Mariposa				
Distance to roadways (meters):	> 100				
Traffic Count (AADT,year)	Not available				
Ground Cover:					
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	General Background				
Monitor type(s)	Non-EPA Federal				
Network affiliation(s)	CASTNET				
Instrument manufacturer and model	Thermo 49C				
Method code	47				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	National Park Service				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	National Park Service				
Spatial scale	Regional				
Monitoring start date	9/1/1990				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	10				
Distance from supporting structure (meters)					
Distance from obstructions on roof (meters)					
Height above probe for obstructions on roof (meters)					
Distance from obstructions not on roof (meters)	>50				
Height above probe for obstructions not on roof (meters)	10				
Distance to nearest tree drip line (meters)					
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)					
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.0				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/10/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Mendocino County AQMD

Local Site Name	Fort Bragg - 300 Dana Street				
AQS ID	06-045-0010				
GPS Coordinates	39.43734, -123.78766				
Street Address	300 Dana Street, Fort Bragg, 95437				
County	Mendocino				
Distance to roadways (meters)	1,564 to CA-1				
Traffic Count (AADT,year)	19,300 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Ukiah Micropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	General Background				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mendocino County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	08/17/2011				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6.9				
Distance from supporting structure (meters)	2.6				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	Yes				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/24/23 11/16/23				

Local Site Name	Ukiah - Gobbi Street				
AQS ID	06-045-0008				
GPS Coordinates	39.14566, -123.20298				
Street Address	306 E. Gobbi St, Ukiah, 95482				
County	Mendocino				
Distance to roadways (meters)	570 to US-101				
Traffic Count (AADT,year)	22,800 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Ukiah Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API T265				
Method code	199				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mendocino County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	08/01/1992				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	7				
Distance from supporting structure (meters)	3				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.9				
Will there be changes within the next 18 months?	Yes				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/25/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Ukiah - Library				
AQS ID	06-045-0006				
GPS Coordinates	39.15047, -123.20655				
Street Address	105 N. Main St, Ukiah, 95482				
County	Mendocino				
Distance to roadways (meters)	847 to US-101				
Traffic Count (AADT,year)	29,200 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Ukiah Micropolitan Statistical Area				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88101				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	170				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mendocino County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	12/31/2008				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	9.5				
Distance from supporting structure (meters)	2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	Yes				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/25/23 11/16/23				

Local Site Name	Willits - Blosser Lane				
AQS ID	06-045-2003				
GPS Coordinates	39.39861, -123.35872				
Street Address	1277 Blosser Lane, Willits, 95490				
County	Mendocino				
Distance to roadways (meters)	595 to State Hwy 20				
Traffic Count (AADT,year)	23,600 (2015)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	Ukiah Micropolitan Statistical Area				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88101				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	170				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mendocino County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	2/4/2021				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.3				
Distance from supporting structure (meters)	2.5				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	Yes				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/24/23 11/16/23				

Mojave Desert AQMD

Local Site Name	Barstow				
AQS ID	06-071-0001				
GPS Coordinates	34.89405, -117.02471				
Street Address	301 E. Mountain View St., Barstow, 92311				
County	San Bernardino				
Distance to roadways (meters)	890 to I-15; 890 to CA-247				
Traffic Count (AADT,year)	66,000 (I-15); 18,400 (CA-247) (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 1		
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary		
Parameter Code	42602	44201	81102		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 200U	Teledyne API 400T	Met One BAM 1020		
Method code	99	87	122		
FRM/FEM/ARM/Other	FRM	FEM	FEM		
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Spatial scale	Middle	Middle	Neighborhood		
Monitoring start date	01/01/1973	01/01/1974	01/01/2014		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	5.2	5.2	5.7		
Distance from supporting structure (meters)	1	1	2.5		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.2	14.7	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly		
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	Every 2 weeks	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/14/2023	3/14/2023	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	03/14/23 09/20/23		

Local Site Name	Hesperia-Olive Street				
AQS ID	06-071-4001				
GPS Coordinates	34.41650, -117.28559				
Street Address	17288 Olive St, Hesperia, 92340				
County	San Bernardino				
Distance to roadways (meters)	105 to Olive Street; 36 to H Avenue				
Traffic Count (AADT,year)	Not available				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure; General Background			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400T	Met One BAM 1020			
Method code	87	122			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	01/01/1980	01/01/2014			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4	4.5			
Distance from supporting structure (meters)	1	>2			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	2.7	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/2/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/02/23 09/20/23			

Local Site Name:	Joshua Tree National Monument - Black Rock				
AQS ID:	06-071-9002				
GPS Coordinates:	34.06957, -116.38893				
Street Address:	Joshua Tree National Monument, CA 92239				
County:	San Bernardino				
Distance to roadways (meters):	13 (Campground Rd)				
Traffic Count (AADT,year)	Not available				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	non-EPA Federal				
Network affiliation(s)	CASTNET				
Instrument manufacturer and model	Thermo 491				
Method code	47				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	National Park Service				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	National Park Service				
Spatial scale	Regional				
Monitoring start date	10/1/1993				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	10.3				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.5				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	not audited in 2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	Lucerne Valley - Middle School				
AQS ID:	06-071-0013				
GPS Coordinates:	34.41008, -116.90687				
Street Address:	8560 Aliento Rd, Lucerne Valley, 92356				
County:	San Bernardino				
Distance to roadways (meters):	345 to CA-18				
Traffic Count (AADT,year)	8,100 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 1			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400T	Met One BAM 1020			
Method code	87	122			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	1/1/2024	1/14/2015			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	3	3			
Distance from supporting structure (meters)	1.1	2.2			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	N/A (No trees)	N/A (No trees)			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	270			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	3.3	N/A			
Will there be changes within the next 18 months?	Yes	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	TBD	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/02/23 09/20/23			

Local Site Name:	Mojave National Preserve				
AQS ID:	06-071-1001				
GPS Coordinates:	35.10190, -115.77670				
Street Address:	47411 Canyon Back Rd, Kelso, 92309				
County:	San Bernardino				
Distance to roadways (meters):	30,800 to I-15				
Traffic Count (AADT,year)	42,000 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	Public Information				
Site type(s)	General Background				
Monitor type(s)	non-EPA Federal				
Network affiliation(s)	N/A				
Instrument manufacturer and model	2B Technologies M202				
Method code	190				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	National Park Service				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	National Park Service				
Spatial scale	Regional				
Monitoring start date	5/9/2007				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	not audited				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	not audited				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

*Last Sample Date was 10/31/2020; Site is not currently scheduled to be audited due to location, access, and power issues; not reporting data to AQS

Local Site Name:	Trona - Athol/Telescope #2				
AQS ID:	06-071-1234				
GPS Coordinates:	35.771470, -117.37210				
Street Address:	Telescope & Athol, Trona, 93562				
County:	San Bernardino				
Distance to roadways (meters):	375 to CA-178				
Traffic Count (AADT,year)	2,300 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 2		
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary		
Parameter Code	42602	44201	81102		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Source Impact	Population Exposure	Highest Concentration; Source Impact		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 200U	Teledyne API 400T	Met One BAM 1020		
Method code	99	87	122		
FRM/FEM/ARM/Other	FRM	FEM	FEM		
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	04/01/1997	04/01/1997	6/1/1997		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.2	4.2	4.6		
Distance from supporting structure (meters)	1.2	1.2	>10		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.5	9.4	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly		
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	Every 2 weeks	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/20/2023	9/20/2023	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	04/11/23 09/20/23		

Local Site Name:	Victorville - Park Avenue				
AQS ID:	06-071-0306				
GPS Coordinates:	34.51096, -117.32555				
Street Address:	14306 Park Av, Victorville, 92392				
County:	San Bernardino				
Distance to roadways (meters):	416 to CA-18; 416 to I-15				
Traffic Count (AADT,year)	40,000 (CA-18); 87,000 (I-15) (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 1	PM2.5, 1	PM2.5, 2
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	QA-Audit
Parameter Code	42602	44201	81102	88101	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Regional Transport; Population Exposure	Regional Transport; Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 200U	Teledyne API 400T	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020
Method code	99	87	122	170	170
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	FEM
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	01/01/2000	01/01/2000	1/1/2014	1/1/2016	1/1/2016
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	1:6
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	6.9	6.9	7.5	7.6	7.6
Distance from supporting structure (meters)	1.9	1.9	2	2.1	2.1
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	N/A (no trees)	N/A (no trees)	N/A (no trees)	N/A (no trees)	N/A (no trees)
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	2	2
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	16.8	17.4	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	Yes	Yes
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	Yes
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	Monthly	N/A
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	Every 2 weeks	N/A	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/1/2023	3/1/2023	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	03/01/23 09/20/23	03/01/23 09/20/23	03/01/23 09/20/23

Local Site Name	Blythe-Murphy Street				
AQS ID	06-065-9003				
GPS Coordinates	33.61235, -114.60209				
Street Address	445 W Murphy St, Blythe, 92225				
County	Riverside				
Distance to roadways (meters)	674 to I-10				
Traffic Count (AADT,year)	27,200 (2015)				
Ground Cover	Unpaved				
Representative statistical area name (i.e. MSA, CBSA, other)	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS, Public Information				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne T400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Neighborhood				
Monitoring start date	05/01/2003				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6.5				
Distance from supporting structure (meters)	2				
Distance from obstructions on roof (meters)	N/A				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	N/A				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A (No trees)				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.6				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/28/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Northern Sierra AQMD

Local Site Name:	Chester				
AQS ID:	06-063-1007				
GPS Coordinates:	40.30965, -121.22785				
Street Address:	222 1st Ave, Chester 96020				
County:	Plumas				
Distance to roadways (meters):	133 to CA-36				
Traffic Count (AADT,year)	4,800 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM2.5, 4				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88502				
Basic monitoring objective(s)	Public Information				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	731				
FRM/FEM/ARM/Other	Other				
Collecting Agency	Northern Sierra AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Northern Sierra AQMD				
Spatial scale	Neighborhood				
Monitoring start date	3/1/2020				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	7.2				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	No				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	02/15/23 07/28/23				

Local Site Name:	Grass Valley-Litton Building				
AQS ID:	06-057-0005				
GPS Coordinates:	39.23352, -121.05567				
Street Address:	200 Litton Dr., Suite 320, Grass Valley, 95945				
County:	Nevada				
Distance to roadways (meters):	1,256 to CA-20				
Traffic Count (AADT,year)	37,000 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Truckee-Grass Valley Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	Met One BAM 1022			
Method code	87	209			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Northern Sierra	Northern Sierra			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Northern Sierra	Northern Sierra			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	06/01/1993	12/6/2017			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	11.9	12.1			
Distance from supporting structure (meters)	3.8	4			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	270	270			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.5	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Weekly	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	7/27/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/16/23 07/27/23			

Local Site Name:	Portola				
AQS ID:	06-063-1010				
GPS Coordinates:	39.81336, -120.47069				
Street Address:	420 N Gulling St, Portola, 96122				
County:	Plumas				
Distance to roadways (meters):	317 to CA-70				
Traffic Count (AADT,year)	6,600 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM2.5, 4				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88101				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	CSN supplemental				
Instrument manufacturer and model	Met One BAM 1022				
Method code	209				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sierra AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Northern Sierra AQMD				
Spatial scale	Neighborhood				
Monitoring start date	10/1/2022				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	8.3				
Distance from supporting structure (meters)	3				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	3				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	Yes				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	02/15/23 07/28/23				

Local Site Name:	Quincy-N Church Street				
AQS ID:	06-063-1006				
GPS Coordinates:	39.93957, -120.94438				
Street Address:	267 N Church Street, Quincy, 95971				
County:	Plumas				
Distance to roadways (meters):	270 to CA-70; 492 to CA-70				
Traffic Count (AADT,year)	4,800 (CA-70); 9,800 (CA-70) (2015)				
Ground Cover:	Grass				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88101				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1022				
Method code	209				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sierra AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Northern Sierra AQMD				
Spatial scale	Neighborhood				
Monitoring start date	10/1/2022				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	12.1				
Distance from supporting structure (meters)	4				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	Yes				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	02/15/23 07/28/23				

Local Site Name:	Truckee - Fire Station				
AQS ID:	06-057-1001				
GPS Coordinates:	39.32782, -120.18459				
Street Address:	10049 Donner Pass Rd, Truckee, 96161				
County:	Nevada				
Distance to roadways (meters):	825 to I-80				
Traffic Count (AADT,year)	33,000 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Truckee-Grass Valley Micropolitan Statistical Area				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Supplementary				
Parameter Code	88101				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	170				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sierra AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Northern Sierra AQMD				
Spatial scale	Neighborhood				
Monitoring start date	1/1/2007				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	10.2				
Distance from supporting structure (meters)	2.2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	Yes				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	02/16/23 07/27/23				

Northern Sonoma County APCD

Local Site Name	Cloverdale				
AQS ID	06-097-0001				
GPS Coordinates	38.80423, -123.01820				
Street Address	100 S. Washington St, Cloverdale, 95425				
County	Sonoma				
Distance to roadways (meters)	623 to US-101				
Traffic Count (AADT,year)	15,400 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Santa Rosa Metropolitan Statistical Area				
Pollutant, POC	PM10, 2				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sonoma				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	1/1/1990				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.9				
Distance from supporting structure (meters)	2.4				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/17/23 11/14/23				

Local Site Name	Guerneville-Church and 1st				
AQS ID	06-097-3002				
GPS Coordinates	38.50107, -122.99819				
Street Address	16255 1st Street Guerneville, 95446				
County	Sonoma				
Distance to roadways (meters)	160 to CA-116				
Traffic Count (AADT,year)	9,000 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Santa Rosa Metropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sonoma				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Neighborhood				
Monitoring start date	4/1/1990				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5				
Distance from supporting structure (meters)	2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/17/23 11/14/23				

Local Site Name:	Healdsburg - Matheson				
AQS ID:	06-097-0002				
GPS Coordinates:	38.61090, -122.86878				
Street Address:	133 Matheson St, Healdsburg, 95448				
County:	Sonoma				
Distance to roadways (meters):	540 to US-101				
Traffic Count (AADT,year)	40,500 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Santa Rosa Metropolitan Statistical Area				
Pollutant, POC	PM10, 2				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	General Background				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sonoma				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Urban				
Monitoring start date	5/21/1998				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6.5				
Distance from supporting structure (meters)	2.5				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/17/23 11/14/23				

Placer County APCD

Local Site Name:	Auburn - Atwood Rd				
AQS ID:	06-061-0003				
GPS Coordinates:	38.93568, -121.09959				
Street Address:	11645 Atwood Rd., Auburn, 95603				
County:	Placer				
Distance to roadways (meters):	446 to CA-49				
Traffic Count (AADT,year)	39,000 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 1			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	Met One BAM1020			
Method code	87	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Placer County	Placer County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	CARB	CARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	06/24/2011	1/1/2012			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	5.8	7			
Distance from supporting structure (meters)	2.8	4			
Distance from obstructions on roof (meters)	No obstacles	No obstacles			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstacles	No obstacles			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	15.8	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Every 8-10 days	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/2/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/7/2023 8/1/2023			

Local Site Name:	Colfax-City Hall				
AQS ID:	06-061-0004				
GPS Coordinates:	39.09979, -120.95391				
Street Address:	33 S. Main St., Colfax, 95713				
County:	Placer				
Distance to roadways (meters):	404 to CA-174; 567 to I-80				
Traffic Count (AADT,year)	6,100 (CA-174); 27,600 (I-80) (2015)				
Ground Cover:	Paved				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	Other			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	Met One BAM1020			
Method code	87	731			
FRM/FEM/ARM/Other	FEM	Other			
Collecting Agency	Placer County	Placer County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	CARB	CARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	01/01/1992	1/1/2012			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	6.7	7.5			
Distance from supporting structure (meters)	1.4	2.2			
Distance from obstructions on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.9	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	No			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Every 8-10 days	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/1/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/7/2023 8/1/2023			

Local Site Name:	Lincoln-Moore Road				
AQS ID:	06-061-2003				
GPS Coordinates:	38.86794, -121.33835				
Street Address:	2885 Moore Road, Lincoln, 95648				
County:	Placer				
Distance to roadways (meters):	20 to Moore Road				
Traffic Count (AADT,year)	500 (2019)				
Ground Cover:	Grass				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	Other			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	Met One BAM1020			
Method code	87	731			
FRM/FEM/ARM/Other	FEM	Other			
Collecting Agency	Placer County	Placer County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	CARB	CARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	11/1/2018	11/1/2018			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	3.6	4.4			
Distance from supporting structure (meters)	1.1	2.2			
Distance from obstructions on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	11.6	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	No			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Every 8-10 days	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	7/31/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/7/2023 7/31/2023			

Local Site Name:	Tahoe City-Fairway Drive				
AQS ID:	06-061-1004				
GPS Coordinates:	39.16602, -120.14883				
Street Address:	221 Fairway Drive, Tahoe City, 96145				
County:	Placer				
Distance to roadways (meters):	280 to CA- 89; 377 to CA-28				
Traffic Count (AADT,year)	10,800 (CA- 89); 11,800 (CA-28) (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	General Background	General Background			
Monitor type(s)	SLAMS	Other			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	Met One BAM1020			
Method code	87	731			
FRM/FEM/ARM/Other	FEM	Other			
Collecting Agency	Placer County	Placer County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	CARB	CARB			
Spatial scale	Urban	Urban			
Monitoring start date	11/01/2013	11/01/2013			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	3.6	4.4			
Distance from supporting structure (meters)	1.2	2			
Distance from obstructions on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.4	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	No			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Every 8-10 days	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/3/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/7/2023 8/3/2023			

Local Site Name:	Roseville-N Sunrise Ave				
AQS ID:	06-061-0006				
GPS Coordinates:	38.74643, -121.26498				
Street Address:	151 N Sunrise Ave, Roseville, 95661				
County:	Placer				
Distance to roadways (meters):	330 to I-80				
Traffic Count (AADT,year)	175,500 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	
Parameter Code	42602	44201	81102	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Highest Concentration	Highest Concentration	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	Other	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Thermo 42i	Teledyne API 400	Met One BAM 1020	Met One BAM 1020	
Method code	74	87	122	170	
FRM/FEM/ARM/Other	FRM	FEM	FEM	Other	
Collecting Agency	CARB	CARB	CARB	CARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	CARB	CARB	CARB	CARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	01/13/1993	01/13/1993	4/1/2015	12/1/2020	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	8.5	8.5	7.9	7.9	
Distance from supporting structure (meters)	3.5	3.5	2.9	2.9	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters	>10 meters	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	18.1	13.6	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	Monthly	
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/11/2023	5/11/2023	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	05/11/23 10/23/23	05/11/23 10/23/23	

Shasta County AQMD

Local Site Name	Anderson-North Street				
AQS ID	06-089-0007				
GPS Coordinates	40.45318, -122.29883				
Street Address	2220 North St, Anderson, 96007				
County	Shasta				
Distance to roadways (meters)	717 to CA-273; 818 to I-5				
Traffic Count (AADT,year)	8,600 (CA-273); 51,000 (I-5) (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Redding Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Shasta County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Shasta County				
Spatial scale	Neighborhood				
Monitoring start date	05/01/1993				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	7				
Distance from supporting structure (meters)	3				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.4				
Will there be changes within the next 18 months?	Site closed OCT 2023				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/15/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Lassen Volcanic NP				
AQS ID	06-089-3003				
GPS Coordinates	40.539991, -121.576462				
Street Address	Manzanita Lake RS, Lassen Volcanic NP				
County	Shasta				
Distance to roadways (meters)	778 to CA-44				
Traffic Count (AADT,year)	1,150 (2015)				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Redding Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS & Research				
Site type(s)	General Background				
Monitor type(s)	Non-EPA Federal				
Network affiliation(s)	CASTNET				
Instrument manufacturer and model	Thermo 49C				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	National Park Service				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	National Park Service				
Spatial scale	Regional				
Monitoring start date	11/1/1987				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	8				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	8 (Tree) *				
Height above probe for obstructions not on roof (meters)	15				
Distance to nearest tree drip line (meters)	7.5 *				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	6.5				
Frequency of flow rate verification for automated PM analyzers	N/A		Notes:		
Frequency of one-point QC check for gaseous instruments	Daily		* Distance to tree is 8m; height unknown. Waiver (EPA) was granted in 2014.		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/15/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	Redding - Health Department				
AQS ID:	06-089-0004				
GPS Coordinates:	40.55013, -122.38092				
Street Address:	2630 Breslauer Way, Redding, 96001				
County:	Shasta				
Distance to roadways (meters):	530 to CA-273				
Traffic Count (AADT,year)	19,200 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Redding Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 1	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Supplementary	Primary	
Parameter Code	44201	81102	88101	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure; Highest Concentration	Highest Concentration	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 400	Sierra Andersen 1200	R & P 2000	Met One BAM 1022	
Method code	87	63	143	209	
FRM/FEM/ARM/Other	FEM	FRM	FRM	FEM	
Collecting Agency	Shasta County	Shasta County	Shasta County	Shasta County	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB	N/A	
Reporting Agency	Shasta County	ARB	ARB	Shasta County	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	05/01/1990	01/01/1988	02/19/1998	2/23/2019	
Current sampling frequency	Continuous	1:6	1:12	Continuous	
Required sampling frequency including exceptional events	N/A	1:6	1:12	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	9.6	8.3	8.7	9	
Distance from supporting structure (meters)	3	>2	>2	>2	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	>2	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, Pyrex Borosilicate	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.6	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	Yes	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes	No	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Quarterly	Monthly	Monthly	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	Weekly	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/14/2023	N/A	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/14/23 08/21/23	03/14/23 08/21/23	03/14/23 08/21/23	

Local Site Name:	Shasta Lake - Lake Blvd				
AQS ID:	06-089-0009				
GPS Coordinates:	40.68908, -122.40226				
Street Address:	13791 Lake Blvd., Shasta Lake, 96019				
County:	Shasta				
Distance to roadways (meters):	259 to CA-151				
Traffic Count (AADT,year)	1,650 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Redding Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 265				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Shasta County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Shasta County				
Spatial scale	Neighborhood				
Monitoring start date	04/01/2009				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.1				
Distance from supporting structure (meters)	1.5				
Distance from obstructions on roof (meters)	no obstructions *				
Height above probe for obstructions on roof (meters)	1.5				
Distance from obstructions not on roof (meters)	no obstructions *				
Height above probe for obstructions not on roof (meters)	30.5				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, Pyrex Borosilicate				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	19.4				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A		Notes:		
Frequency of one-point QC check for gaseous instruments	weekly		* Cell tower is not considered an obstruction. Distance to probe is 6m.		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/14/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Siskiyou County APCD

Local Site Name	Yreka				
AQS ID	06-093-2001				
GPS Coordinates	41.72679, -122.63359				
Street Address	530 S. Foothill Dr., Yreka, 96097				
County	Siskiyou				
Distance to roadways (meters)	437 to I-5; 496 to CA-3				
Traffic Count (AADT,year)	16,500 (I-5); 8,700 (CA-3) (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary following POC 1 shutdown			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Highest Conc; Regional Transport; Pop. Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400E	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Siskiyou County	Siskiyou County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	Siskiyou County			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	01/01/1981	7/1/2018			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	3.4	3.7			
Distance from supporting structure (meters)	N/A	N/A			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	4.3	N/A			
Will there be changes within the next 18 months?	NO	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Biweekly			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Daily	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/16/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/16/23 08/22/23			

Tehama County APCD

Local Site Name	Red Bluff - Walnut Street				
AQS ID	06-103-0007				
GPS Coordinates	40.17088, -122.25556				
Street Address	1834 Walnut Street, Red Bluff, 96080				
County	Tehama				
Distance to roadways (meters)	1,860 to CA-36				
Traffic Count (AADT,year)	11,400 (2015)				
Ground Cover	Grass				
Representative statistical area name (i.e. MSA, CBSA, other)	Red Bluff Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 3	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	85101	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Highest Concentration	General Background		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM1022		
Method code	87	122	209		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	Tehama County APCD	Tehama County APCD	Tehama County APCD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	1/29/2015	4/11/2023	4/14/2023		
Current sampling frequency	Continuous	1:6	Continuous		
Required sampling frequency including exceptional events	N/A	1:6	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	6.9	6.4	6.2		
Distance from supporting structure (meters)	2.4	2.7	>2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	17	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Pyrex, borosilicate glass	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.9	N/A	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	N/A		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly	Monthly		
Frequency of one-point QC check for gaseous instruments	Weekly	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/13/2023	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/13/23 08/21/23	03/13/23 08/21/23		

Local Site Name	Tuscan Butte (seasonal)				
AQS ID	06-103-0004				
GPS Coordinates	40.26207, -122.09265				
Street Address	Fire Lookout Atop Tuscan Butte, Tuscan Butte, 95080				
County	Tehama				
Distance to roadways (meters)	3,076 to CA-36				
Traffic Count (AADT,year)	1,200 (2015)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	Red Bluff Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Regional				
Monitoring start date	06/01/1995				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	Apr-Oct				
Probe height (meters)	4.3				
Distance from supporting structure (meters)	1.1				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A (No trees)				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	5.7				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/8/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Tuolumne County APCD

Local Site Name:	Sonora - Barretta Street				
AQS ID:	06-109-0005				
GPS Coordinates:	37.98178, -120.37855				
Street Address:	251 S. Barretta St, Sonora, 95370				
County:	Tuolumne				
Distance to roadways (meters):	355 to CA-49				
Traffic Count (AADT,year)	18,300 (2015)				
Ground Cover:	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other):	Sonora Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	CARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	CARB				
Spatial scale	Neighborhood				
Monitoring start date	07/01/1992				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.8				
Distance from supporting structure (meters)	1.0				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	23.0				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/21/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Ventura County APCD

Local Site Name:	El Rio-Rio Mesa School #2				
AQS ID:	06-111-3001				
GPS Coordinates:	34.25239, -119.14318				
Street Address:	545 Central Av, El Rio, 93030				
County:	Ventura				
Distance to roadways (meters):	1,116 to CA-232				
Traffic Count (AADT,year)	14,600 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	N/A	
Parameter Code	42602	44201	81102	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	PAMS	PAMS	N/A	N/A	
Instrument manufacturer and model	Teledyne API 200	Teledyne API 400	Met One BAM 1020	Met One BAM 1020	
Method code	99	87	122	170	
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	
Collecting Agency	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD	
Spatial scale	Urban	Urban	Neighborhood	Neighborhood	
Monitoring start date	01/01/1980	01/01/1979	07/22/2012	01/26/2012	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	4.4	4.4	4.6	4.7	
Distance from supporting structure (meters)	1.9	1.9	2.1	2.2	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, borosilicate glass	Teflon, borosilicate glass	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.1	14.2	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Biweekly	Biweekly	
Frequency of one-point QC check for gaseous instruments	Every Other Day	Every Other Day	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	12/19/2023	11/15/2023	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	04/25/23 11/15/23	04/25/23 11/15/23	

Local Site Name:	Ojai - East Ojai Ave				
AQS ID:	06-111-1004				
GPS Coordinates:	34.44806, -119.23130				
Street Address:	1201 E. Ojai Ave, Ojai, 93023				
County:	Ventura				
Distance to roadways (meters):	366 to CA-150				
Traffic Count (AADT,year)	6,500 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Ventura County APCD	Ventura County APCD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Ventura County APCD	Ventura County APCD			
Spatial scale	Urban	Neighborhood			
Monitoring start date	04/01/1996	11/29/2011			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.4	4.8			
Distance from supporting structure (meters)	1.9	2.3			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	None			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, borosilicate glass	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.5	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Biweekly			
Frequency of one-point QC check for gaseous instruments	Every Other Day	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	11/16/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/26/23 11/16/23			

Local Site Name:	Piru - Pacific				
AQS ID:	06-111-0009				
GPS Coordinates:	34.40428, -118.80998				
Street Address:	3301 Pacific Ave, Piru, 93040				
County:	Ventura				
Distance to roadways (meters):	403 to CA-126				
Traffic Count (AADT,year)	23,500 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Highest Concentration			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Ventura County APCD	Ventura County APCD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Ventura County APCD	Ventura County APCD			
Spatial scale	Urban	Neighborhood			
Monitoring start date	11/03/2000	11/15/2011			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.4	4.9			
Distance from supporting structure (meters)	1.8	2.3			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, borosilicate glass	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.6	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Biweekly			
Frequency of one-point QC check for gaseous instruments	Every Other Day	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	11/16/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/26/23 11/16/23			

Local Site Name:	Simi Valley - Cochran Street				
AQS ID:	06-111-2002				
GPS Coordinates:	34.27632, -118.68369				
Street Address:	5400 Cochran St, Simi Valley, 93063				
County:	Ventura				
Distance to roadways (meters):	758 to CA-118				
Traffic Count (AADT,year)	125,000 (2015)				
Ground Cover:	Paved				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 3	PM2.5, 4
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	Primary	QA-Audit
Parameter Code	42602	44201	81102	88101	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	Public Information
Site type(s)	Highest Concentration	Highest Concentration	Population Exposure	Highest Concentration	Highest Concentration
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	PAMS	PAMS	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 200	Teledyne API 400	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020
Method code	99	87	122	170	170
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	FEM
Collecting Agency	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD
Spatial scale	Urban	Urban	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	06/01/1985	06/01/1985	06/19/2012	06/29/2013	03/17/2014
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	Continuous
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	3.6	3.6	4.6	4.8	4.8
Distance from supporting structure (meters)	1.1	1.1	2.1	2.3	2.3
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	None	None
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	2.1	2.1
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, borosilicate glass	Teflon, borosilicate glass	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.9	14.4	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	Yes
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Biweekly	Biweekly	Biweekly
Frequency of one-point QC check for gaseous instruments	Every Other Day	Every Other Day	N/A	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	12/20/2023	11/14/2023	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	04/25/23 11/14/23	04/25/23 11/14/23	04/25/23 11/14/23

Local Site Name:	Thousand Oaks-Moorpark Road				
AQS ID:	06-111-0007				
GPS Coordinates:	34.21017, -118.87051				
Street Address:	2323 Moorpark Rd, Thousand Oaks, 91360				
County:	Ventura				
Distance to roadways (meters):	1,622 to CA-23				
Traffic Count (AADT,year)	112,000 (2015)				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Ventura County APCD	Ventura County APCD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Ventura County APCD	Ventura County APCD			
Spatial scale	Urban	Neighborhood			
Monitoring start date	03/01/1992	01/07/2012			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.4	4.9			
Distance from supporting structure (meters)	1.8	2.3			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, borosilicate glass	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.5	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Biweekly			
Frequency of one-point QC check for gaseous instruments	Every Other Day	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/31/2023	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/25/23 10/31/23			

Yolo-Solano AQMD

Local Site Name:	Vacaville-Merchant Street				
AQS ID:	06-095-3001				
GPS Coordinates:	38.35140, -121.99410				
Street Address:	650 Merchant St, Vacaville, 95688				
County:	Solano				
Distance to roadways (meters):	607 to I-80				
Traffic Count (AADT,year)	174,000 (2015)				
Ground Cover:	Grass and asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Vallejo-Fairfield Metropolitan Statistical Area				
Pollutant, POC	PM10, 2				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	GMW Model 1200				
Method code	63				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Yolo-Solano AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	01/01/1988				
Current sampling frequency	1:6				
Required sampling frequency including exceptional events	1:6				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	8.5				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/04/23 10/25/23				

Local Site Name:	Vacaville-Ulatis Drive				
AQS ID:	06-095-3003				
GPS Coordinates:	38.35655, -121.94986				
Street Address:	2012 Ulatis Drive, Vacaville, 95687				
County:	Solano				
Distance to roadways (meters):	1,500 to I-80				
Traffic Count (AADT,year)	169,000 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Vallejo-Fairfield Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure; Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API T400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Yolo-Solano AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	07/21/2003				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.4				
Distance from supporting structure (meters)	2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.7				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/4/2023				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	West Sacramento-15th Street				
AQS ID:	06-113-2001				
GPS Coordinates:	38.57146, -121.52579				
Street Address:	132 W. 15th St, West Sacramento, 95691				
County:	Yolo				
Distance to roadways (meters):	1,338 to I-5; 1,338 to US-50				
Traffic Count (AADT,year)	179,000 (2015)				
Ground Cover:	Pavement				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	GMW Model 1200				
Method code	63				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Yolo-Solano AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	09/01/1990				
Current sampling frequency	1:6				
Required sampling frequency including exceptional events	1:6				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6.1				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	05/04/23 10/25/23				

Local Site Name:	Woodland-Gibson Road				
AQS ID:	06-113-1003				
GPS Coordinates:	38.66121, -121.73269				
Street Address:	41929 E Gibson Rd, Woodland, 95776				
County:	Yolo				
Distance to roadways (meters):	1,442 to I-5; 1,642 to CA-113				
Traffic Count (AADT,year)	47,300 (2015)				
Ground Cover:	Grass				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 1	PM2.5, 1	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Supplementary	
Parameter Code	44201	81102	88101	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API T400	GMW Model 1200	R & P 2025	Met One BAM 1020	
Method code	87	63	145	170	
FRM/FEM/ARM/Other	FEM	FRM	FRM	FEM	
Collecting Agency	Yolo-Solano AQMD	Yolo-Solano AQMD	Yolo-Solano AQMD	Yolo-Solano AQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB	N/A	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	05/27/1998	10/26/1998	01/09/1999	12/12/2022	
Current sampling frequency	Continuous	1:6	1:6	Continuous	
Required sampling frequency including exceptional events	N/A	1:6	1:6	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	3.6	2.2	2.1	4.8	
Distance from supporting structure (meters)	1	>2	2	2.3	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.0	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	No	Yes	Yes	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Monthly	Monthly	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly	
Frequency of one-point QC check for gaseous instruments	Weekly	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/3/2023	N/A	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	05/03/23 10/25/23	05/03/23 10/25/23	05/03/23 10/25/23	

Local Site Name:	Davis-UCD Campus				
AQS ID:	06-113-0004				
GPS Coordinates:	38.53455, -121.77340				
Street Address:	Campbell Rd, Davis, 95616				
County:	Yolo				
Distance to roadways (meters):	502 to CA-113				
Traffic Count (AADT,year)	39,300 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary		
Parameter Code	42602	44201	88502		
Basic monitoring objective(s)	NAAQS	NAAQS	Public Information		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	Other		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Thermo 42iQ	Teledyne API 400	Met One BAM 1020		
Method code	74	87	731		
FRM/FEM/ARM/Other	FRM	FEM	Other		
Collecting Agency	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	05/21/1996	09/01/1987	8/14/2003		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	5.1	5.1	5.4		
Distance from supporting structure (meters)	1.7	1.7	2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.7	10.1	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	No		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/15/2023	8/15/2023	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	02/08/23 08/15/23		

Appendix B

Ozone Seasonal Monitoring Waiver
Renewal Request

Ozone Seasonal Monitoring Sites Waiver Renewal Request

WAIVER JUSTIFICATION FOR SEASONAL OZONE MONITORING SITES

California's ozone monitoring season is defined in 40 Code of Federal Regulations (CFR) Part 58, Appendix D, Table D-3, as January through December. However, section 4.1(i) of the same regulation allows for deviations from the listed ozone season on a state-by-state basis, provided that sufficient information is provided to the United States Environmental Protection Agency (U.S. EPA) and approved by the Regional Administrator. The California Air Resources Board (CARB) maintains five ozone monitors that only operate seasonally during the months of April through October. None of these monitors have ever operated year-round. The purpose of this document is to provide justification for continuing the waivers utilizing the most recent data and evaluating those data against the current 0.070 ppm federal 8-hour standard.

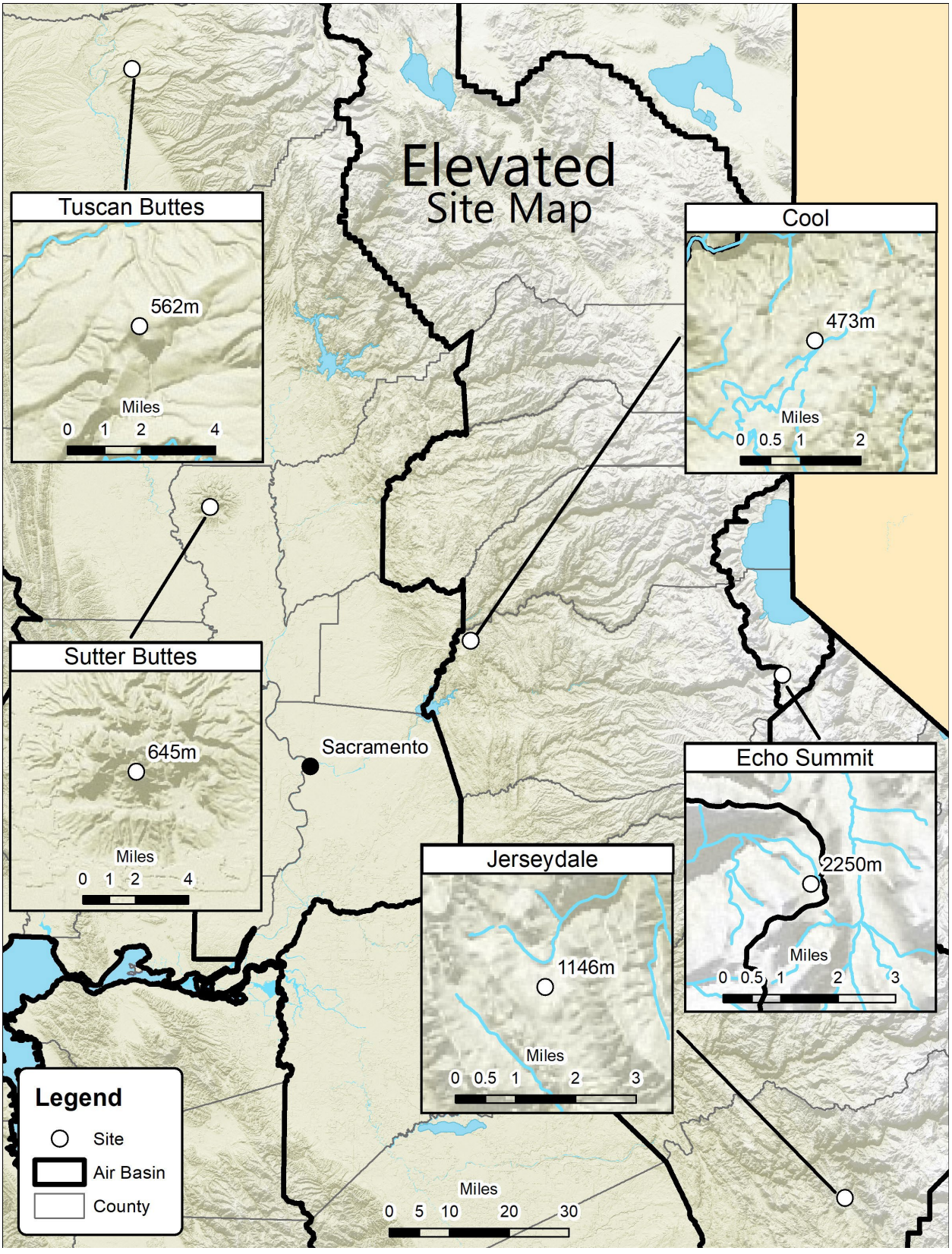
CARB staff has updated several tables and graphs which demonstrated in the past that an April through October monitoring season is adequate for the five seasonal ozone monitors. The following analyses provide the justification needed for the U.S. EPA to continue to grant a waiver for the seasonal monitoring sites, in accordance with 40 CFR Part 58.12 (a)(3). The five ozone monitors included in the analyses are listed in Table 1 and shown in Figure 1.

TABLE 1
SEASONAL OZONE MONITORS

Site Name	AQS ID	County	Start Year	Current Operating Season	Preliminary 2023 Design Value (ppm)[1]
Echo Summit[2]	060170012	El Dorado	2000	April-October	0.070
Cool	060170020	El Dorado	1996	April-October	0.075
Jerseydale[3]	060430006	Mariposa	1995	April-October	0.073
Sutter Buttes	061010004	Sutter	1993	April-October	0.071
Tuscan Butte	061030004	Tehama	1995	April-October	0.072

[1] Ozone data obtained on March 29, 2024, from CARB's AQMIS database: *https://www.arb.ca.gov/aqmis2/aqmis2.php*
[2] Echo Summit site did not operate in April of 2019 through 2023, and September and October of 2021.
[3] Jerseydale site did not operate in April of 2019.

FIGURE 1
CARB SEASONAL OZONE MONITORING SITES



Ozone concentration data used in the analyses were retrieved from CARB's AQMIS databases in March 2024. Average of the monthly maximum 8-hour ozone concentrations for each seasonal site covering a 5-year period from 2019 to 2023 are shown in Figures 2 through 6. In addition to averages for the seasonal sites, averages for the closest surrounding site(s) that operate year-round are also depicted. Beginning with 2016, ozone monitoring season was extended to include April. However, some of the seasonal sites were not operated in April during certain years (Echo Summit in 2019 through 2023; Jerseydale in 2019) due to weather conditions that resulted in the impassable of the access roads to the sites. Additionally, to enhance understanding of the seasonal variations in ozone concentrations, the highest monthly maximum 8-hour ozone concentrations for each of the five years are also shown in Table 2.

Figures 2 to 6 and Table 2 indicate that seasonal sites and their surrounding site(s) show similar seasonal variations and have higher concentrations during summer months (June through September), when weather conditions are conducive to ozone formation and buildup. It shows that the average concentrations at the seasonal sites during June through September were 11 percent higher than the averages of the preceding months (April and May) and 9 percent higher than the averages of the following month (October). Concentrations at the year-round sites show that the average percent difference between the months of March to April was 13 percent, which is 1.6 times higher than those between the months of April to May (9 percent). In addition, on average, the concentrations dropped 11 percent from September to October, and 25 percent from October to November. These indicate that maximum ozone concentrations are significantly lower in the early spring and late fall months than in the summer ozone season months. Thus, for the seasonal ozone monitoring sites, the April through October monitoring season captures the highest annual concentrations.

In addition, the fourth-highest daily maximum 8-hour average ozone concentrations, used in calculating design values, were also estimated. These Design values are compared with the federal standard to determine an area's designation status. The annual fourth-highest daily maximum 8-hour average ozone concentrations for each of the seasonal and year-round sites are shown in Table 3, along with the measurement date. Nearly all of the fourth-highest concentrations occurred between June and September, indicating that those are the key monitoring months.

The Sutter Buttes and the Tuscan Butte sites present unique situations. Sutter Buttes and Tuscan Butte are high elevation sites, located on isolated hilltops (refer to Figures 7 and 8). The sites were originally deployed to measure the impact of pollutant transport. Because there are no nearby developed areas, ozone concentrations measured at Sutter Buttes and Tuscan Butte are not representative of population exposure. U.S. EPA recognized the uniqueness of the Sutter Buttes site when promulgating area designations for the 0.080 ppm federal 8-hour ozone standard. U.S. EPA limited the nonattainment area to the area immediately surrounding the Sutter Buttes monitor. Although concentrations at Sutter Buttes are higher than those at Yuba City (the closest populated area), concentrations continue to decrease. Tuscan Butte

received similar recognition during designations for the 0.075 ppm federal 8-hour standard and the area immediately surrounding the monitor was designated as a nonattainment area.

To account for the lower concentration of the current ozone standard, ozone concentrations were evaluated at two thresholds suggested by U.S. EPA: 0.070 ppm, the current ozone standard threshold (Table 4), and 0.054 ppm, the moderate Air Quality Index (AQI) threshold (Table 5). The tables show counts of the number of days above each threshold by site and month. Tables 4 and 5 indicate that there are no exceedances of the 0.070 ppm standard and a few exceedances above the 0.054 ppm threshold at the year-round sites between the months of November and March. Both Tables 4 and 5 clearly indicate that monitoring, based on concentration information alone, is not needed from November through March. Therefore, the current April through October operating season will continue to be adequate.

In addition to air quality, there are other considerations for maintaining a seasonal monitoring schedule at the Echo Summit, Cool, Jerseydale, Sutter Buttes, and Tuscan Butte locations. For instance, all five seasonal monitoring sites are located in remote, mountainous areas, and at significant distances from CARB headquarters in Sacramento. Also, as denoted in Figure 1, all of the monitors are located at high elevations, with the lowest site, Cool, at 473 meters (1,552 feet) and the highest site, Echo Summit, at 2,250 meters (7,382 feet). These physical characteristics require significant time and resources for servicing the monitoring equipment. Winter weather conditions further complicate the issue, at times making the access roads impassable due to a lack of plowing and unsafe for travel.

Based on our analyses of the measured data against the current 0.070 ppm federal 8-hour standard and other considerations, CARB finds that the April through October monitoring season continues to be adequate for capturing the highest ozone concentrations at the Echo Summit, Cool, Jerseydale, Sutter Buttes, and Tuscan Butte monitoring sites. Therefore, CARB is recommending that U.S. EPA grant a renewal waiver for seasonal monitoring (April through October) at these sites, in accordance with 40 CFR Part 58.12 (a)(3).

FIGURE 2

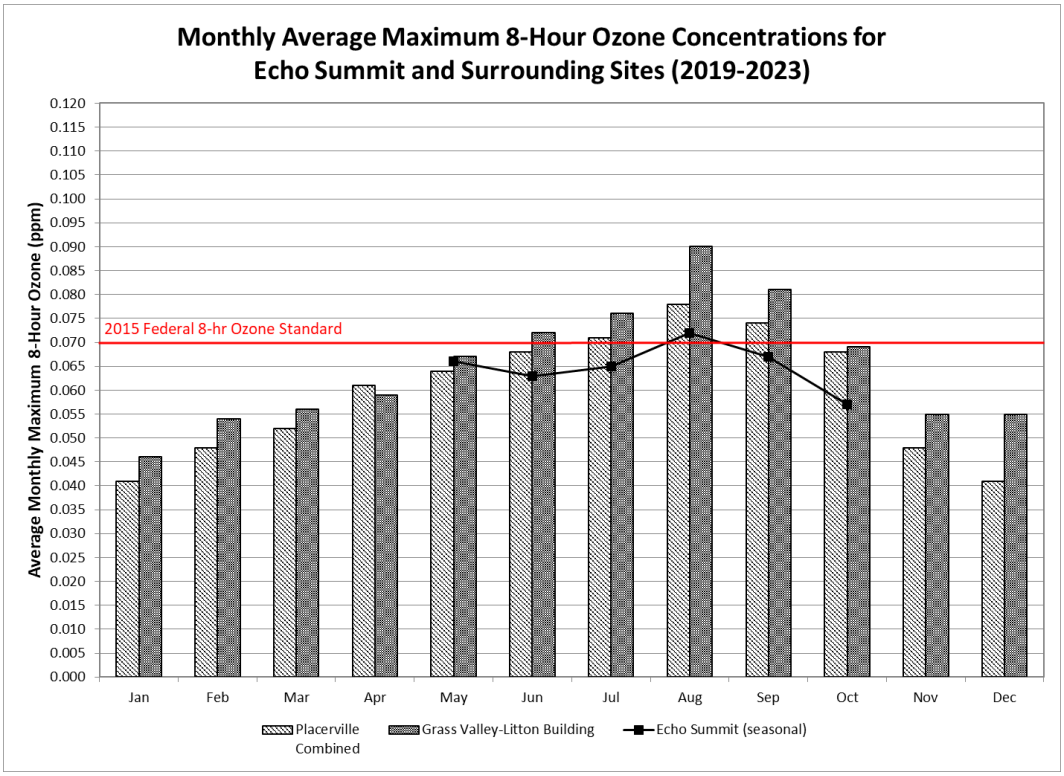


FIGURE 3

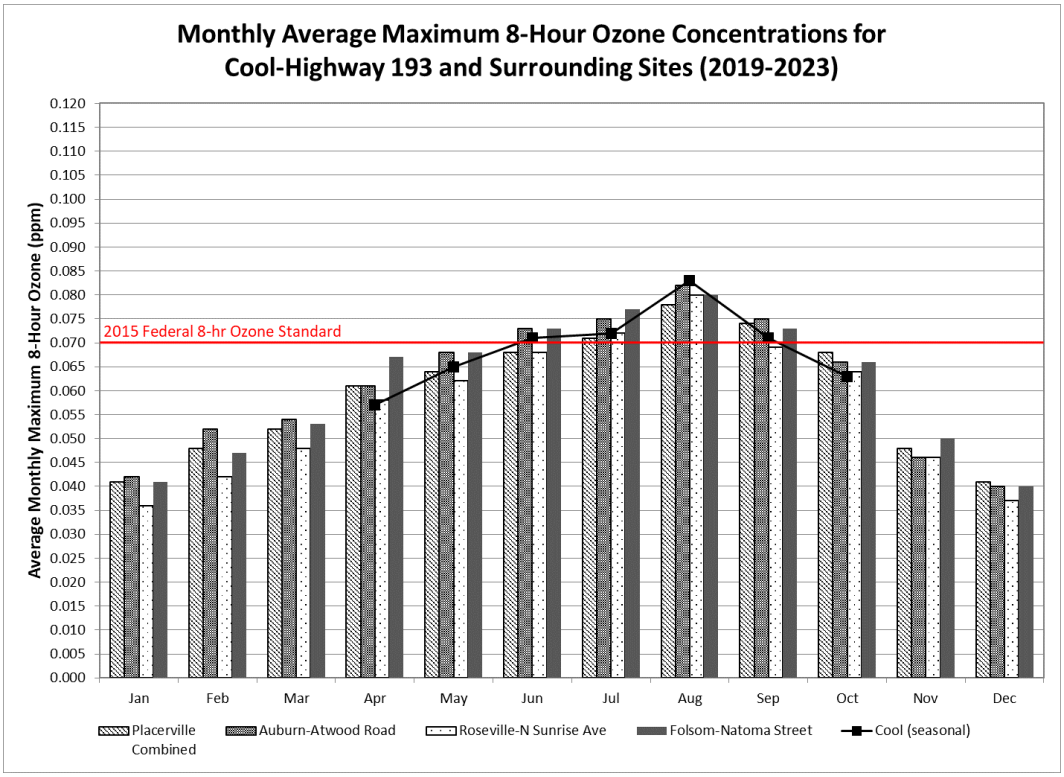


FIGURE 4

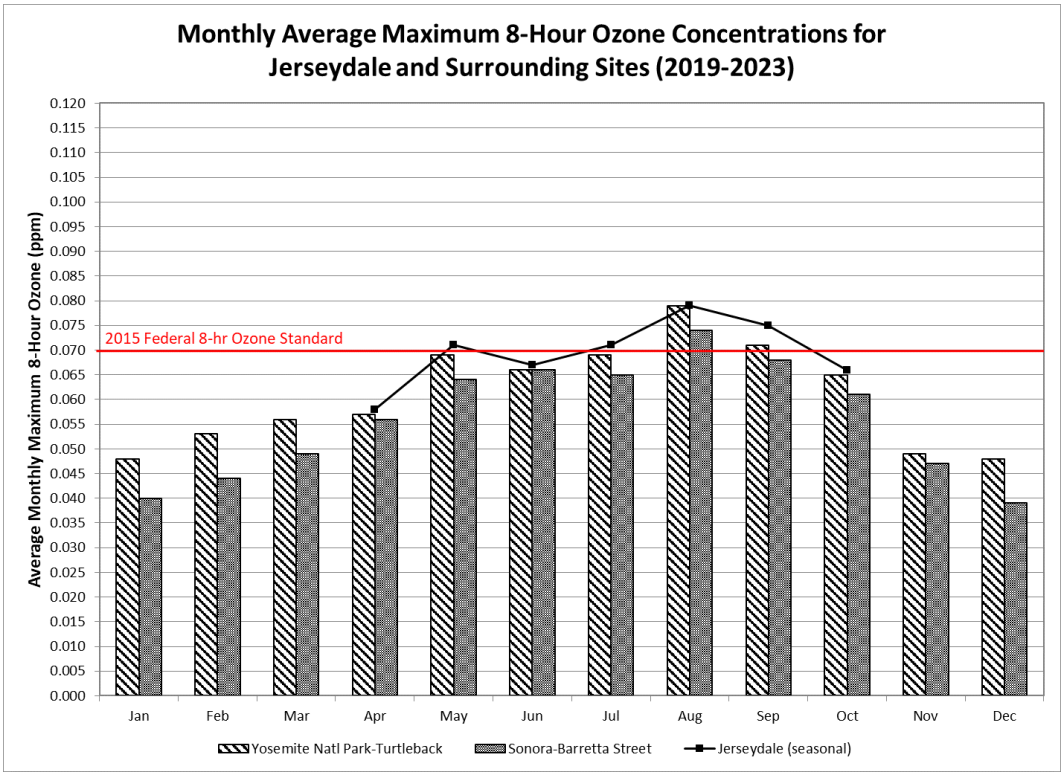
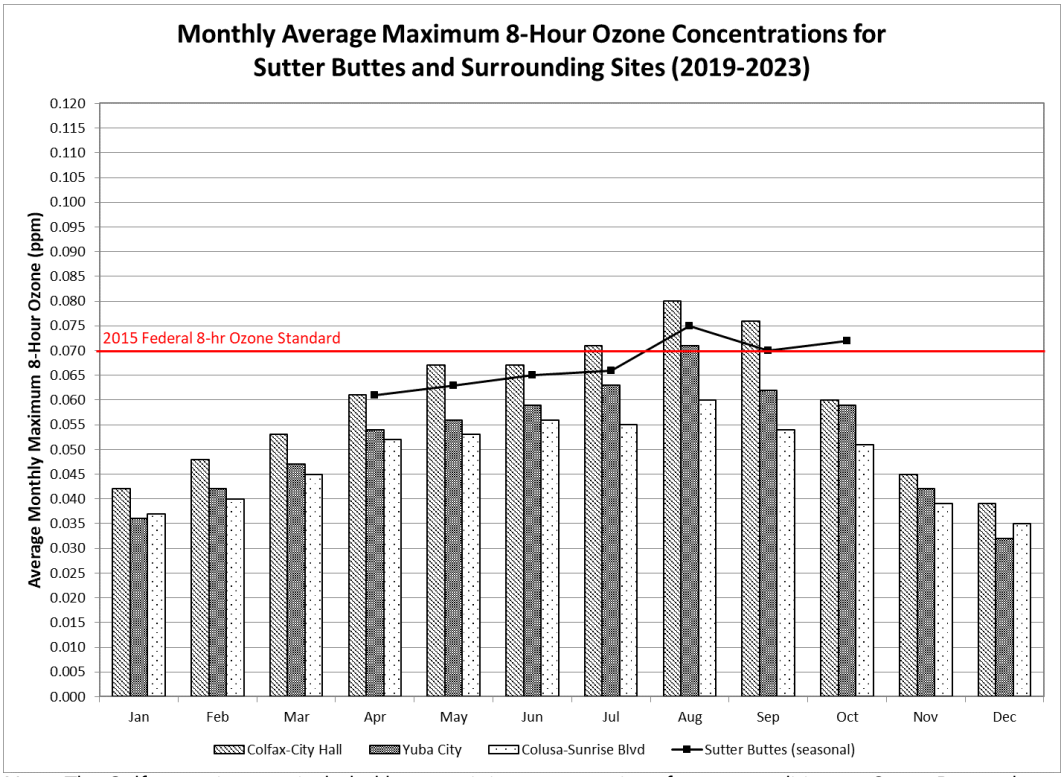


FIGURE 5



Note: The Colfax monitor was included because it is representative of ozone conditions at Sutter Buttes due to its location at a similar altitude and at roughly the same transport distance from the Sacramento metropolitan area.

FIGURE 6

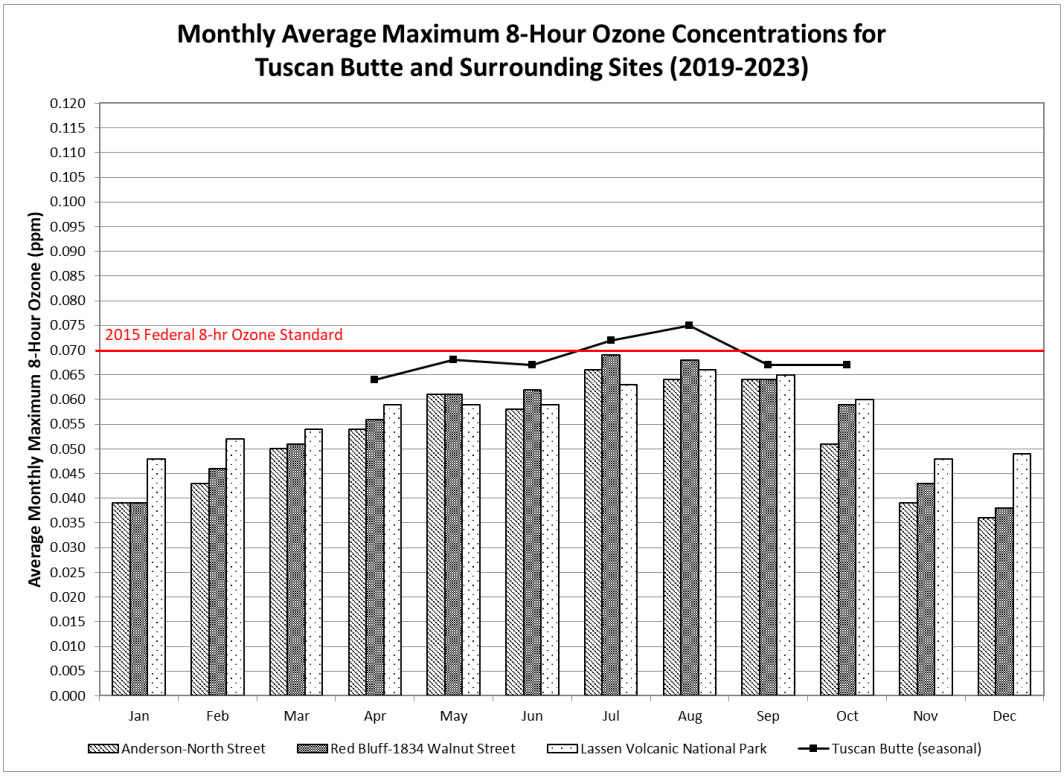

Monthly Average Maximum 8-Hour Ozone Concentrations for Tuscan Butte and Surrounding Sites (2019-2023)
Average Monthly Maximum 8-Hour Ozone (ppm)
0.120
0.115
0.110
0.105
0.100
0.095
0.090
0.085
0.080
0.075
0.070
0.065
0.060
0.055
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
2015 Federal 8-hr Ozone Standard
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Anderson-North Street
Red Bluff-1834 Walnut Street
Lassen Volcanic National Park
Tuscan Butte (seasonal)

TABLE 2
MONTHLY MAXIMUM 8-HOUR OZONE CONCENTRATIONS AT SEASONAL AND SURROUNDING MONITORING SITES
(Ozone in parts per million)

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '19	---	---	---	0.040	---	---	0.039	0.047	---	0.048	0.041	0.037	0.034	0.042	---	---	0.045	0.036
FEB '19	---	---	---	0.040	---	---	0.043	0.046	---	0.052	0.046	0.043	0.038	0.048	---	---	0.050	0.037
MAR '19	---	---	---	0.046	---	---	0.052	0.055	---	0.052	0.053	0.050	0.045	0.053	---	---	0.060	0.039
APR '19	0.055	---	---	0.052	0.060	---	0.067	0.056	---	0.052	0.065	0.058	0.059	0.057	0.061	0.062	0.053	0.044
MAY '19	0.060	---	---	0.052	0.061	---	0.067	0.059	---	0.055	0.065	0.058	0.057	0.061	0.061	0.064	0.060	0.046
JUN '19	0.063	0.079	0.070	0.054	0.072	0.063	0.072	0.074	0.064	0.061	0.065	0.059	0.067	0.073	0.067	0.067	0.065	0.059
JUL '19	0.063	0.079	0.075	0.055	0.069	0.057	---	0.072	0.068	0.057	0.069	0.065	0.070	0.067	0.065	0.068	0.065	0.069
AUG '19	0.065	0.081	0.077	0.051	0.077	0.057	---	0.076	0.074	0.059	0.073	0.067	0.076	0.072	0.064	0.068	0.070	0.063
SEP '19	0.055	0.074	0.073	0.048	0.064	0.063	---	0.077	0.074	0.059	0.075	0.058	0.062	0.069	0.061	0.058	0.073	0.060
OCT '19	0.052	0.067	0.059	0.051	0.062	0.059	---	0.064	0.068	0.060	0.068	0.060	0.062	0.062	0.066	0.065	0.068	0.056
NOV '19	0.043	0.052	0.052	0.045	---	---	---	0.059	---	0.045	0.061	0.048	0.049	0.059	---	---	0.051	0.045
DEC '19	0.035	0.039	0.039	0.034	---	---	---	0.044	---	0.046	0.042	0.037	0.035	0.043	---	---	0.048	0.031
JAN '20	0.034	0.037	0.037	0.034	---	---	---	0.042	---	0.048	0.036	0.036	0.033	0.039	---	---	0.048	0.031
FEB '20	---	0.054	0.051	0.040	---	---	---	0.055	---	0.049	0.050	0.050	0.044	0.047	---	---	0.050	0.046
MAR '20	0.051	0.058	0.053	0.042	---	---	---	0.059	---	0.049	0.050	0.051	0.048	0.049	---	---	0.056	0.050
APR '20	0.050	0.055	0.054	0.044	0.051	---	---	0.052	0.054	0.057	0.055	0.048	0.049	0.054	0.052	0.055	0.053	0.051
MAY '20	0.062	0.070	0.071	0.051	0.063	---	---	0.068	0.071	0.066	0.067	0.058	0.058	0.067	0.059	0.068	0.070	0.059
JUN '20	0.052	0.072	0.065	0.051	0.066	0.062	---	---	0.070	0.052	0.069	0.058	0.062	0.066	0.058	0.063	0.067	0.058
JUL '20	0.062	0.072	0.068	0.047	0.066	0.061	---	---	0.067	0.059	0.071	0.061	0.063	0.063	0.059	0.065	0.064	0.058
AUG '20	0.063	0.089	0.092	0.068	0.096	0.079	---	0.122	0.100	0.075	0.101	---	0.080	0.083	0.090	0.087	0.100	0.082
SEP '20	0.073	0.083	0.075	0.052	0.075	0.076	---	0.086	0.078	0.079	0.078	0.063	0.073	0.068	0.083	0.073	0.075	0.066
OCT '20	0.049	0.070	0.064	0.044	0.062	0.057	---	0.065	0.077	0.058	0.081	0.059	0.063	0.068	0.084	0.068	0.063	0.057
NOV '20	0.039	0.052	0.049	0.042	---	---	---	0.054	---	0.046	0.052	0.050	0.048	0.046	---	---	0.044	0.046
DEC '20	0.034	0.043	0.040	0.029	---	---	---	0.042	---	0.048	0.044	0.039	0.032	0.040	---	---	0.045	0.032

TABLE 2 Continued

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '21	0.040	0.042	0.044	0.031	---	---	0.039	0.042	---	0.045	0.043	0.043	0.035	0.043	---	---	0.046	0.036
FEB '21	0.042	0.050	0.048	0.037	---	---	0.046	0.048	---	0.056	0.049	0.047	0.039	0.043	---	---	0.053	0.041
MAR '21	0.048	0.059	0.056	0.042	---	---	0.057	0.056	---	0.059	0.058	0.053	0.050	0.050	---	---	0.051	0.050
APR '21	0.054	0.068	0.065	0.047	0.058	---	0.066	---	0.064	0.066	0.064	0.059	0.054	0.059	0.062	0.069	0.060	0.057
MAY '21	0.067	0.077	0.070	0.051	0.068	---	0.069	0.074	0.072	0.062	0.068	0.074	0.057	0.066	0.068	0.077	0.071	0.060
JUN '21	0.058	0.081	0.071	0.051	0.074	0.068	0.079	0.072	0.081	0.064	0.072	0.070	0.060	0.065	0.067	0.073	0.073	0.061
JUL '21	0.061	0.082	0.075	---	---	0.069	0.091	0.079	0.089	0.076	0.080	0.081	0.070	0.067	---	0.078	0.076	0.063
AUG '21	0.065	0.094	0.083	---	0.091	0.085	0.096	0.092	0.090	0.077	0.076	0.076	0.090	0.081	---	0.084	0.086	0.077
SEP '21	0.062	0.085	0.075	0.063	0.081	---	0.085	0.096	0.078	0.068	0.075	0.072	0.079	0.070	0.077	0.076	0.077	0.072
OCT '21	0.053	0.067	0.068	0.052	0.062	---	0.071	0.072	---	0.069	0.068	0.061	0.064	0.062	0.073	0.063	0.073	0.065
NOV '21	0.035	0.039	0.038	0.030	---	---	---	0.049	---	0.046	0.038	0.036	0.035	0.037	---	---	0.047	0.034
DEC '21	0.038	0.041	0.038	0.037	---	---	---	0.050	---	0.052	0.042	0.039	0.037	0.040	---	---	0.053	0.035
JAN '22	0.042	0.044	0.043	0.038	---	---	0.040	0.049	---	0.052	0.046	0.039	0.035	0.039	---	---	0.050	0.038
FEB '22	0.044	0.052	0.051	0.042	---	---	0.048	0.055	---	0.052	0.052	0.044	0.043	0.045	---	---	0.054	0.046
MAR '22	0.050	0.056	0.057	0.046	---	---	0.054	0.057	---	0.055	0.052	0.050	0.046	0.045	---	---	0.056	0.052
APR '22	0.052	0.062	0.060	0.052	0.058	---	0.063	0.060	0.062	0.058	0.056	0.054	0.060	0.053	0.066	0.061	0.058	0.059
MAY '22	0.052	0.070	0.064	0.050	0.066	0.066	0.069	0.063	0.084	0.056	0.056	0.053	0.064	0.060	0.062	0.062	0.081	0.057
JUN '22	---	0.071	0.066	0.062	0.072	0.059	0.066	0.070	0.068	0.061	---	0.066	0.069	0.061	0.068	0.070	0.061	0.058
JUL '22	0.069	0.076	0.070	0.057	0.076	0.072	0.068	0.073	---	0.058	0.062	0.068	0.075	0.056	0.069	0.073	0.070	---
AUG '22	0.061	0.080	0.071	0.061	0.079	0.061	0.074	0.076	0.066	0.058	0.066	0.066	0.075	0.061	0.076	0.069	0.066	0.064
SEP '22	0.069	0.075	0.069	0.052	0.072	0.064	0.072	0.078	0.086	0.065	0.079	0.070	0.067	0.073	0.066	0.069	0.070	0.057
OCT '22	---	0.070	0.054	0.056	0.066	0.055	0.067	0.071	0.066	0.056	0.061	0.065	0.063	0.054	0.071	0.070	0.063	0.055
NOV '22	0.038	0.046	0.042	0.035	---	---	0.049	0.057	---	0.050	0.040	0.041	0.041	0.037	---	---	0.049	0.034
DEC '22	---	0.042	0.042	0.035	---	---	0.043	0.049	---	---	0.039	0.035	0.044	0.033	---	---	0.047	0.025

MONTHLY MAXIMUM 8-HOUR OZONE CONCENTRATIONS AT SEASONAL AND SURROUNDING MONITORING SITES

(Ozone in parts per million)

Month & Year	Anderson -North Street	Auburn- Atwood Road	Colfax -City Hall	Colusa- Sunrise Blvd	Cool	Echo Summit	Folsom- Natoma Street	Grass Valley- Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville	Red Bluff- Walnut Street	Roseville-N Sunrise Ave	Sonora- Barrett a Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park- Turtleback	Yuba City
JAN '23	---	0.043	0.042	0.042	---	---	0.045	0.049	---	0.047	0.041	0.040	0.044	0.038	---	---	0.050	0.038
FEB '23	0.042	0.050	0.043	0.042	---	---	0.049	0.068	---	0.050	0.044	0.044	0.046	0.039	---	---	0.056	0.041
MAR '23	0.050	0.044	0.046	0.047	0.047	---	0.047	0.055	0.038	0.056	0.048	0.050	0.049	0.048	0.049	0.049	0.057	0.046
APR '23	0.061	0.057	0.065	0.064	0.060	---	0.071	0.069	0.051	0.061	0.067	0.061	0.067	0.055	0.066	0.071	0.059	0.061
MAY '23	0.063	0.056	0.064	0.059	0.066	---	0.067	0.069	0.055	0.057	0.063	0.063	0.074	0.064	0.066	0.067	0.063	0.057
JUN '23	0.060	0.064	0.064	0.060	0.072	0.065	0.073	0.072	0.053	0.055	0.064	0.058	0.081	0.065	0.064	0.064	0.062	0.057
JUL '23	0.075	0.067	0.067	0.060	0.075	0.067	0.073	0.081	0.061	0.064	---	0.072	0.083	0.074	0.072	0.075	0.069	0.062
AUG '23	0.064	0.066	0.075	0.059	0.074	0.076	0.069	0.082	0.067	0.059	0.075	0.064	0.077	0.074	0.068	0.068	0.074	0.067
SEP '23	0.062	0.056	0.089	0.054	0.062	0.063	0.062	0.070	0.057	0.056	0.064	0.058	0.065	0.059	0.061	0.061	0.062	0.057
OCT '23	---	0.057	0.057	0.053	0.065	0.057	0.060	0.074	0.053	0.057	0.063	0.051	0.069	0.058	0.065	0.069	0.058	0.060
NOV '23	---	0.043	0.046	0.042	0.045	0.040	0.050	0.056	0.039	0.054	0.047	0.040	0.056	0.054	0.052	0.050	0.054	0.051
DEC '23	---	0.034	0.036	0.040	---	---	0.037	0.044	---	0.049	0.040	0.038	0.037	0.038	---	---	0.049	0.036

Notes:

1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Highlighted cells indicate the maximum 8-hour average concentration for each site during each calendar year.
3. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.
4. Data for the Placerville-Gold Nugget Way and Placerville-Canal Street monitoring sites were merged to make a continuous Placerville record for the 5-year period.
5. Months with no data or less than 75% data completeness are denoted by "---".
6. AQS Site ID of the surrounding sites: Anderson-North Street (060890007); Auburn- Atwood Road(060610003); Colfax-City Hall (060610004); Colusa-Sunrise Blvd (060111002); Folsom-Natoma Street (060670012); Grass Valley-Litton Building (060570005); Lassen Volcanic Natl Park (060893003); Placerville-Gold Nugget Way (060170010); Placerville-Canal Street (060172004); Red Bluff-Walnut Street (061030007); Roseville-N Sunrise Ave (060610006); Sonora-Barretta Street (06109000); Yosemite Natl Park-Turtleback (060430003); Yuba City (061010003)

TABLE 3
ANNUAL 4th HIGHEST 8-HOUR OZONE CONCENTRATIONS AT SEASONAL AND SURROUNDING MONITORING SITES
(Ozone in parts per million; seasonal sites highlighted)

	2019 4th Highest	Date	2020 4th Highest	Date	2021 4th Highest	Date	2022 4th Highest	Date	2023 4th Highest	Date
Anderson-North Street	0.063	6/3/2019	0.066	9/15/2020	0.063	8/25/2021	0.066	7/25/2022	0.064	8/10/2023
Auburn-Atwood Road	0.079	7/31/2019	0.083	9/1/2020	0.085	9/24/2021	0.075	7/23/2022	0.064	6/30/2023
Colfax-City Hall	0.072	7/31/2019	0.080	8/23/2020	0.076	8/24/2021	0.070	7/29/2022	0.068	8/24/2023
Colusa-Sunrise Blvd	0.053	6/12/2019	0.052	9/5/2020	0.061	8/30/2021	0.057	8/18/2022	0.059	5/18/2023
Cool	0.070	8/16/2019	0.078	8/23/2020	0.080	7/23/2021	0.074	7/25/2022	0.072	7/11/2023
Echo Summit	0.059	10/7/2019	0.073	9/15/2020	0.081	8/22/2021	0.064	7/14/2022	0.065	5/18/2023
Folsom-Natoma Street	—	—	—	—	0.085	9/24/2021	0.070	9/6/2022	0.071	4/27/2023
Grass Valley-Litton Building	0.072	7/25/2019	0.080	8/29/2020	0.090	9/10/2021	0.074	8/30/2022	0.076	7/11/2023
Jerseydale	0.071	8/3/2019	0.091	8/20/2020	0.081	6/17/2021	0.079	9/8/2022	0.060	8/24/2023
Lassen Volcanic Natl Park	0.059	9/15/2019	0.069	9/14/2020	0.075	8/23/2021	0.061	6/22/2022	0.061	7/12/2023
Placerville	0.071	8/16/2019	0.086	8/22/2020	0.075	9/24/2021	0.066	9/2/2022	0.067	4/27/2023
Red Bluff-Walnut Street	0.065	8/14/2019	0.061	9/6/2020	0.075	7/22/2021	0.066	6/22/2022	0.063	5/18/2023
Roseville-N Sunrise Ave	0.067	6/5/2019	0.070	8/23/2020	0.075	9/3/2021	0.070	7/23/2022	0.077	8/31/2023
Sonora-Barretta Street	0.069	9/14/2019	0.080	8/24/2020	0.068	8/25/2021	0.061	8/16/2022	0.067	7/2/2023
Sutter Buttes	0.065	7/31/2019	0.083	9/13/2020	0.077	9/4/2021	0.069	7/24/2022	0.068	8/31/2023
Tuscan Butte	0.066	6/12/2019	0.074	8/20/2020	0.077	5/13/2021	0.070	10/21/2022	0.069	10/20/2023
Yosemite Natl Park-Turtleback	0.068	8/3/2019	0.084	8/20/2020	0.080	8/24/2021	0.069	7/25/2022	0.068	7/16/2023
Yuba City-Almond Street	0.061	8/15/2019	0.066	9/5/2020	0.072	9/13/2021	0.058	6/23/2022	0.061	7/21/2023

Notes:
1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.
3. Data for the Placerville-Gold Nugget Way and Placerville-Canal Street monitoring sites were merged to make a continuous Placerville record for the 5-year period.
4.Months with no data or less than 75% data completeness are denoted by "---".
5. AQS Site ID of the surrounding sites: Anderson-North Street (060890007); Auburn- Atwood Road(060610003); Colfax-City Hall (060610004); Colusa-Sunrise Blvd (060111002); Folsom-Natoma Street (060670012); Grass Valley-Litton Building (060570005); Lassen Volcanic Natl Park (060893003); Placerville-Gold Nugget Way (060170010); Placerville-Canal Street (060172004); Red Bluff- Walnut Street (061030007); Roseville-N Sunrise Ave (060610006); Sonora-Barretta Street (06109000); Yosemite Natl Park-Turtleback (060430003); Yuba City (061010003)

TABLE 4
NUMBER OF DAYS WITH MAXIMUM 8-HOUR OZONE CONCENTRATION >0.070 PPM
(April-October ozone season columns highlighted in yellow; seasonal site rows denoted by gray)

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '19																		
FEB '19																		
MAR '19																		
APR '19																		
MAY '19																		
JUN '19		1			1		2	1						1				
JUL '19		4	2					2										
AUG '19		2	1		2			1	4		2		1	1				
SEP '19		1	1					1	1		2						1	
OCT '19																		
NOV '19																		
DEC '19																		
JAN '20																		
FEB '20																		
MAR '20																		
APR '20																		
MAY '20			1						1									
JUN '20		1																
JUL '20		1									1							
AUG '20		11	10		5	4		8	12	1	9		2	5	5	6	9	2
SEP '20	1	9	7		2	3		8	5	1	8		1		3	2	3	
OCT '20									6		2				1			
NOV '20																		
DEC '20																		

TABLE 4 Continued

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '21																		
FEB '21																		
MAR '21																		
APR '21																		
MAY '21		1						2	1			1				1	1	
JUN '21		3	1		1		2	1	3		2					1	1	
JUL '21		13	6		3		8	8	4	2	3	3			1	4	3	
AUG '21		11	7		5	6	8	11	9	7	4	7	2	2	7	9	10	3
SEP '21		6	3		4		10	14	4		1	4	2		3	5	1	1
OCT '21							1	2	1						1		1	
NOV '21																		
DEC '21																		
JAN '22																		
FEB '22																		
MAR '22																		
APR '22																		
MAY '22									2								1	
JUN '22		1			1													
JUL '22		5			4	1		4					2			2		
AUG '22		5	1		4		2	4					1		2			
SEP '22		2			3		1	3	3		2			1				
OCT '22								1							1			
NOV '22																		
DEC '22																		

TABLE 4 Continued

Month & Year	Anderson -North Street	Auburn- Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '23																		
FEB '23																		
MAR '23																		
APR '23							1									1		
MAY '23													1					
JUN '23					1		1	1					1					
JUL '23	1				3		3	6				1	5	1	3	2		
AUG '23			1		1	1		2			1		1	1			1	
SEP '23			1															
OCT '23								1										
NOV '23																		
DEC '23																		

Notes:
1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Highlighted cells indicate the maximum 8-hour average concentration for each site during each calendar year.
3. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.
4. Data for the Placerville-Gold Nugget Way and Placerville-Canal Street monitoring sites were merged to make a continuous Placerville record for the 5-year period.
5. Months with no data or less than 75% data completeness are denoted by "---".
6. AQS Site ID of the surrounding sites: Anderson-North Street (060890007); Auburn- Atwood Road(060610003); Colfax-City Hall (060610004); Colusa-Sunrise Blvd (060111002); Folsom-Natoma Street (060670012); Grass Valley-Litton Building (060570005); Lassen Volcanic Natl Park (060893003); Placerville-Gold Nugget Way (060170010); Placerville-Canal Street (060172004); Red Bluff-Walnut Street (061030007); Roseville-N Sunrise Ave (060610006); Sonora-Barretta Street (06109000); Yosemite Natl Park-Turtleback (060430003); Yuba City (061010003)

TABLE 5
NUMBER OF DAYS WITH MAXIMUM 8-HOUR OZONE CONCENTRATION >0.054 PPM
(April-October ozone season columns highlighted in yellow; seasonal site rows denoted by gray)

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville-Gold Nugget Way	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '19																		
FEB '19																		
MAR '19								1									2	
APR '19	2				4		6	1			4	3	4	3	4	7		
MAY '19	6	2			6		7	5		1	3	5	1	5	9	8	5	
JUN '19	7	18	12		14	6	16	14	11	4	11	11	9	16	18	13	18	5
JUL '19	6	20	17	1	15	2	8	15	15	3	14	4	6	15	7	10	16	4
AUG '19	9	16	19		13	2		19	26	5	19	13	8	21	11	15	23	8
SEP '19	1	12	11		5	1		11	14	1	9	3	5	13	4	6	11	4
OCT '19		8	6		4	2		7	15	2	9	4	2	10	6	5	10	1
NOV '19								3			6			3				
DEC '19																		
JAN '20																		
FEB '20								1										
MAR '20		2						2									1	
APR '20		2								1	1					1		
MAY '20	4	10	8		4			5	11	2	8	1	1	8	2	8	6	2
JUN '20		11	12		8	3			11		9	2	5	7	2	4	9	4
JUL '20	13	25	27		21	4		15	28	5	23	5	10	16	12	16	26	4
AUG '20	9	28	24	2	24	13		23	24	12	25	4	18	17	20	18	23	15
SEP '20	9	18	19		12	8		23	19	16	21	9	12	17	17	17	15	8
OCT '20		12	6		6	2		9	19	2	11	2	5	11	10	7	12	2
NOV '20																		
DEC '20																		

TABLE 5 Continued

Month & Year	Anderson -North Street	Auburn-Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville-Gold Nugget Way	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '21																		
FEB '21										1								
MAR '21		3	3				1	2		4	1							
APR '21		9	5		2		7		7	4	7	4		2	5	4	5	3
MAY '21	3	13	7		3	2	9	13	14	4	8	6	1	7	3	8	13	3
JUN '21	2	18	14		10	6	14	19	15	9	10	14	2	5	10	15	12	4
JUL '21	9	30	28	1	9	16	21	30	31	26	22	24	17	19	7	28	31	12
AUG '21	12	27	21	6	24	21	16	25	29	25	19	23	16	18	12	26	29	14
SEP '21	5	22	19	8	20		21	21	24	17	19	20	16	12	21	21	25	16
OCT '21		7	7		7		6	7	10	4	6	3	3	3	6	6	7	3
NOV '21																		
DEC '21																		
JAN '22																		
FEB '22								1										
MAR '22		2	1					2		1							2	
APR '22		5	5		3		4	5	7	2	1		2		4	5	5	3
MAY '22		7	3		6	6	4	6	11	3	1		3	2	4	2	8	1
JUN '22	2	14	11	1	15	6	12	15	16	7		5	11	1	7	11	13	3
JUL '22	15	21	23	1	21	10	12	23	13	8	11	16	18	1	21	21	19	1
AUG '22	13	23	12	3	19	8	16	26	16	3	13	15	17	4	17	18	21	5
SEP '22	7	15	10		16	6	17	19	18	5	10	9	14	6	15	14	14	1
OCT '22	6	16		3	14	1	10	21	13	1	7	10	10		19	12	10	1
NOV '22								1										
DEC '22																		

TABLE 5 Continued

Month & Year	Anderson -North Street	Auburn- Atwood Road	Colfax -City Hall	Colusa-Sunrise Blvd	Cool	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale	Lassen Volcanic Natl Park	Placerville-Gold Nugget Way	Red Bluff-Walnut Street	Roseville-N Sunrise Ave	Sonora-Barretta Street	Sutter Buttes	Tuscan Butte	Yosemite Natl Park-Turtleback	Yuba City
JAN '23																		
FEB '23								1										
MAR '23								1		1								
APR '23	2	3	4	1	4		5	5		4	4	2	5	1	5	9	4	2
MAY '23	6	2	7	4	8	7	8	11	1	3	6	9	10	6	12	12	6	2
JUN '23	3	1	5	3	13	13	8	15		1	10	2	14	7	9	15	8	1
JUL '23	9	12	18	6	19	12	19	28	8	6	7	10	22	17	20	18	19	10
AUG '23	15	6	24	3	23	6	16	28	5	6	17	14	20	15	18	23	18	6
SEP '23	2	1	11		11	4		17	2	2	12	1	9	6	9	9	7	2
OCT '23		1	2					7		1								2
NOV '23																		
DEC '23																		

Notes:
1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Highlighted cells indicate the maximum 8-hour average concentration for each site during each calendar year.
3. Folsom-Natoma Street monitoring site shutdown 7/22/2019 for renovations and operation resumed 12/10/2020.
4. Data for the Placerville-Gold Nugget Way and Placerville-Canal Street monitoring sites were merged to make a continuous Placerville record for the 5-year period.
5. Months with no data or less than 75% data completeness are denoted by "---".
6. AQS Site ID of the surrounding sites: Anderson-North Street (060890007); Auburn- Atwood Road(060610003); Colfax-City Hall (060610004); Colusa-Sunrise Blvd (060111002); Folsom-Natoma Street (060670012); Grass Valley-Litton Building (060570005); Lassen Volcanic Natl Park (060893003); Placerville-Gold Nugget Way (060170010); Placerville-Canal Street (060172004); Red Bluff-Walnut Street (061030007); Roseville-N Sunrise Ave (060610006); Sonora-Barretta Street (06109000); Yosemite Natl Park-Turtleback (060430003); Yuba City (061010003)

FIGURE 7
PHOTOS OF AREA SURROUNDING THE SUTTER BUTTES OZONE MONITORING SITE

Sutter Buttes: Looking north from probe.

Sutter Buttes: Looking east from probe.

Sutter Buttes: Looking south from probe.
(from 2016 site audit)

Sutter Buttes: Looking west from probe.

FIGURE 8
PHOTOS OF AREA SURROUNDING THE TUSCAN BUTTE OZONE MONITORING SITE

Tuscan Butte: Looking north from probe.

Tuscan Butte: Looking east from probe.

Tuscan Butte: Looking south from probe.
(from 2016 site audit)

Tuscan Butte: Looking west from probe.

Appendix C

Supporting Documentation for Site Changes

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

June 26, 2023

Paul Hellman
Air Pollution Control Officer
Shasta County Air Quality Management District
1855 Placer Street, Suite 101
Redding, California 96001

Dear Air Pollution Control Officer Hellman:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the Shasta County Air Quality Management District's (ShCAQMD) discontinuation of the O_3 State/Local Air Monitoring Station (SLAMS) monitor at the Anderson – North Street site (Air Quality System (AQS) Site ID: 06-089-0007). A request letter for EPA approval of this network change was submitted to EPA on March 31, 2023. ShCAQMD communicated in their letter that closing the Anderson – North Street site would help the district reach their optimum network size based on data needs and available resources as described in 40 CFR Part 58, Appendix D. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors. Discontinuation of the O_3 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 (National Ambient Air Quality Standards) and if the requirements of appendix D to this part, if any, continue to be met." EPA has reviewed ShCAQMD's request and data associated with this monitor and concludes that the criteria contained in 40 CFR 58.14(c) are met as described below; EPA therefore approves discontinuation of the O_3 SLAMS monitor at the Anderson – North Street site.

According to certified data submitted to EPA's AQS, the Anderson – North Street O_3 monitoring site was in attainment of the 2015 8-hour O_3 NAAQS based on the five most recent design values (design values 2018-2022, encompassing data years 2016-2022); 2018-2020 design values for the 2015 8-hour O_3 NAAQS were invalid due to incomplete data in 2018 and 2019.[1]

[1] The site had incomplete quarters including Q4 in 2018 and Q1 in 2019 due to quality assurance/instrument issues that resulted in invalid 2018, 2019, and 2020 design values for the 2015 8-hour O_3 NAAQS. Based on the historical data record, we would not expect exceedances to have occurred during the periods of missing data.

Incomplete 2018 and 2019 data were consistent with the historical trend and generally continued to show concentrations below the levels of the 2015 8-hour O_3 NAAQS.[2]

ShCAQMD currently operates two other SLAMS O_3 monitoring sites in the Redding, CA MSA, exceeding 40 CFR 58 Appendix D minimum monitoring requirements for the area. The Anderson-North Street site tracks well with the other O_3 monitors in the area and has the same attaining design value in 2022 as the Shasta Lake (AQS ID: 06-093-2001) monitor (0.065 ppm). The Anderson – North Street site has consistently measured concentrations less than or equal to the Redding-Health Dept Roof (AQS ID: 06-089-004) and Shasta Lake sites in the Redding, CA metropolitan statistical area (MSA). This site is not needed to fulfill the 40 CFR 58 Appendix D requirements for a maximum O_3 concentration site in a metropolitan area and it is not required by the EPA Regional Administrator. Therefore, the closure of this monitoring site will not prevent ShCAQMD from meeting 40 CFR Appendix D requirements and does not compromise data collection needed for implementation of the O_3 NAAQS.

Based on these analyses, EPA approves ShCAQMD's discontinuation of the Anderson – North Street O_3 SLAMS monitor. Please include this letter and the relevant monitor and site information in the next CARB annual monitoring network plan.

If you have any questions, please feel free to contact me at (415) 972-3134 or Shaye Hong of my staff at (415) 947-4104.

Sincerely,

DENA VALLANO

Digitally signed by DENA VALLANO
Date: 2023.06.26 06:36:28 -07'00'

Dena Vallano
Manager, Monitoring and Analysis Section

cc (via email): Monica Stant, ShCAQMD
Rob Stahl, ShCAQMD
Chad Peterson, ShCAQMD
Jin Xu, California Air Resources Board (CARB)
Sylvia Vanderspek, CARB
Kathleen Gill, CARB
Eric McDougall, CARB
Manisha Singh, CARB
Louise Sorenson, CARB
Melissa Niederreiter, CARB
Aman Bains, CARB

[2] The site measured four exceedances of the 2015 8-hour O_3 NAAQS in August 2018 and one exceedance in September 2020. These exceedances occurred during the time several active wildfires were burning in Northern California which may have contributed to unusually high concentrations at the monitoring site.

June 8, 2023

Dena Vallano, PhD
Manager, Air Quality Monitoring & Analysis Section
U.S. EPA Region 9
75 Hawthorne Street
Mail Code: AIR-7
San Francisco, California 94104

RE: Notification of Air Monitoring Relocation from Phelan (Site ID: 060710012) to Lucerne Valley (Site ID: 060710013).

Dear Ms. Vallano,

The Mojave Desert Air Quality Management District (District) is submitting this notification to the U.S. Environmental Protection Agency (U.S. EPA), regarding the relocation of the Phelan air monitoring station, Site ID: 060710012, to the District's Lucerne Valley site, Site ID: 060710013. As you are aware the Phelan air monitoring station instrumentation includes an ozone monitor and meteorological equipment while the Lucerne Valley site currently only monitors PM10 as well as meteorological equipment. The District plans to relocate the Phelan equipment to the Lucerne valley site to create a full SLAMS site at the later location. This relocation is justified based upon the provisions of 40CFR Part 58.14 (6) due to logistical problems beyond the District's control as explained below. The siting of the ozone monitor at the Lucerne Valley will conform to the siting criteria of 40 CFR Part 58 Appendix E.

The relocation of the Phelan site is necessary as the owner of the existing site notified the District that the property use agreement would be terminated, effective December 1, 2023 (see attachment A letter). As the operation of the Districts air monitoring network requires significant infrastructure and resources, the District intends to relocate the Phelan ozone monitor to the existing Lucerne Valley SLAMs site. Both locations are each situated in rural, low income and highly impacted communities under AB1550 on the outskirts of the Victor Valley area, and are both currently categorized as population site type and neighborhood spatial scale[1]. While the proposed site is further than four kilometers from the original site, both sites are similarly located, with nearby areas characterized by residential and commercial land use as well as undeveloped land. The sources that influence ozone measurements at the Phelan site are largely transported ozone, on-road sources, and area sources and are not representative of a neighborhood scale. There are no major stationary sources in the Phelan area and only a handful of minor sources. Sources

[1] CARB Annual Network Plan, July 2022.

that influence ozone at the Lucerne site are similarly transported ozone, on-road sources, area sources and include minor and major sources[2].

Historically, air quality monitored at the Phelan air monitoring stations has been a poor representation of the impacts from local sources on air quality in the Victor Valley and the MDAQMD. The MDAQMD, specifically the Victor Valley area, is located in inland Southern California, adjacent to and directly downwind from the greater Los Angeles area. Due to the prevailing wind direction and topography, the MDAQMD is overwhelmingly impacted by transported Ozone and its precursors[3], from both the greater Los Angeles area and the San Joaquin Valley. These transport couplings have been officially recognized by California Air Resources Board (CARB).[4]

As a result of transport, the Phelan, as well as Hesperia air monitoring stations, which are situated just beyond the top of the Cajon and West Cajon Valleys and are the nearest monitoring locations to the South Coast Air Quality Management District, continue to report the highest levels of ozone in the MDAQMD. Thus, continuing to locate an air monitoring station in Phelan is not representative of the stationary sources operating within the MDAQMD. The Hesperia air monitoring site (site ID#060714001) will continue to operate and provide a marker for the continued influences of the pollution emitted from the greater Los Angeles area.

As shown below in Table 1, the air monitoring stations most impacted in the Victor Valley area by transported ozone are Joshua Tree, Phelan, and Hesperia.

---

[2] Major sources include Mitsubishi Cement (located ~5 miles away in an upwind direction) and Specialty Minerals (located ~ 3 miles away in an upwind direction).

[3] 17 Cal Code Regs. §70500(c)

[4] "Ozone Transport: 2001 Review," April 2001, CARB identifies the South Coast Air Basin as having an overwhelming and significant impact on the Mojave Desert Air Basin (which includes the Mojave Desert) and the San Joaquin Valley as having an overwhelming impact on the MDAB.

Table 1- MDAQMD ozone design value information[5]:

Station Name	AQS Station Number	5-year weighted 2018 Design Value	Base 2032 Design Value	2032 with controls Design Values*
Barstow**	060710001	78.3	71.3	68.7
Phelan-Beekley Road and Phelan Road	060710012	87.0	75.8	70.8
Victorville-14306 Park Avenue	060710306	78.7	68.6	63.9
Hesperia-Olive Street	060714001	85.0	74.3	68.8
Joshua Tree-National Monument**	060719002	88.0	74.4	68.2
Lancaster-43301 Division Street	060379033 (LA County)	77.3	67.9	64.2

* Emission controls include South Coast AQMD's defined measures for stationary sources from the Draft Final 2022 AQMP and CARB's measures for mobile sources from the 2022 State SIP Strategy. Emissions reductions reflected in this scenario is summarized in Table 4-18 of the Draft Final 2022 AQMP.

** 5-year weighted design values for the monitors at Barstow and Joshua Tree are calculated without excluding any fire events

Relocating the Phelan ozone monitor to the Lucerne Valley station will continue to provide for a robust network within the MDAQMD as well as being located in a low-income community according to the CARB priority populations CES4 2022 map [6].

The District operates a comprehensive monitoring network, collecting ambient concentration data for a wide variety of pollutants including ozone, $PM_{2.5}$, PM_{10}, NO_2, and H_2S (state criteria pollutant). Although most sites monitor for multiple pollutants, not all pollutants are monitored at every site because the data needs vary by locale. Ambient data collected by the District is collected in accordance with 40 CFR Part 58, including population and severity of the air quality problem. The current breakdown of sites located within the boundaries of MDAQMD is listed below in Table 2. Relocating the ozone monitor from Phelan to Lucerne will not change the number of monitors in the MDAQMD overall.

---

[5] MDAQMD Federal 70 ppb Ozone Attainment Plan, January 23, 2023

[6] California Climate Investments Priority Populations 2022 CES 4.0.

Table 2, Pollutants Monitored in the MDAQMD

Site (AQS ID)	NO2	Ozone	PM10	PM2.5	H2S
Barstow (06-071-0001)	1	1	1		
Blythe-Murphy (06-065-9003)**		1			
Hesperia (06-071-4001)		1	1		
Joshua Tree- Black Rock (06-071-9002)*		1			
Joshua Tree-Pinto Wells (06-065-1004)*			1		
Lucerne Valley (06-071-0013)			1		
Mojave NP (06-071-1001)*		1			
Phelan (06-071-0012)		1			
Trona (06-071-1234)	1	1	1		1
Victorville (06-071-0306)	1	1	1	2	

* These sites are operated by National Park Service (NPS).
**These sites are operated by CARB.

According to the CARB Annual Network Plan (ANP), all MDAQMD sites are located within the Riverside-San Bernardino-Ontario CBSA (CBSA), which is shared with the neighboring South Coast Air Quality Management District (SCAQMD). The CARB ANP shows that all minimum Federal ozone monitoring objectives are met in the CBSA, noting that the Ozone Design Value site is located in the SCAQMD in Redlands and the minimum sites requirement for three (3) sites is met as the CBSA is reported as having nineteen (19) ozone sites.

Both the Phelan site and Lucerne Valley sites are classified as population exposure type in the CARB ANP. For criteria pollutants, the relocation of the Phelan Ozone monitor again does not interfere with the CBSA meeting the requirements of 40 CFR Part 58, Appendix D.

The Phelan site is located in an unincorporated community in San Bernardino County, situated below the foothills of the Angeles National Forest. Phelan is part of the tri-community which include Wrightwood and Pinon Hills. The tri-community area is situated about 8 miles south of the MDAQMD/SCAQMD border and the Cajon Pass which is a major transport route for locomotives and roadways. The Phelan site is located about 16 miles west-south west of the Victorville Site and about 17 miles west of the Hesperia site

The Phelan site monitors for ozone and also collects meteorological data. The site's gas monitor is a Teledyne T400 ozone gas analyzer. This unit is setup with a sample train that draws through a cane styled inlet tube into a manifold. The manifold is introduced with a nightly scheduled challenging gas which is generated with an Environics 9100 and Teledyne T701 Zero air generator. Meteorological data is obtained with the use of a MetOne AIO weather sensor. All data at the Phelan site is collected and processed using an Agilaire 8872 data logger and is sent to a central server at the MDAQMD offices.

The Lucerne Valley site monitors for PM10 and collects meteorological data. The site's particulate matter monitoring is completed with a MetOne BAM 1020 unit. The meteorological data is obtained with the use

of a MetOne AIO weather sensor. Once again, all data at the site is collected and processed using an Agilaire 8872 data logger and is sent to a central server.

The Lucerne Valley site is located at the Lucerne Valley Unified School District, about 4.2 miles away from the center of Lucerne Valley, an unincorporated community in San Bernardino County, and surrounded by the Granite Mountains, Ord Mountains and San Bernardino Mountains. The Lucerne site is located about 25 miles east of the Victorville site. See Attachment B for photographs of the Lucerne site.

Upon relocation, the Lucerne Valley ozone monitor system will be configured similarly to the current Phelan site monitor. Ozone will continue to be sampled via a Teledyne T400 ozone gas analyzer. The sample train will be drawn through a cane styled inlet tube. The manifold will also be introduced with a nightly scheduled challenging gas which is generated with an Environics 9100 and Teledyne T701 Zero air generator.

Additionally, further information supporting the relocation is presented in Attachments B through G; including, satellite imagery, wind rose data, roadways analysis, site metadata as well as measured ozone comparison amongst the sites.

Should you have any questions or need additional information regarding this notification please contact Chris Anderson, Planning/Air Monitoring Supervisor, at (760) 245-1661, extension 1846, or by email at: canderson@mdaqmd.ca.gov.

Sincerely,

Brad Poiriez
APCO

Email CC: vallano.dena@epa.gov
Sheila Tsai, U.S. EPA R9, Tsai.Sheila@epa.gov
Alan De Salvio, MDAQMD Deputy APCO, adesalvio@mdaqmd.ca.gov
Grace Tuazon; grace.tuazon@arb.ca.gov
Chris Anderson, canderson@mdaqmd.ca.gov

ATTACHMENT A- Letter from Phelan Pinion Hills Community Special District

Phelan Piñon Hills CSD
Established 2008

A 4176 Warbler Road
P.O. Box 294049
Phelan, CA 92329
P (760) 868-1212
F (760) 868-2323
W www.pphcsd.org

May 24, 2023

Jean Bracy
Director of Administrative Services
MDAQMD
14306 Park Ave.
Victorville, CA 92392-2310

Dear Ms. Bracy,

This letter is to request termination of our agreement regarding the air monitoring station located on our property at Phelan and Beekley Road in Phelan, CA 92371. For our staff to better utilize the site, we kindly request that all equipment owned and operated by MDAQMD be removed no later than December 1, 2023. We thank you for your cooperation and would be happy to assist you in providing a different District property, should you so desire.

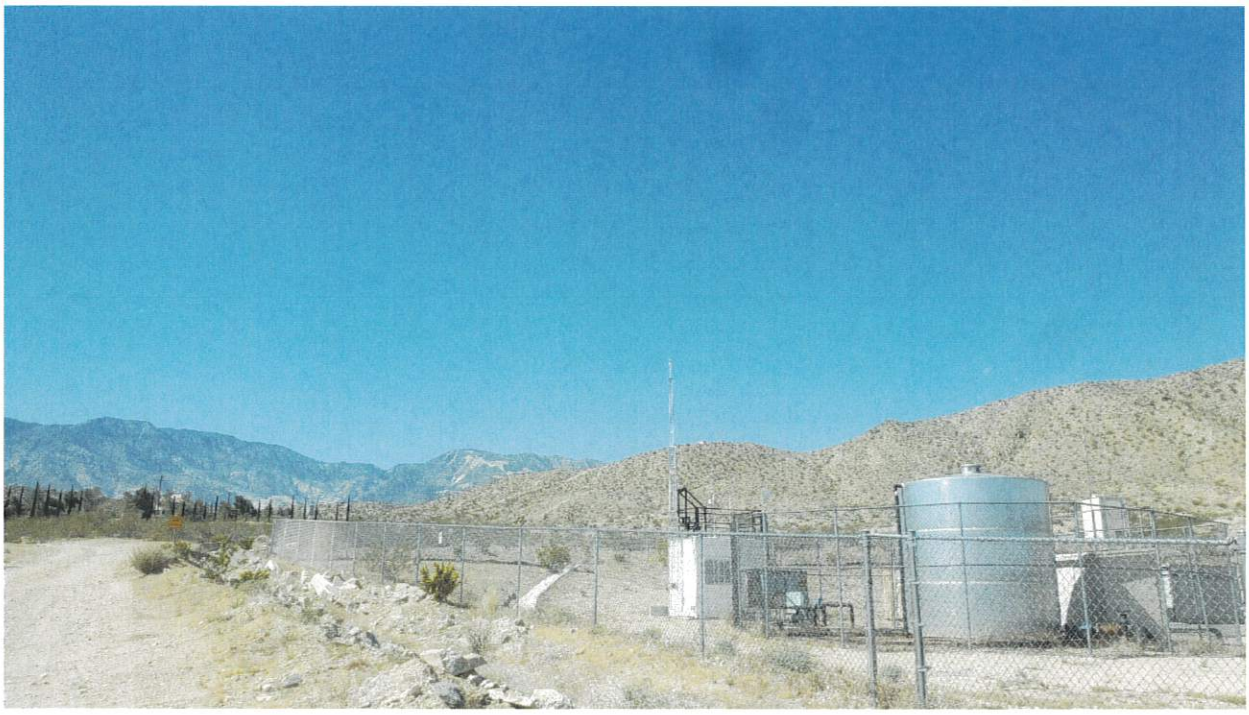
If you have any questions, or require additional information, please contact me at (760) 868-1212 x309 or at ksevy@pphcsd.org.

Sincerely,

K Sevy

Kim Sevy (formerly Ward)
District Clerk

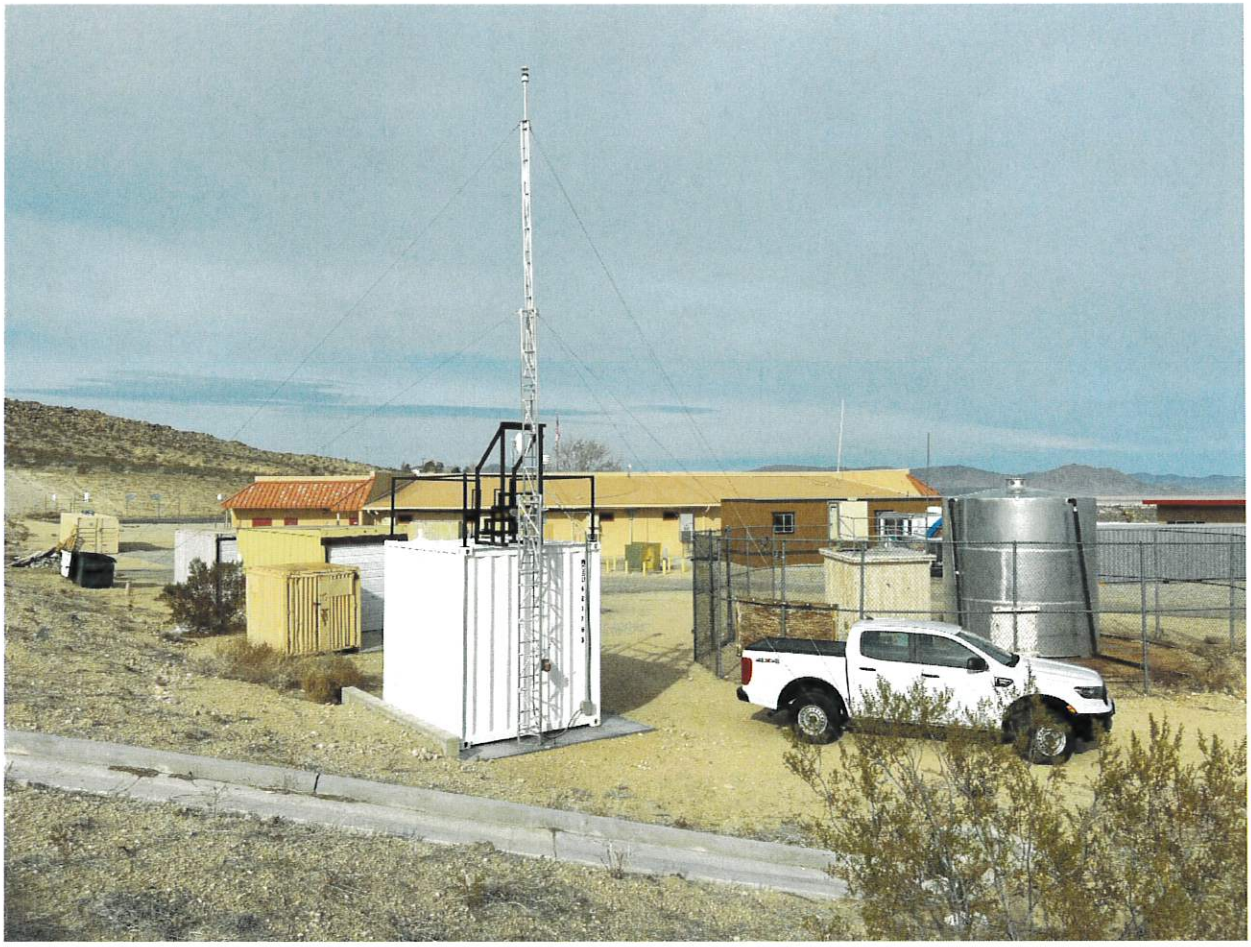
ATTACHMENT B - Photographs of the Lucerne Valley Site (2023):



Photograph 1: East fence line of the site facing south-southwest.

Photograph 2: Facing east towards the site.

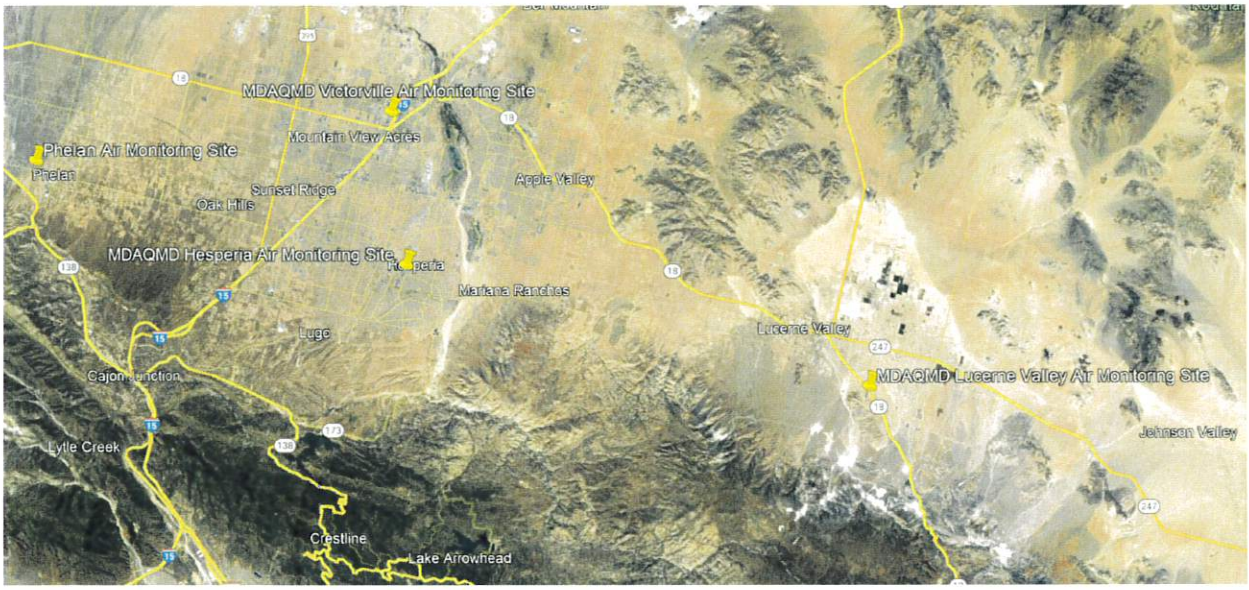
Photograph 3: Facing north and towards town of Lucerne Valley.



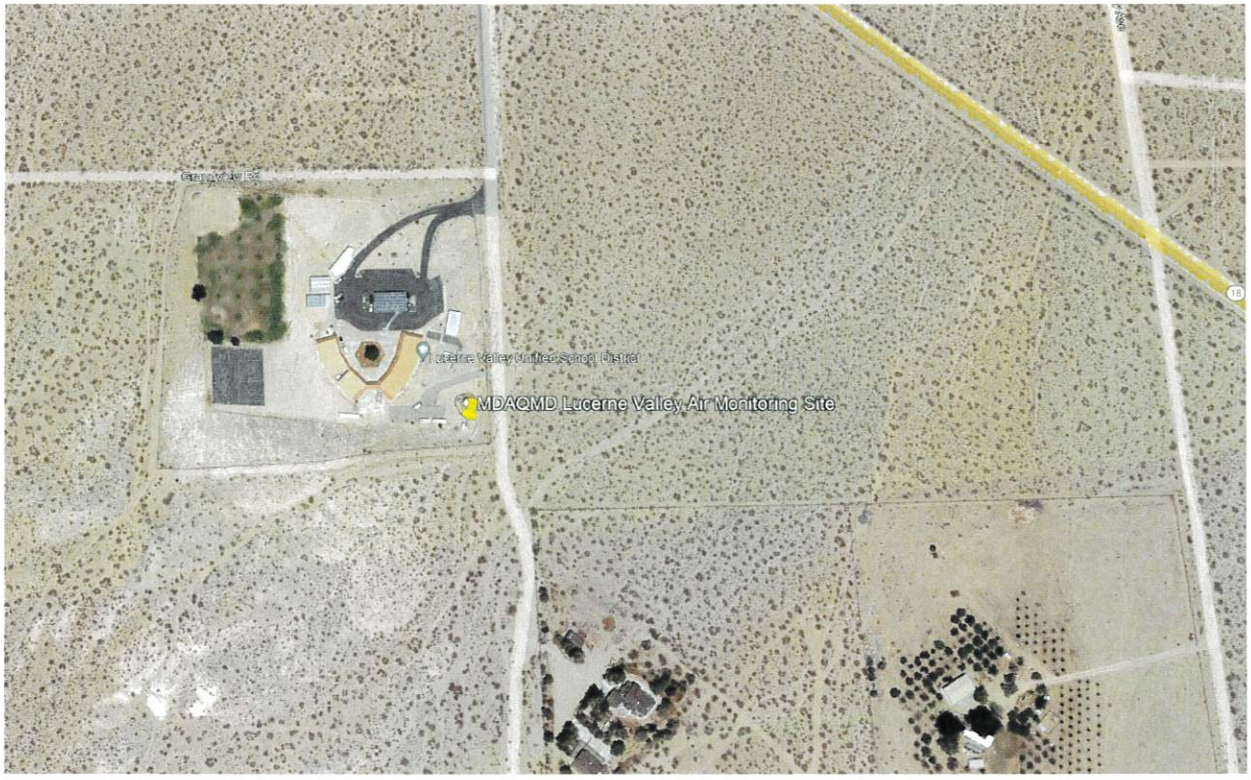
Photograph 4: Facing west-northwest towards the site with school district buildings in the background.

ATTACHMENT C – Satellite Images of MDAQMD air monitoring network

The MDAQMD's Air Monitoring Network in or around the Victor Valley Area. A visual prospective to show the coverage of the MDAQMD's network.



Satellite Image 1: Shown here is a comparison between the Lucerne Valley site and the Phelan site within the Victor Valley area. These sites are located about 39 miles apart.

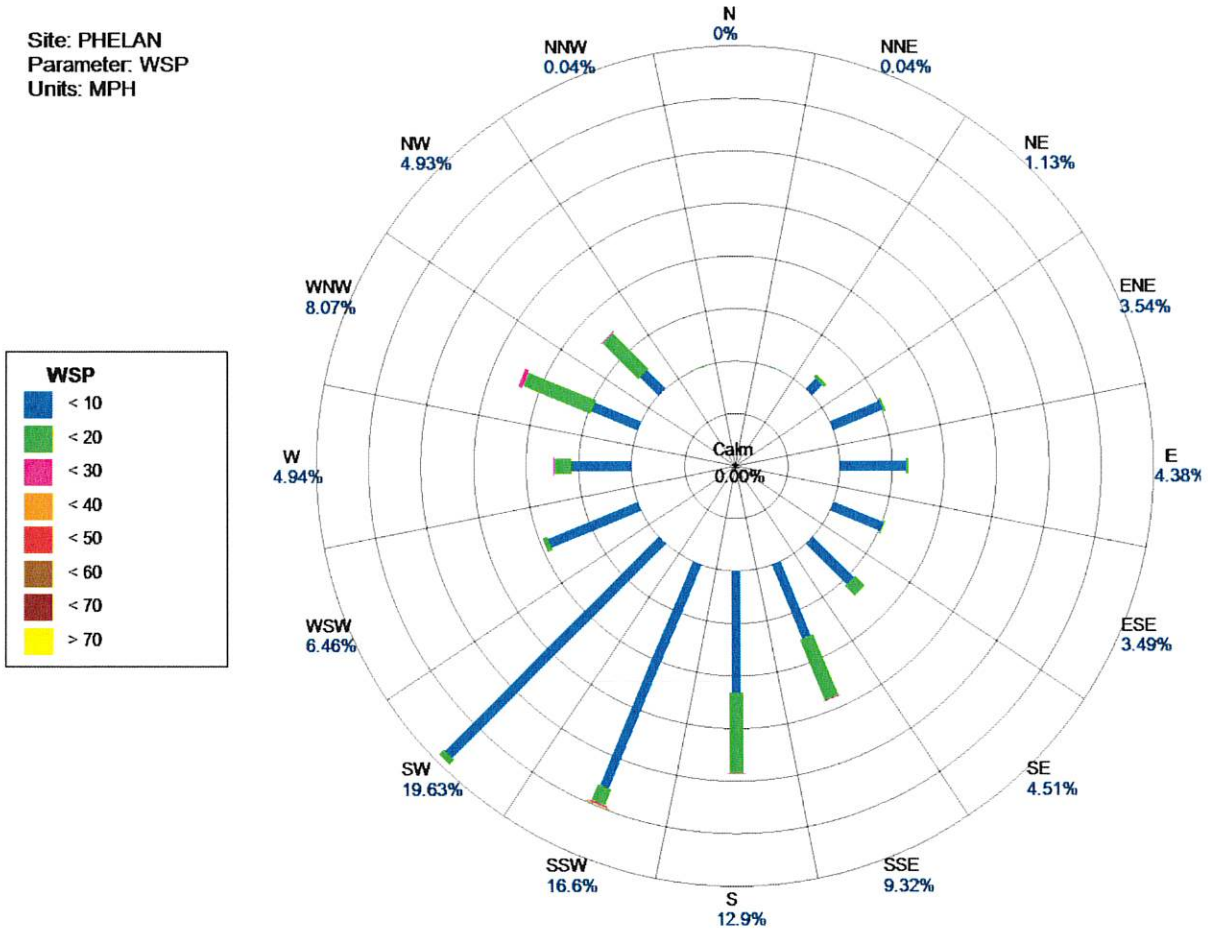


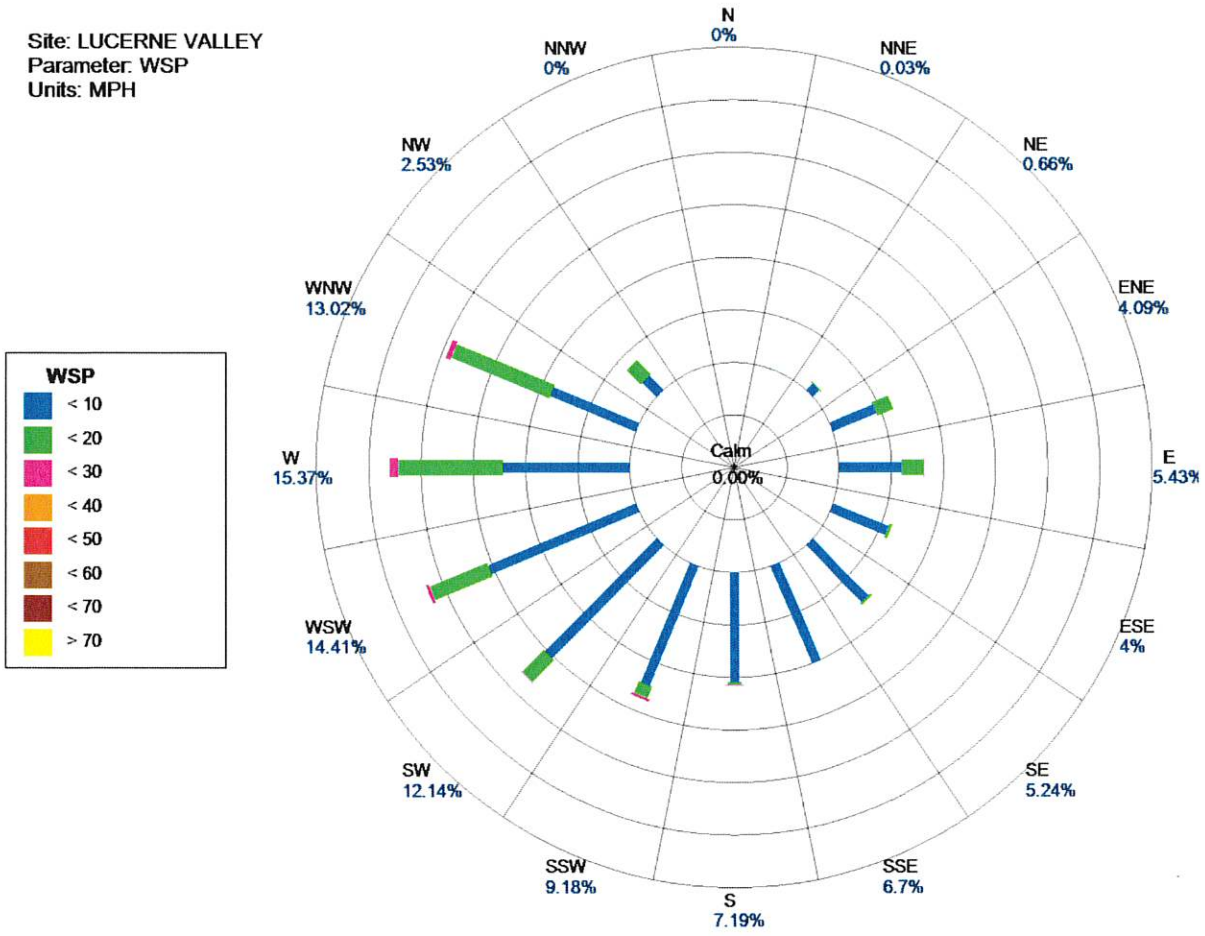
Satellite Image 2: Lucerne Valley site viewed at about 600 ft elevation. Note residences to the south.

Satellite Image 3: Phelan site viewed at about 6000 ft elevation. Note residences to the northeast, west, and south. Directly south is the local SB County fire station.

Satellite image 4: Distance from Lucerne Valley site to Highway 18. Note the school district buildings onsite.

ATTACHMENT D – Phelan Wind Rose Data:





Period: 1/1/2022-12/31/2022

ATTACHMENT E – Minimum Spacing from Roadways Criteria Evaluation

The minimum spacing criteria from probe to roadway is 20 meters (per Table E-1 of Appendix E to Part 58) based on annual average daily traffic trips on Highway 18 of 10,000 vehicles per day (see Table 3). The Lucerne Valley probe will be located about 345 meters away from Highway 18; therefore, the minimum spacing from roadways criteria is met.

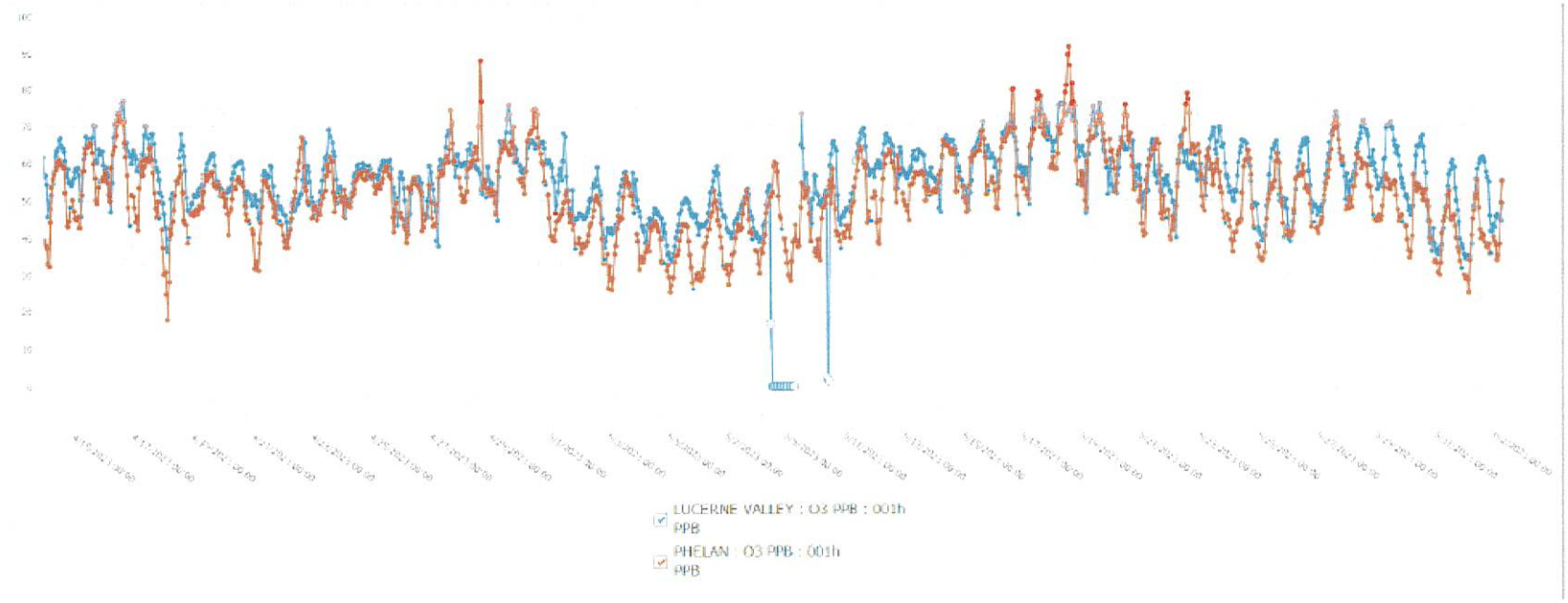
Table 3- Daily Roadway Traffic*

DISTRICT	ROUTE	ROUTE_SFX	COUNTY	PM_PFX	PM	PM_SFX	LOCATION DESCRIPTION	BACK_PEAK_HOUR	BACK_PEAK_MADT	BACK_AADT	AHEAD_PEAK_HOUR	AHEAD_PEAK_MADT	AHEAD_AADT
08	018		SBD		44.319		JCT. RTE. 38 NORTHEAST	1550	11200	8000	1100	7700	5500
08	018		SBD		46.55		BIG BEAR LAKE, BLUE JAY ROAD	1100	7800	5600	1550	10800	7700
08	018		SBD		48.07		BIG BEAR LAKE, MILL CREEK ROAD	2300	16100	11500	2150	15100	10800
08	018		SBD		48.362		LAKEVIEW DRIVE	2150	15100	10800	2400	16800	12000
08	018		SBD		49.117		BIG BEAR BL AT PINE KNOT	3100	21700	15500	6300	44000	31500
08	018		SBD		50.82		MOONRIDGE ROAD	6500	45500	32500	4700	33000	23500
08	018		SBD		51.61		STANFIELD CUTOFF	4700	33000	23500	4100	28500	20500
08	018		SBD		53.917		JCT. RTE. 38 EAST	3300	23000	16400	3050	12800	11200
08	018		SBD		54.537		JCT. RTE. 38 WEST	3050	12800	11200	1600	6600	5800
08	018		SBD		58.16		HOLCOMB VALLEY ROAD	1200	5000	4400	730	3100	2700
08	018		SBD		58.44		BALDWIN LAKE ROAD	730	3100	2700	950	4000	3500
08	018		SBD		65.756		MARBLE CANYON ROAD	950	4000	3500	1400	5800	5100
08	018		SBD		73.783		LUCERNE VALLEY, JCT. RTE. 247	2000	8300	7300	950	10300	9500
08	018		SBD		84.325		BEAR VALLEY CUTOFF	1200	13000	12000	580	6300	5800
08	018		SBD		88.871		APPLE VALLEY, YUCCA LOMA-NAVAJO ROAD	1350	14800	13700	2200	23800	22000
08	018		SBD		90.936		APPLE VALLEY INN ROAD	2650	28500	26500	3400	36500	34000
08	018		SBD		94.39		APPLE VALLEY ROAD	3500	38000	35000	4900	53000	49000

*2021 Traffic Volumes: Annual Average Daily Traffic (AADT) Caltrans Traffic Census Program

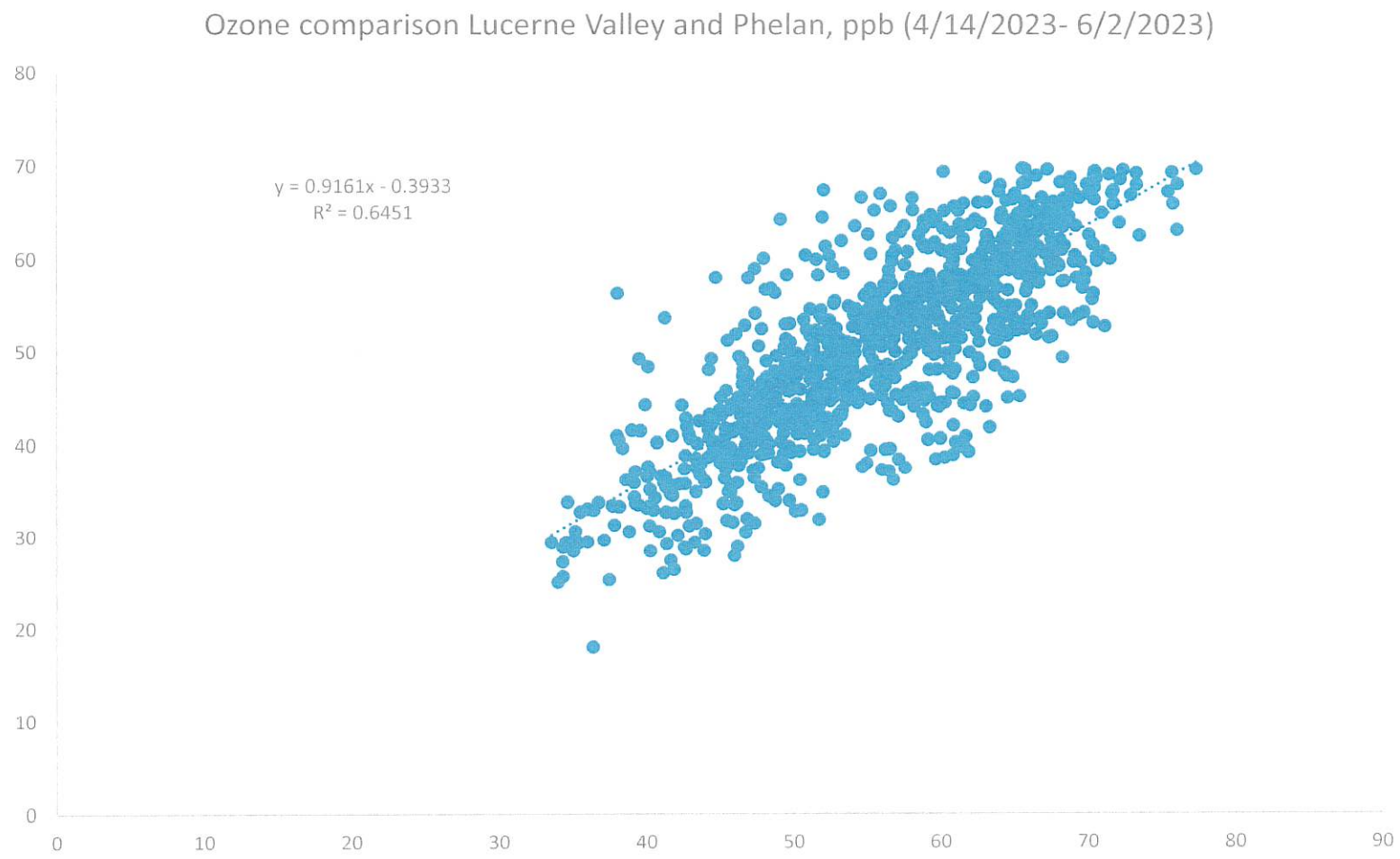
ATTACHMENT F -Comparison of ozone measurements between the Lucerne Valley and Phelan Site and the Hesperia Site and the Phelan Site.

Lucerne Valley and Phelan Ozone data. This is a time series graph showing the data trend between sites.

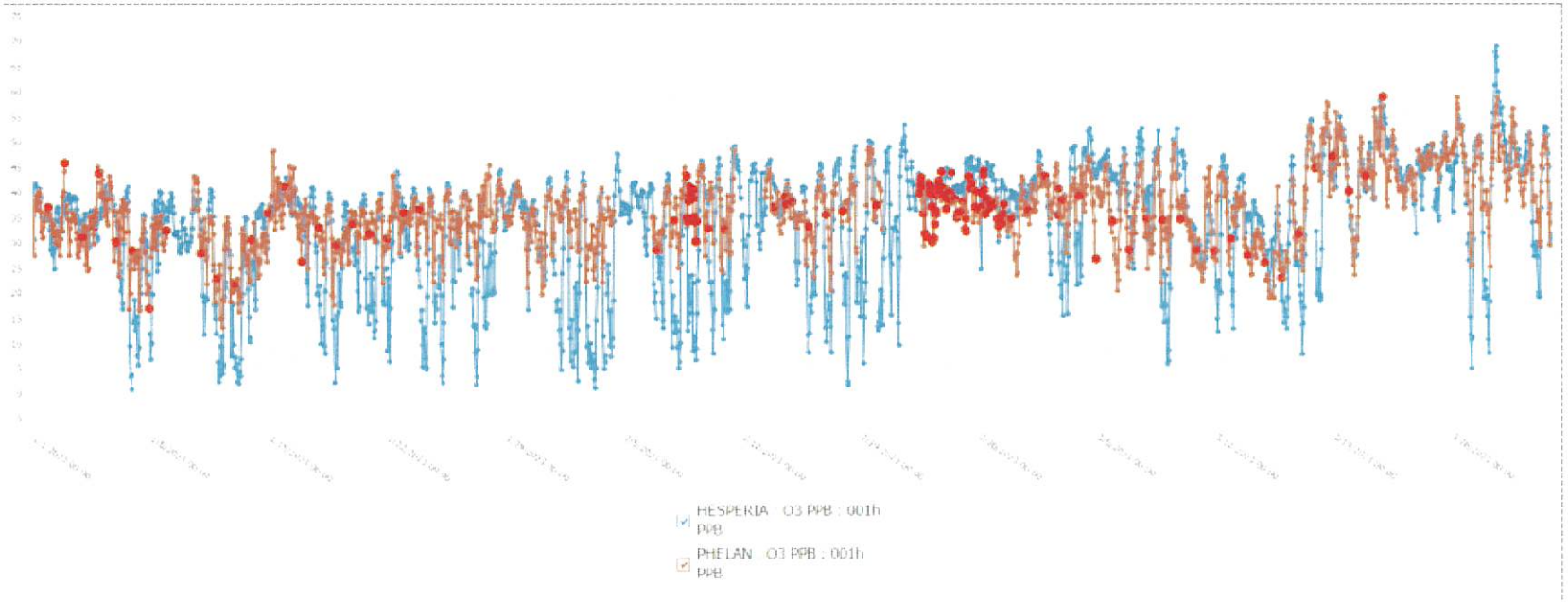


*zero value data points are under review.

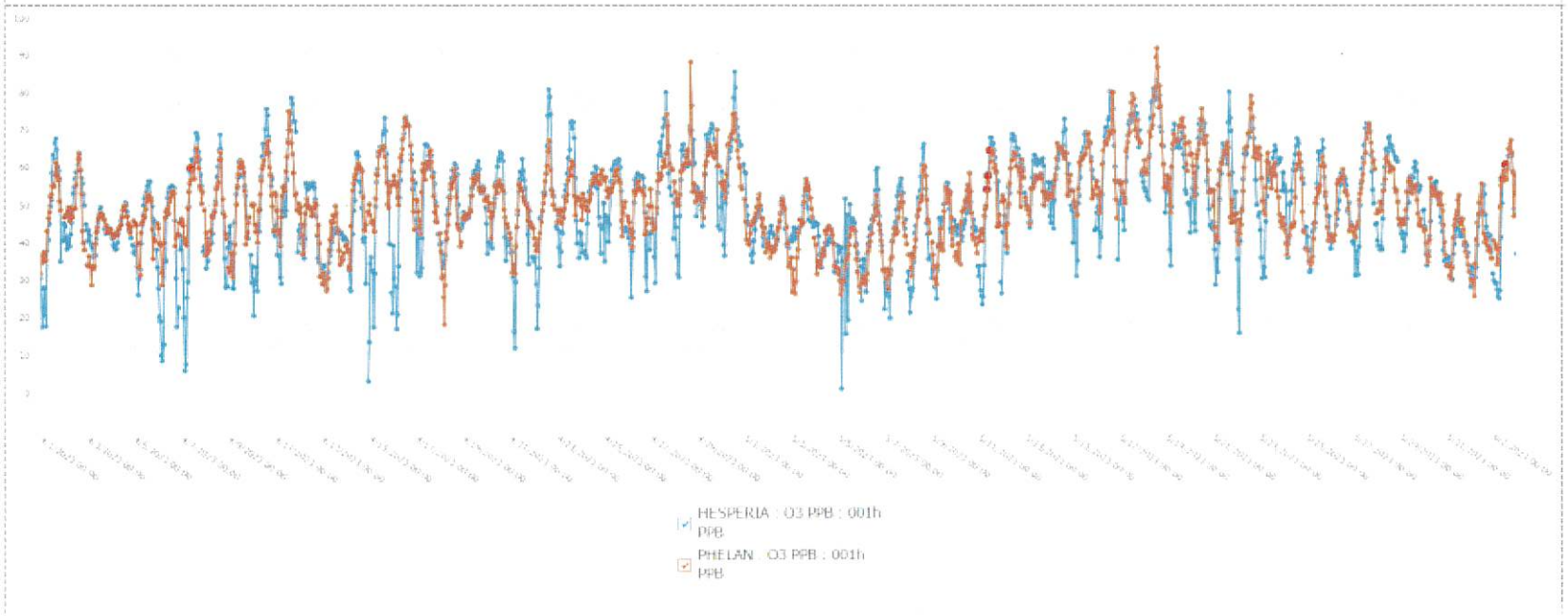
The comparison below shows the relationship between measurements at Lucerne Valley and Phelan.



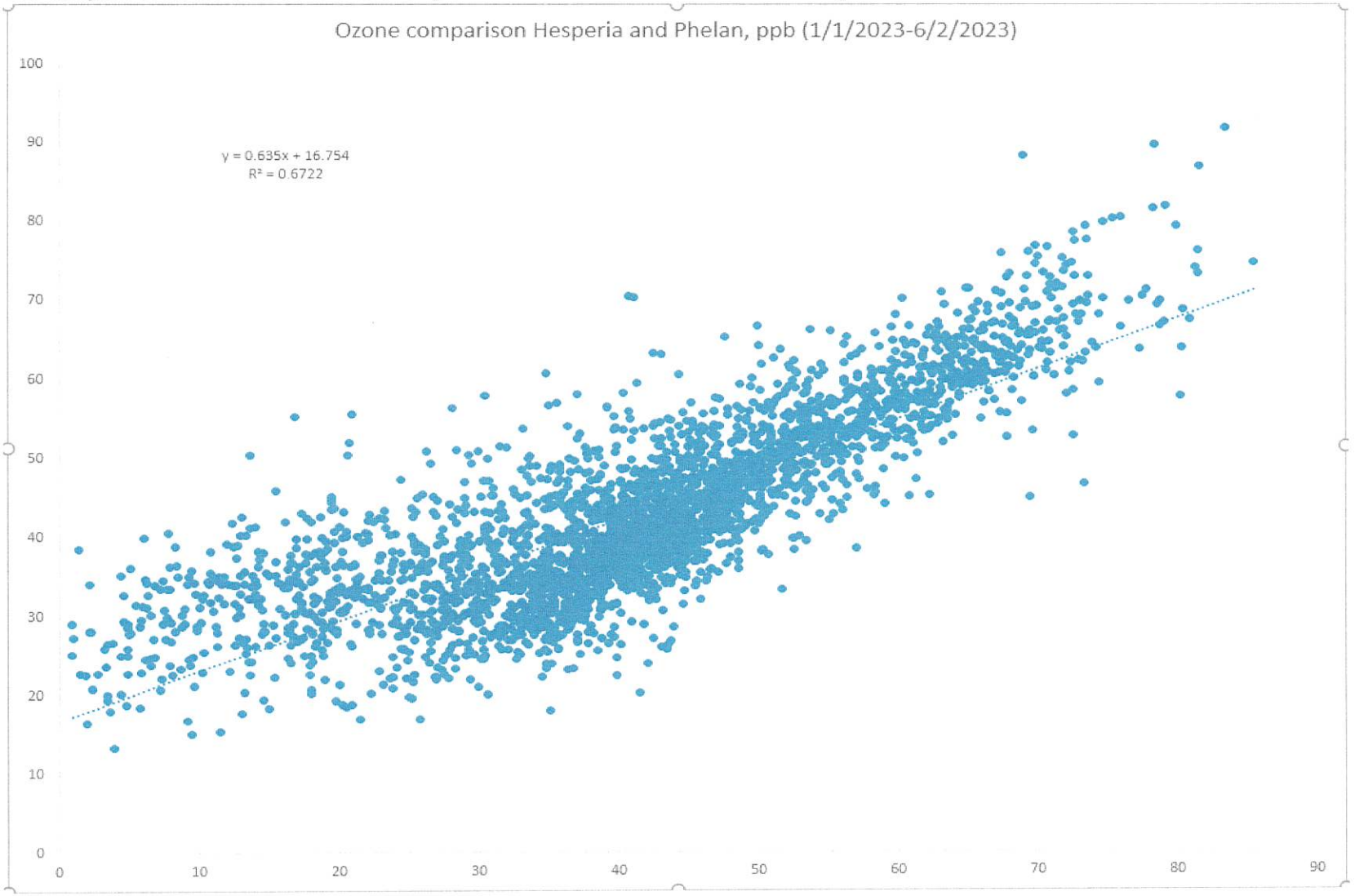
The comparison below shows the relationship between measurements at Hesperia and Phelan (1/1/2023-3/31/2023).



The comparison below shows the relationship between measurements at Hesperia and Phelan (4/1/2023-6/2/2023).



The comparison below shows the relationship between measurements at Lucerne Valley and Phelan.



ATTACHMENT G – Lucerne Valley Site Characteristics (from CARB ANP)

Local Site Name:	Lucerne Valley - Middle School				
AQS ID:	06-071-0013				
GPS Coordinates:	34.41008, -116.90687				
Street Address:	8560 Aliento Rd, Lucerne Valley, 92356				
County:	San Bernardino				
Distance to roadways (meters):	345 to CA-18				
Traffic Count (AADT,year)	8,100 (2015)				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mojave Desert AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Mojave Desert AQMD				
Spatial scale	Neighborhood				
Monitoring start date	1/14/2015				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.7				
Distance from supporting structure (meters)	2.2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A (No trees)				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	270				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	03/24/2021 09/16/2021				

Phelan Alternative Site Evaluation

February 1, 2024

We appreciate the continued collaboration with CARB and USEPA in finding an alternative location for our ozone air monitoring site. Due to the rural nature of the unincorporated community of Phelan, identifying suitable monitoring sites, which also meet the necessary security and operational criteria for hosting an official SLAMS site, including local or nearby restroom facilities for staff, has proven challenging. After unsuccessful attempts to find an appropriate site in Phelan, the ozone monitor has been relocated to the existing SLAMS PM10 site in Lucerne Valley (#0013).

To meet data completeness requirements, ozone monitoring has been operational in Lucerne Valley since January 1, 2024, and the reconfigured site is scheduled for its first audit on March 20th, 2024. We are seeking the support and endorsement from CARB and USEPA for this relocation.

We noted that USEPA suggested locations for consideration in Hesperia, and previously, we have also tried to find a location in the outer regions of Hesperia but were unsuccessful in finding a suitable site. Fortunately, we already operate a SLAMS in Hesperia that monitors PM10, Ozone and metrological data. This site is classified as a population exposure site in the Annual Network Plan (ANP), along with Lucerne Valley and the decommissioned Phelan site within the Riverside-San Bernardino-Ontario Core Based Statistical Areas (CBSA), where Redlands is the ozone design value site.

Prevailing winds along our border with South Coast Air Quality Management District (SCAQMD) transports ozone in a northerly or north by northwest direction, from SCAQMD's most heavily ozone concentrated areas in the Inland Empire over the San Bernardino Mountain range into the High Desert. Modeling projections (refer to figure 3) suggest that the heaviest concentrations of ozone in the MDAQMD will be primarily situated east of the I-15 Freeway at the border of our Jurisdiction with South Coast Air Quality Management District. This puts the bulk of the transported ozone in Hesperia and neighboring communities. Even without the Phelan ozone site relocation, we anticipate Hesperia to become our high design value site for ozone in the MDAQMD.

In our relocation efforts, we conducted a comprehensive evaluation of air quality data statistics and explored alternative sites for ozone monitoring. Below, you will find maps depicting the assessed locations, a comparison of design values, and days exceeding 70 ppb of Ozone for the 8-Hour standard at the Phelan and Hesperia sites over the last decade, along with a detailed evaluation of potential sites, sorted by their distance in kilometers from the decommissioned Phelan Air Monitoring Site (#0012):

Maps of Evaluated Locations

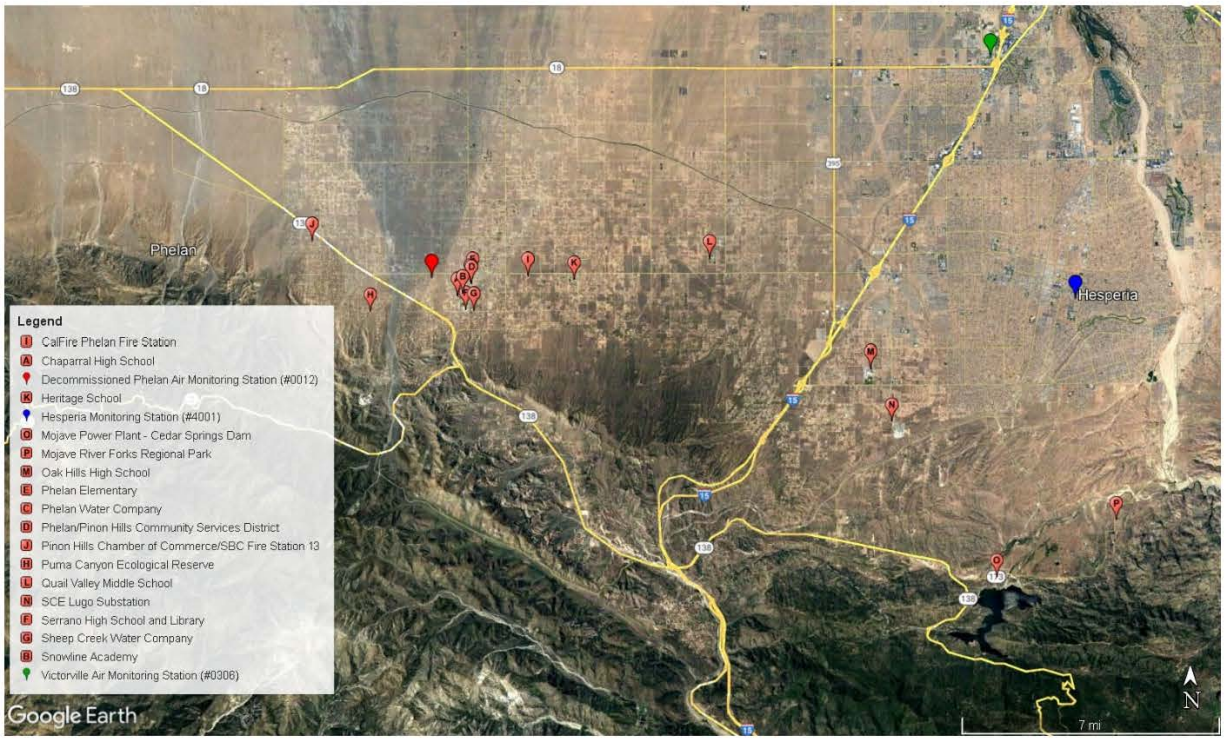


Figure 1 - Image of all locations evaluated, including Phelan (decommissioned), Hesperia, Lucerne Valley and Victorville monitoring sites.

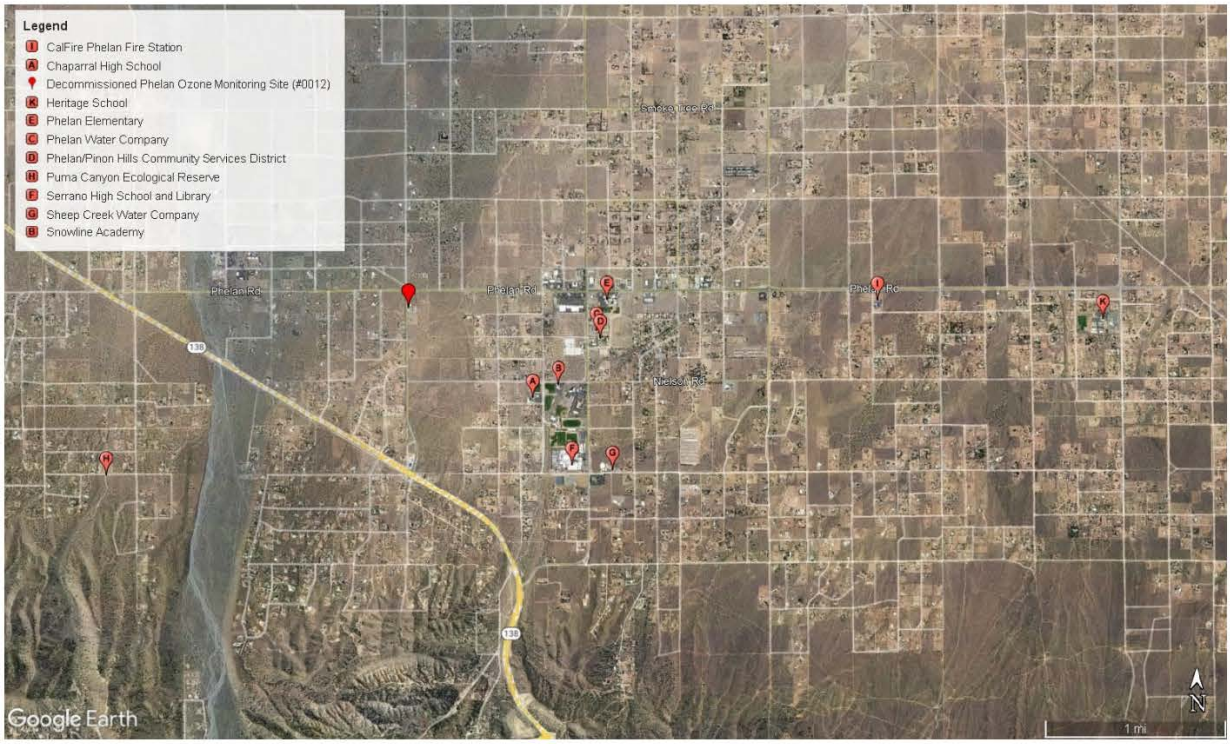


Figure 2 - Locations within 4 km of decommissioned Phelan air monitoring site.

2023 Predicted Ozone Design Values

Modeling projections indicate that by 2032, had Phelan remained operational, Hesperia would have surpassed it as the high design value site for MDAQMD.

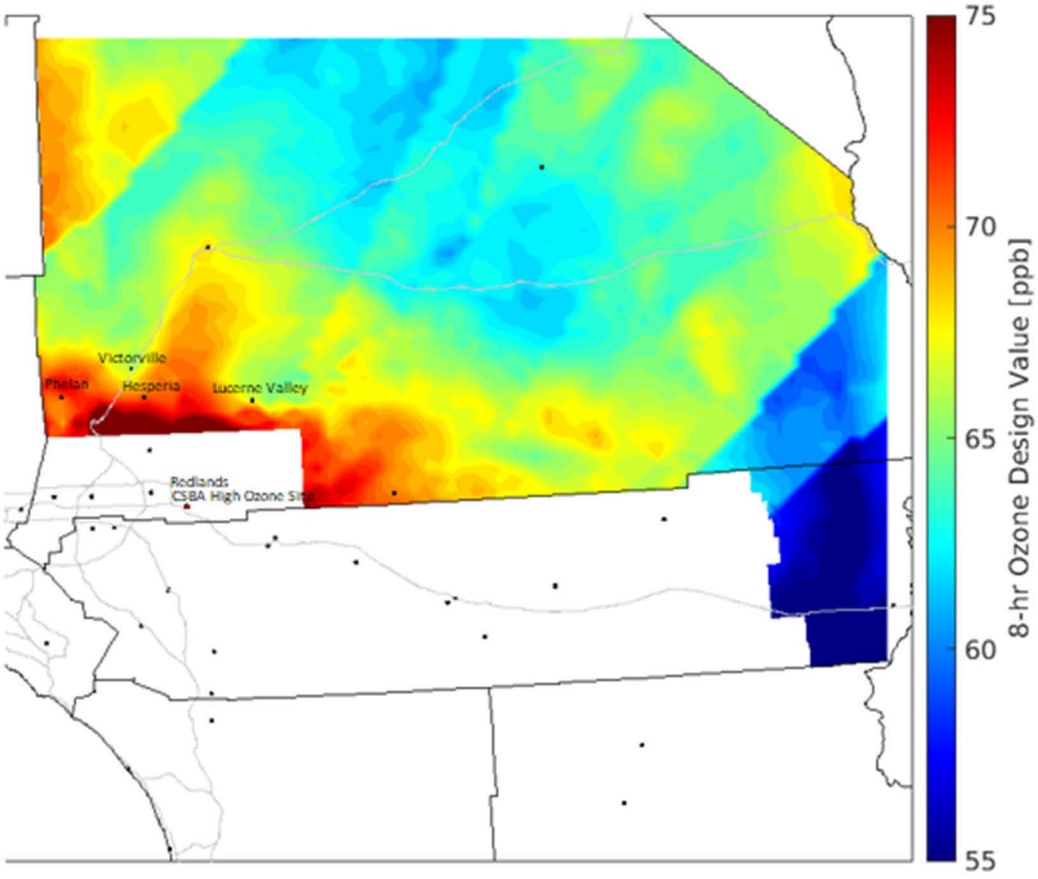


Figure 3 - 2032 Predicted 8-Hour Ozone Values. Ozone monitoring stations are notated with black dots, CSBA Ozone Designation Site in Red.

Design Values and Exceedance Days

Design values have generally followed a similar trend between Phelan and Hesperia deviating primarily during years of wildfire influence.

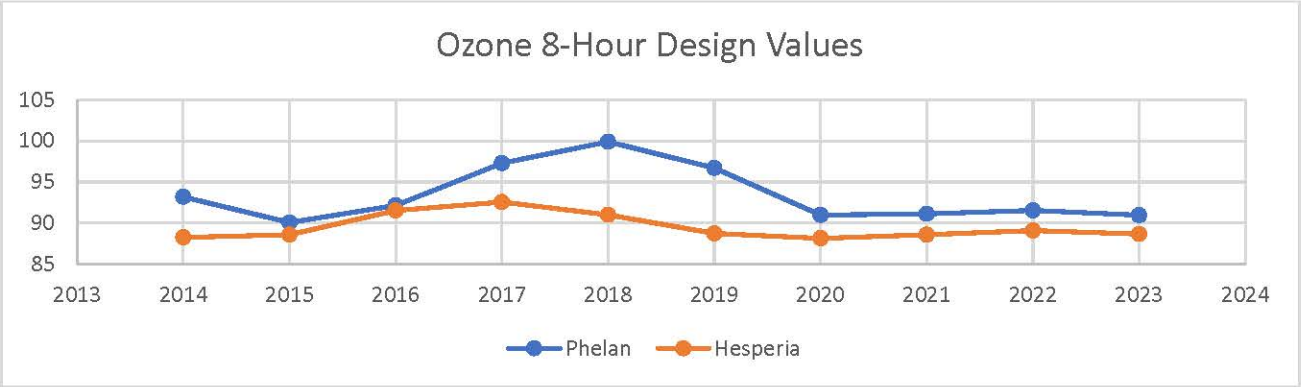
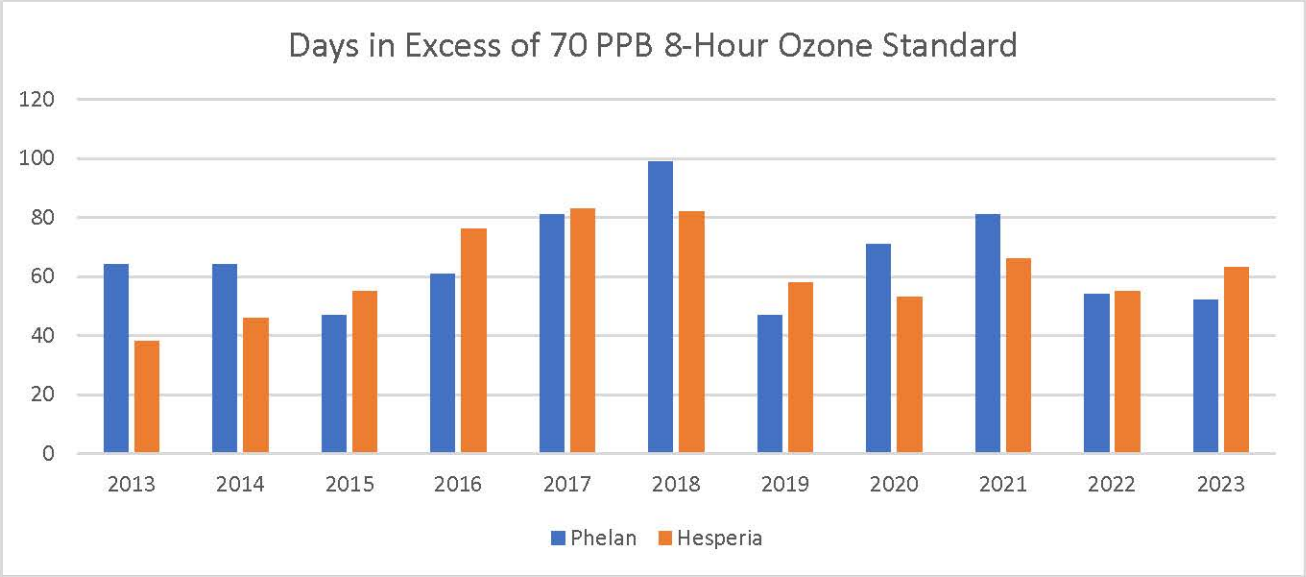


Figure 4 - Design Value Data, Hesperia and Phelan 2014-2023

With the exception of years impacted by wildfires, Hesperia consistently exceeds Phelan in the number of days surpassing the 70 ppb 8-Hour Ozone Standard.



Evaluated Phelan Ozone Air Monitoring Relocation Sites

#	Distance	Site Name	Site Address	GPS Coordinates
A	1.33 km	Chaparral High School	9258 Malpaso Rd, Phelan	34.417768°, -117.577830°

All the schools on this list pose accessibility challenges due to their enhanced campus safety practices. Schools also create security concerns for our equipment. We have had problems with theft and vandalism in various schools throughout the District with our PurpleAir low cost sensor program. Considering the cost and sensitivity of the air monitoring equipment, the history of problems at various schools, and present-day campus safety protocols, hosting a monitor at a school creates a heightened level of apprehension for the District. Additionally, campus space is limited and the compromised accessibly of campus spaces restricts 24/7 access of staff from being onsite to access monitoring equipment. Continuous access is crucial for timely response and maintenance, especially in situations requiring immediate attention.

Figure 5- Chaparral High School

#	Distance	Site Name	Site Address	GPS Coordinates
B	1.56 km	Snowline Academy	3919 Nielson Rd, Phelan	34.408223°, -117.575311°

This is a school site which creates security concerns for vandalism of the equipment. This site also does not allow for 24-Hour access to the monitoring equipment due to present-day campus safety protocols.

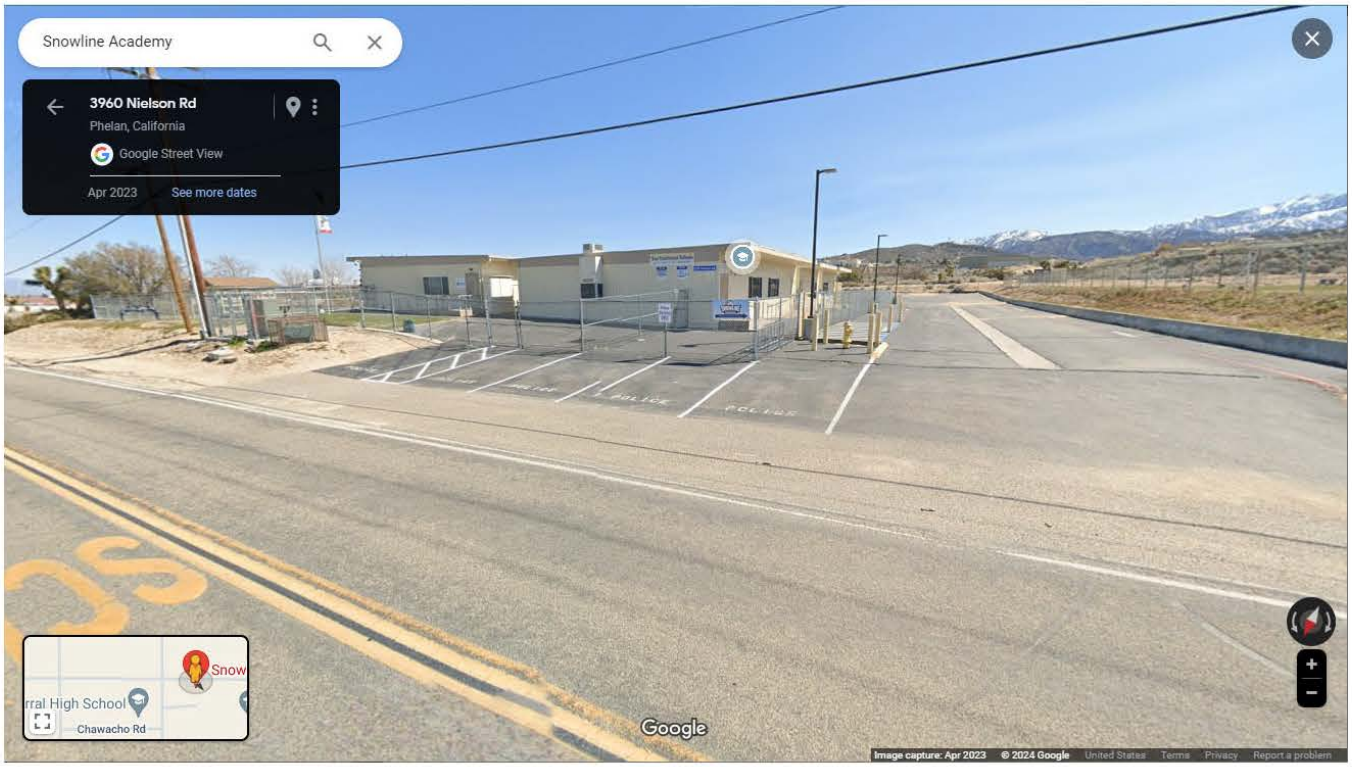


Figure 6 - Snowline Academy

#	Distance	Site Name	Site Address	GPS Coordinates
C	1.67 km	Phelan Water Company	4176 Warbler Rd, Phelan	34.422577°, -117.571275°

Not secure - not fully fenced (No Gate). No power, unpaved facility, frequent use of large diesel trucks.

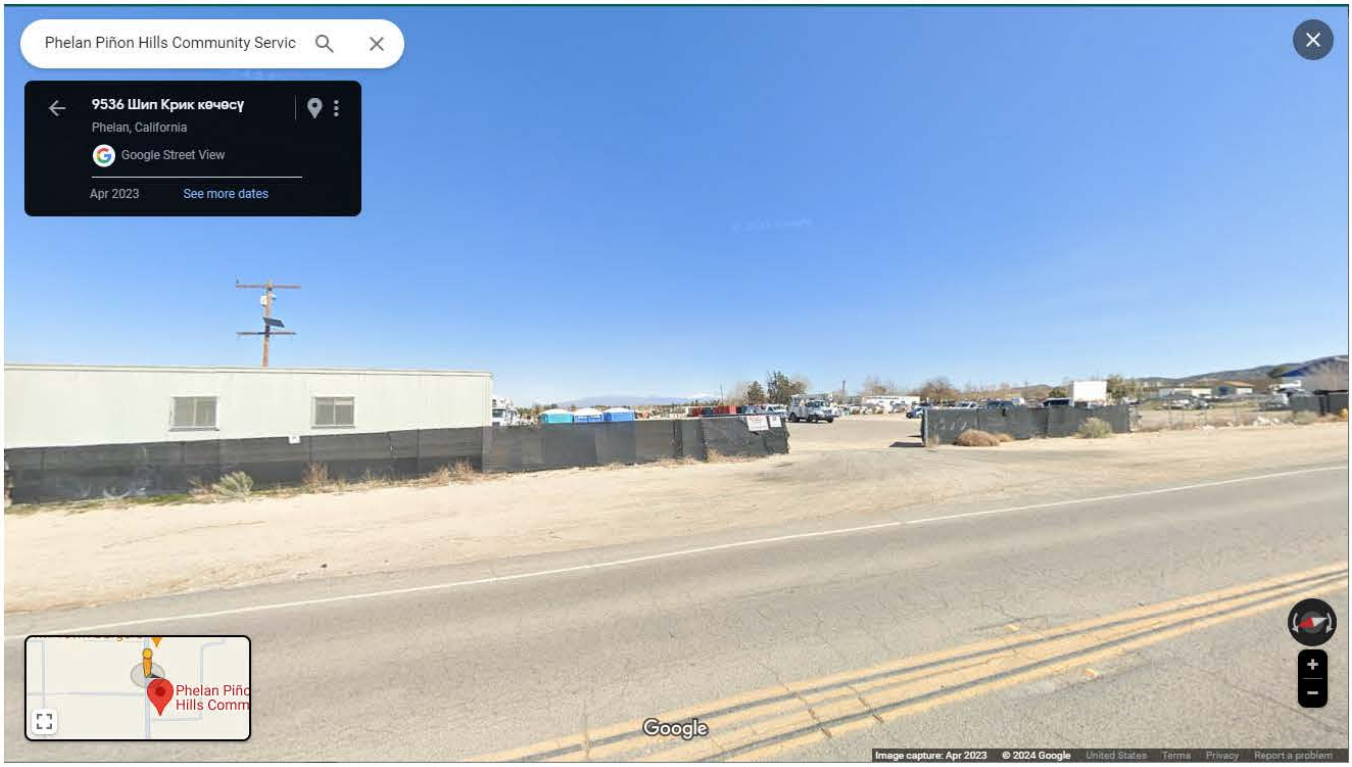


Figure 7 - Phelan Water Company

#	Distance	Site Name	Site Address	GPS Coordinates
D	1.71 km	Phelan Piñon Hills Community Services District	4176 Warbler Rd, Phelan	34.422577°, -117.571275°

Not secured, no fencing. 24/7 access not available.

Figure 8 - Phelan/Pinon Hills Community Services District

#	Distance	Site Name	Site Address	GPS Coordinates
E	1.83 km	Phelan Elementary	4167 Phelan Rd, Phelan	34.425615°, -117.570634°

This is a school site which creates security concerns for vandalism of the equipment. This site also does not allow for 24-Hour access to the monitoring equipment due to present-day campus safety protocols.

Figure 9 - Phelan Elementary School

#	Distance	Site Name	Site Address	GPS Coordinates
F	1.92 km	Serrano High School & Public Library	9292 Sheep Creek Rd, Phelan	34.412432°, -117.573981°

This is a school site which creates security concerns for vandalism of the equipment. This site also does not allow for 24-Hour access to the monitoring equipment due to present-day campus safety protocols.

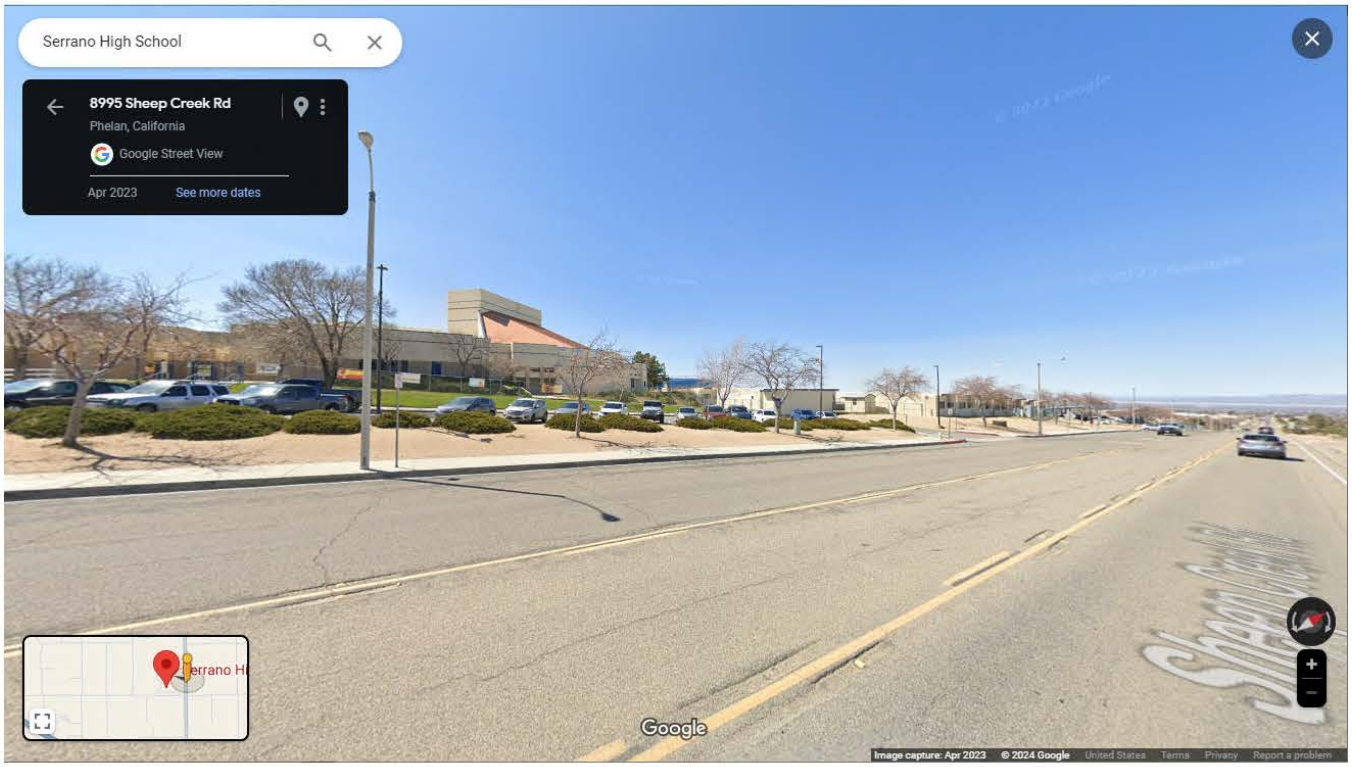


Figure 10 - Serrano High School & Public Library

#	Distance	Site Name	Site Address	GPS Coordinates
G	2.37 km	Sheep Creek Water Co.	4200 Sunnyslope Rd, Phelan	34.412058°-117.570083°

A lot of heavy-duty equipment activity on site. Abundant amount of construction PM. Non-paved, non-county-maintained access roads. Site is fenced, but not secure as fencing needs repair.

Figure 11 - Sheep Creek Water Company

#	Distance	Site Name	Site Address	GPS Coordinates
H	3.91 km	Puma Canyon Ecological Reserve	Sand Canyon Rd, Pinon Hills	34.411606°, -117.619051°

The study center is located on non-maintained unpaved road approximately 1km from nearest paved road. In addition, the study center is located within the conservancy atop a hillside with a steep unpaved driveway about 0.3 kilometers which could prevent access in the wintertime due to road conditions. This is a small educational center available by appointment only. Does not allow for 27/7 access. The site is not completely secured by fencing which is concerning for potential vandalism. This is the same site as Pinon Hills Transition Habitat Conservancy and Pinon Hills Transition Habitat Study Center.

Figure 12 - Puma Canyon Ecological Reserve

#	Distance	Site Name	Site Address	GPS Coordinates
I	4.2 km	CAL Fire BDU – Phelan Fire Station	9600 Centola Rd, Phelan, CA 92371	34.427609393147556, -117.54464618075379

Unpaved roadways. On site generator and above ground fuels storage tank. Frequent use of diesel-powered chipper/grinder.

Figure 13 - CAL Fire BDU - Phelan Fire Station

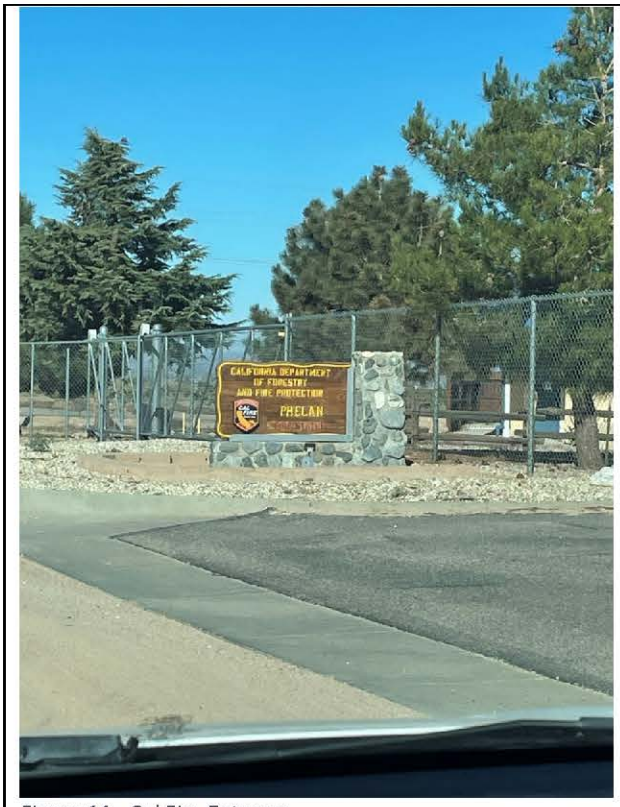


Figure 14 - Cal Fire Entrance

Figure 15 - Cal Fire Equipment

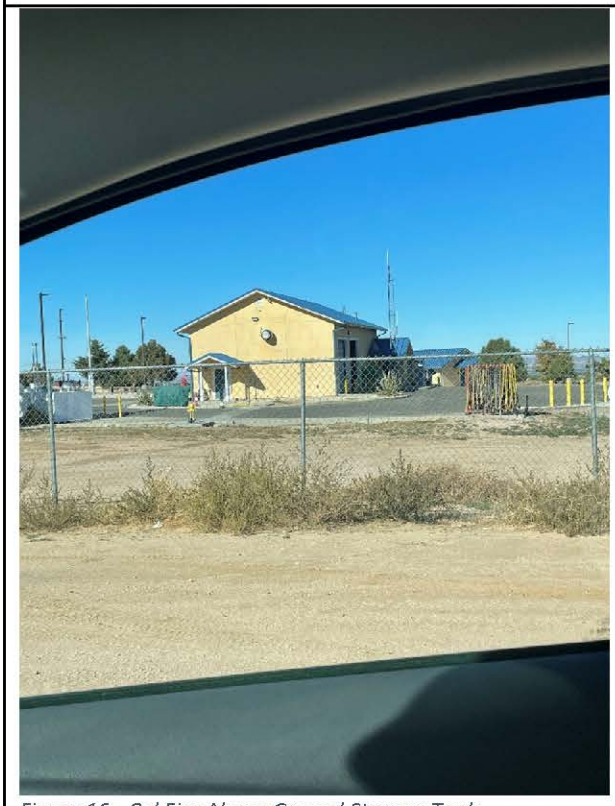


Figure 16 - Cal Fire Above Ground Storage Tank

Figure 17 - Cal Fire Equipment

#	Distance	Site Name	Site Address	GPS Coordinates
J	5.45 km	Piñon Hills Chamber of Commerce/SBC Fire Station 13	10433 Mountain Rd, Piñon Hills, CA 92372	34.439000 – 117.647000

Facility not secured/fenced. No availability of infrastructure to house air monitoring equipment.

Figure 18 - Pinon Hills Chamber of Commerce/SBC Fire Station #13

#	Distance	Site Name	Site Address	GPS Coordinates
K	6.13 km	Heritage School	9542 Wilson Ranch Rd, Phelan, CA 92371	34.42451833156377, -117.52269083502995

This is a school site which creates security concerns for vandalism of the equipment. This site also does not allow for 24-Hour access to the monitoring equipment due to present-day campus safety protocols. This campus is also located adjacent to the District School Bus Yard.

Figure 19 - Heritage School & Bus Yard

#	Distance	Site Name	Site Address	GPS Coordinates
L	12.18 km	Quail Valley Middle School	10058 Arrowhead Rd, Phelan, CA 92371	34.43357541364628, -117.45723930506549

This is a school site which creates security concerns for vandalism of the equipment. This site also does not allow for 24-Hour access to the monitoring equipment due to present-day campus safety protocols.

Figure 20 - Quail Valley Middle School

#	Distance	Site Name	Site Address	GPS Coordinates
M	19.18 km	Oak Hills High School	7625 Cataba Rd, Oak Hills, CA 92344	34.389926319849316, -117.38475695006144

This is a school site which creates security concerns for vandalism of the equipment. This site also does not allow for 24-Hour access to the monitoring equipment due to present-day campus safety protocols. Lots of bus traffic, only 9.5 km from the Hesperia Air Monitoring site as opposed to 19.3 km from discontinued Phelan site.

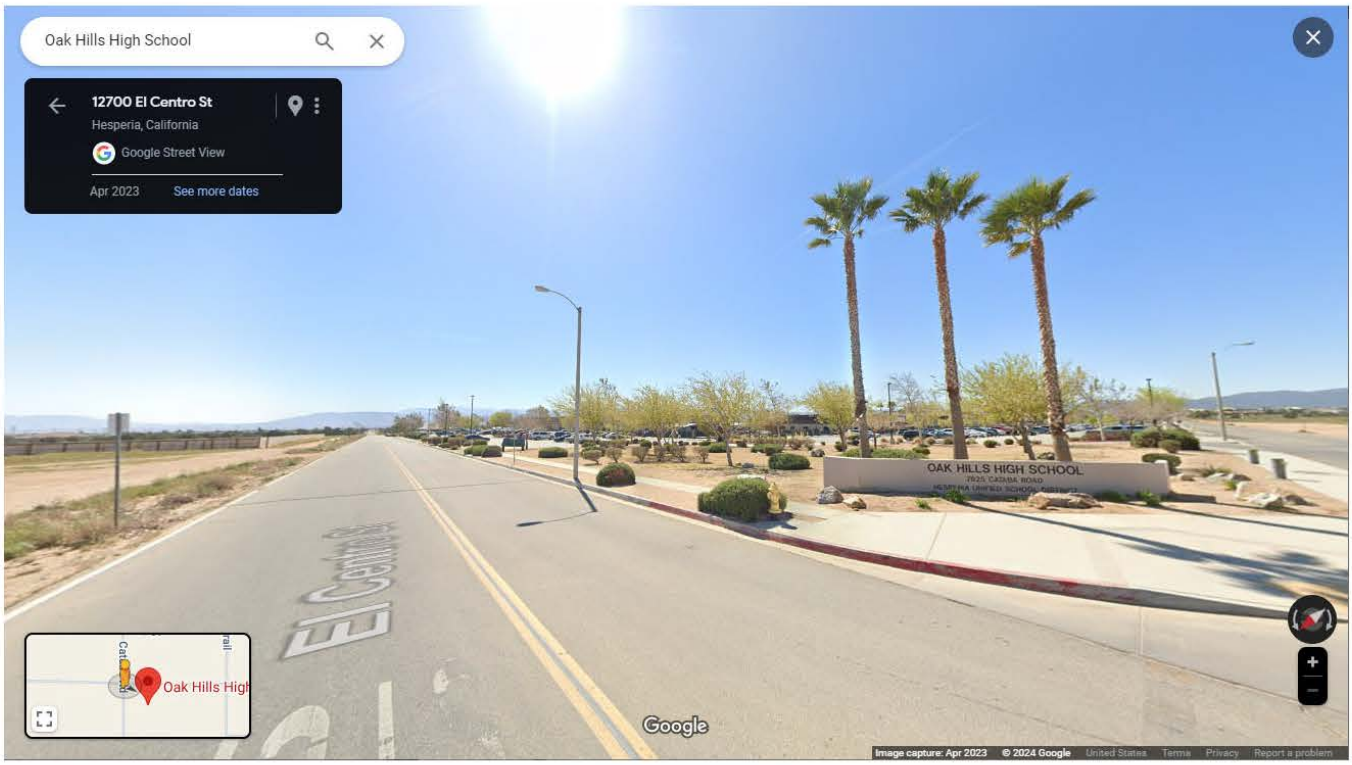


Figure 21 - Oak Hills High School

#	Distance	Site Name	Site Address	GPS Coordinates
N	20.94 km	SCE Lugo Substation	13301 Whitehaven St, Hesperia	34.36839746675596, -117.3717125185596

24/7 access is not available. High Voltage Power Lines on Premises. Only 9.23 km from Hesperia AM site as opposed to 21.1 km from the discontinued Phelan site.

Figure 22 - SCE Lugo Substation

#	Distance	Site Name	Site Address	GPS Coordinates
O	27.7 km	Mojave Power Plant – Cedar Springs Dam	CA HWY 173, Hesperia	34.308022°, -117.323373°

High security at site, 24/7 access not available. Network connection not available.

#	Distance	Site Name	Site Address	GPS Coordinates
P	31.6 km	Mojave River Forks Regional Park	18395 CA HWY 173, Hesperia	34.330241° -117.266814°

Not secured, no fencing.

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

December 20, 2021

Christopher Collins
Air Monitoring Supervisor
Mojave Desert Air Quality Management District
14306 Park Ave
Victorville, CA 92392

Dear Christopher Collins:

This letter provides the U.S Environmental Protection Agency's (EPA) review and approval for the Mojave Desert Air Quality Management District (MDAQMD) discontinuation of the sulfur dioxide (SO_2) State/Local Air Monitoring Station (SLAMS) monitors at the Victorville (Air Quality System (AQS) ID: 06-071-0306) and Trona (AQS ID: 06-071-1234) sites, and discontinuation of the carbon monoxide (CO) SLAMS monitors at the Victorville and Barstow (AQS ID: 06-071-0001) sites. A request for EPA approval of these network changes was submitted to EPA on November 17, 2021. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors.

Discontinuation of the CO and SO_2 SLAMS monitors was reviewed by EPA against criteria contained in 40 CFR 58.14(c)(1). According to certified data submitted to EPA's AQS, the Victorville and Trona SO_2 monitors were in attainment of the 2010 1-hour SO_2 National Ambient Air Quality Standards (NAAQS) from 2016 through 2020. The EPA has determined that, based on design values from 2016-2020, there is a less than 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at these sites. Preliminary 2021 data are consistent with the historical trend and continue to show low concentrations. These SO_2 monitors are not specifically required by an attainment or maintenance plan and are not located in a nonattainment or maintenance area.

According to certified data submitted to EPA's AQS, the Victorville and Barstow CO monitors were in attainment of the 1971 1-hour CO and 8-hour CO NAAQS from 2016 through 2020. The EPA determined that, based on design values from 2016-2020, there is a less than 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at these sites. Preliminary 2021 data are consistent with the historical trend and continue to show low concentrations. These CO monitors are not specifically required by an attainment or maintenance plan and are not located in a nonattainment or maintenance area.

With these closures, fulfillment of SO_2 and CO minimum monitoring requirements (as specified in 40 CFR 58 Appendix D) for the Riverside-San Bernardino-Ontario, CA Metropolitan Statistical Area (MSA) will be dependent on monitoring conducted by the South Coast Air

Quality Management District (South Coast AQMD). 40 CFR 58 Appendix D §2(e) requires MDAQMD to establish a shared monitoring agreement with South Coast AQMD upon EPA approval of these monitor discontinuations. Please include a letter of agreement between the two agencies in your next Annual Network Plan (ANP).

Based on these analyses, EPA approves MDAQMD's discontinuation of the SO_2 SLAMS monitors at the Victorville and Trona sites, and CO SLAMS monitors at the Victorville and Barstow sites. Please include this letter, the relevant monitor and site information, and the letter of agreement between MDAQMD and South Coast AQMD in the next ANP.

If there are any questions regarding this letter, please feel free to contact me at (415) 947-4134 or Sheila Tsai of my staff at 415-972-3328.

Sincerely,

BEN MACHOL Digitally signed by BEN MACHOL Date: 2021.12.20 16:04:41 -08'00' for

Gwen Yoshimura, Manager
Air Quality Analysis Office

cc (via e-mail): Greg Gilani, CARB
Manisha Singh, CARB
Kathleen Gill, CARB
Sylvia Vanderspek, CARB
Ravi Ramalingam, CARB
Jin Xu, CARB
Adolfo Garcia, CARB
Reggie Smith, CARB
Ranjit Bhullar, CARB

February 07, 2023

Ms. Gwen Yoshimura, Manager
Air Quality Analysis Office
U.S. Environmental Protection Agency, Region 9 Air Division
75 Hawthorne Street
San Francisco, California 94105
Yoshimura.Gwen@epa.gov

Dear Ms. Yoshimura,

The California Air Resources Board (CARB) requests approval from the U.S. Environmental Protection Agency (U.S. EPA) for the relocation of all monitoring parameters (O3, PM2.5, and PM10) at the Mojave – 923 Poole Street (Poole) monitoring station (AQS: 060290011) to the nearby location at 1773 CA-58 Business (CA-58). Justification for relocation is based on 40CFR, 58.14(c)(6): *A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.*

Resultant of land use changes beyond CARB's control, monitoring operations at Poole were abruptly suspended at the end of August 2020. In coordination with and through extraordinary efforts by the Eastern Kern Air Pollution Control District (EKAPCD), the shelter was expeditiously relocated from Poole to a neighboring county property (CA-58) accessible to EKAPCD. Monitoring operations at CA-58 commenced on September 22, 2020; with subsequent CARB Site (15251) and AQS (060290019) identification numbers. Detailed site reports are provided in the attached documentation.

The CA-58 site is located approximately 1372 meters southwest of the original Poole site. As with Poole, the CA-58 site shares land use with another local government building and resides adjacent to a small parking lot. Trees approximately forty-feet tall outline the property perimeter to the north and west of the shelter, with the closest trees located approximately fifty feet from the shelter. In accordance with 40 CFR, §58.14(c)(6), the CA-58 location's proximity to Poole will maintain the existing scale of representation with no changes in monitored parameters or sampling methods. As shown in Figure 1 below, the Mojave Air and Spaceport remains to the north and northeast of CA-58, with residential neighborhoods to CA-58's south and west directions.

Figure 1: Poole and CA-58 Site Locations

Beyond the outlining trees adjacent to CA-58, the topography remains consistent as compared to Poole; mountainous terrain to the north and west of either location, the neighboring Mojave Air and Spaceport complex to the north, with the remaining southern and eastern areas sparsely developed. CA-58 maintains an unobstructed line of sight with Poole. Vehicle traffic at CA-58 is expected to remain consistent with Poole as both sites are accessible through the same major roadways, SR-14 and CA-58 Business. Based on a 2015 traffic count of 17,000 vehicles per day, CA-58 site distance of 60 meters to the CA-58 Business roadway meets minimum inlet probe distance requirements as shown in Table 1 of the attached doumentation.

Based on analysis of 2016 through 2020 Poole street data included in Attachment 1, all monitored parameters (O3, PM2.5 and PM10) do not meeet the established five-year attainment criteria and are not eligible for removal. Please note the Poole site relocation in August 2020 and ensuing startup at CA-58 with a new AQS identification number, resulted in data capture incompleteness and subsequent undetermined Design Values for 2020 at Poole.

With respect to the region's ongoing nonattainment status and to provide verification that 40CFR, Part 58, Appendix D requirements will continue to be satisfied with the CA-58 relocation, CARB staff have compared recorded daily averaged pollutant concentrations between the Poole and CA-58 sites over a four calendar year period, 2019-2022 (refer to Attachment 2). As not all comparative data is available in AQS, for consistency CARB staff evaluated daily averages as reported from CARB's Air Quality and Meterological Information System (AQMIS) for the monitored O3, PM2.5, and PM10 parameters at both Poole and CA-58. Poole data consists of 2019 and 2020 calendar years, while CA-58 data consists of 2021 and 2022 calendar years.

Tables 2 through 4 in Attachment 2 documentation demonstrate that daily averaged concentration values recorded at CA-58 in 2021 and 2022 align with historical trends recorded at Poole in 2019 and 2020. Seasonal wind roses included in Figures 2 through 5, demonstrate wind patterns between Poole and CA-58 are comparable, with a predominantly western wind. CARB's Air Quality Science and Planning Division (AQPSD) and AQSB monitoring staff anticipate future CA-58 data trends to remain consistent with historical Poole trends based on proximity and similar topography between CA-58 and Poole.

This request comes as a precursor to an imminent request to relocate CA-58 to a final location. In consultation with CARB's AQPSD and U.S. EPA Region 9, a permanent site has been selected for relocation and is currently undergoing site improvements. A separate request will be submitted to U.S. EPA for that final relocation. Until that time, monitoring operations will continue indefinitely at CA-58. If you need any additional information, please contact Mr. Adolfo Garcia, Manager, Air Monitoring South Section within the Air Quality Surveillance Branch, at 951.542.3175 or Adolfo.Garcia@arb.ca.gov.

Sincerely,

Kathy Gill

Kathy Gill, Chief, Air Quality Surveillance Branch

Attachment(s): 5

cc: See next page

cc: Dena Vallano
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U.S. Environmental Protection Agency
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Manisha Singh, Chief, Quality Management Branch

Sylvia Vanderspek, Chief, Air Quality Planning Branch

Adolfo Garcia, Manager, Air Monitoring South Section

Thomas Lovejoy, Air Resources Engineer, Air Monitoring South Section

Attachment 1
Mojave - Poole Street
System Modification Analysis

System Modification Analysis 40 CFR 58.14

Site: **Mojave - Poole Street (AQS# 060290011)**
Pollutant: **Ozone**

2016 - 2020 8-Hour Ozone NAAQS

0.070	ppm	<-- Ozone 4th Maximum 8-Hour NAAQS

2016 Design Value (ppm)	2017 Design Value (ppm)	2018 Design Value (ppm)	2019 Design Value (ppm)	2020[1] Design Value (ppm)	Average Design Value (X) (ppm)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ppm)	80% of NAAQS (ppm)	< 10% Probability of exceeding 80% of NAAQS?
0.084	0.081	0.085	0.081	0.086	0.08	0.00	2.13	5	0.09	0.06	FAIL

1. Poole Street monitoring operations discontinued in August 2020, completeness criteria not met. Displayed value is invalid, Probability Test - failed.

Source: EPA Ambient Air Monitoring Network Assessment Guidance; (EPA-454/D-07-001 February 2007), revised December 2015
Source: EPA-AQS AMP450 and AMP480 Reports

Equation from Section 4.1 of the Ambient Air Monitoring Network Assessment Guidance

$$\overline{X} + \frac{t * s}{\sqrt{n}} < 0.8 * NAAQS$$

System Modification Analysis 40 CFR 58.14

Site: Mojave - Poole Street (AQS# 060290011)
Pollutant: PM 2.5

2016 - 2020 24-Hour NAAQS

35.000 ug/m^3 <-- PM2.5 98th Percentile 24-Hour NAAQS

2016 Design Value (ug/m3)	2017 Design Value (ug/m3)	2018 Design Value (ug/m3)	2019 Design Value (ug/m3)	2020[1] Design Value (ug/m3)	Average Design Value (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
20.0	17.0	21.0	19.0	24.0	20.2	2.59	2.13	5	22.7	28.0	FAIL

1. Poole Street monitoring operations discontinued in August 2020, completeness criteria not met. Displayed value is invalid, Probability Test - failed.

2016 - 2020 Annual Arithmetic Mean NAAQS

12.000 ug/m^3 <-- PM2.5 Annual Arithmetic Mean NAAQS

2016 Design Value (ug/m3)	2017 Design Value (ug/m3)	2018 Design Value (ug/m3)	2019 Design Value (ug/m3)	2020[1] Design Value (ug/m3)	Average Design Value (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
6.1	6.0	6.7	6.4	7.3	6.5	0.52	2.13	5	7.0	9.6	FAIL

1. Poole Street monitoring operations discontinued in August 2020, completeness criteria not met. Displayed value is invalid, Probability Test - failed.

Source: EPA Ambient Air Monitoring Network Assessment Guidance; (EPA-454/D-07-001 February 2007)
Source: EPA-AQS AMP450 and AMP480 Reports

Equation from Section 4.1 of the Ambient Air Monitoring Network Assessment Guidance

$$\overline{X} + \frac{t * s}{\sqrt{n}} < 0.8 * NAAQS$$

System Modification Analysis 40 CFR 58.14

Site: Mojave - Poole Street (AQS# 060290011)
Pollutant: PM 10

2016 - 2020 NAAQS 24-Hour Maximum Concentration

150.000 ug/m^3 <-- PM10 24-Hour **NAAQS**

2016 Maximum Conc. (ug/m3)	2017 Maximum Conc. (ug/m3)	2018 Maximum Conc. (ug/m3)	2019 Maximum Conc. (ug/m3)	2020[1] Maximum Conc. (ug/m3)	Average Maximum Conc. (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
138	92	92	248	111	136.2	65.3	2.13	5	198.4	120.0	FAIL

1. Poole Street monitoring operations discontinued in August 2020, completeness criteria not met. Displayed value is invalid, Probability Test - failed.

2016 - 2020 NAAQS 24-Hour Design Concentration

150.000 ug/m^3 <-- PM10 24-Hour **NAAQS**

2016 Design Conc. (ug/m3)	2017 Design Conc. (ug/m3)	2018 Design Conc. (ug/m3)	2019 Design Conc. (ug/m3)	2020[1] Design Conc. (ug/m3)	Average Design Conc. (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
95	73	78	124	109	95.8	21.3	2.13	5	116.0	120.0	FAIL

1. Poole Street monitoring operations discontinued in August 2020, completeness criteria not met. Displayed value is invalid, Probability Test - failed.

Source: EPA Ambient Air Monitoring Network Assessment Guidance; (EPA-454/D-07-001 February 2007)
Source: EPA-AQS AMP450 and AMP480 Reports

Equation from Section 4.1 of the Ambient Air Monitoring Network Assessment Guidance

$$\overline{X} + \frac{t * s}{\sqrt{n}} < 0.8 * NAAQS$$

Attachment 2
Mojave - Poole Street and CA-58
Comparative Analysis

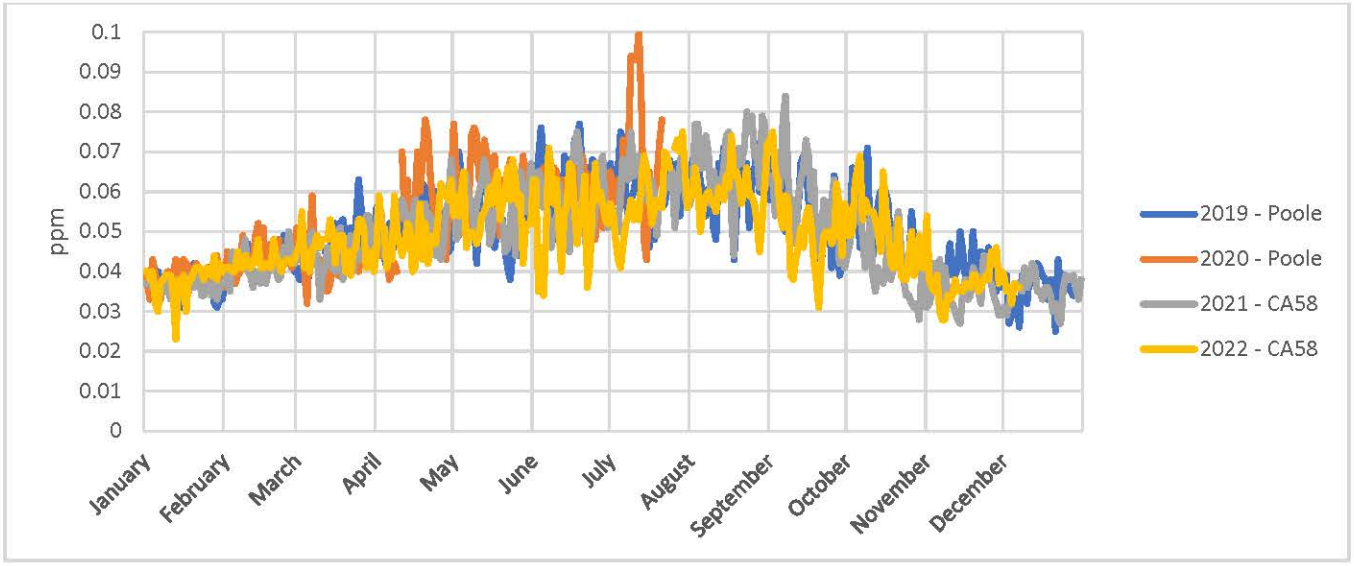
Table 1: Minimum Separation Distance between Roadways and Gaseous Inlet Probe

Roadway Average Daily Traffic (vehicle per day)	Minimum Distance[1] (meters)
≤1,000	10
10,000	10
15,000	20
20,000	30
40,000	50
70,000	100
≥110,000	250

1. Distance from the edge of the nearest traffic lane. The distance for immediate traffic counts should be interpolated from table values based on the actual traffic count.

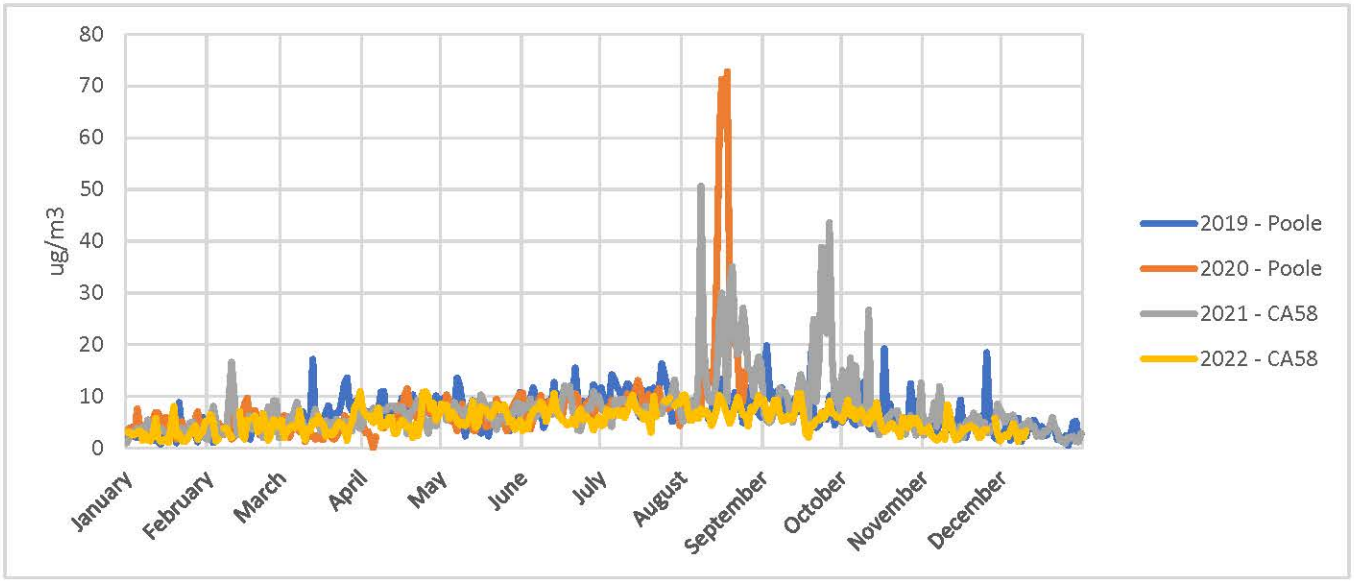
Tables 2 through 4 below represent daily averaged concentration values recorded at Poole in 2019-2022 and CA-58 in 2021-2022. 2020 data only represents Poole data through August 2020, when monitoring operations were suspended. 2022 CA-58 data represents recorded data through December 2022, when the analysis was performed.

Table 2: Mojave Daily Maximum 8-Hour Ozone Comparison: Poole and CA-58



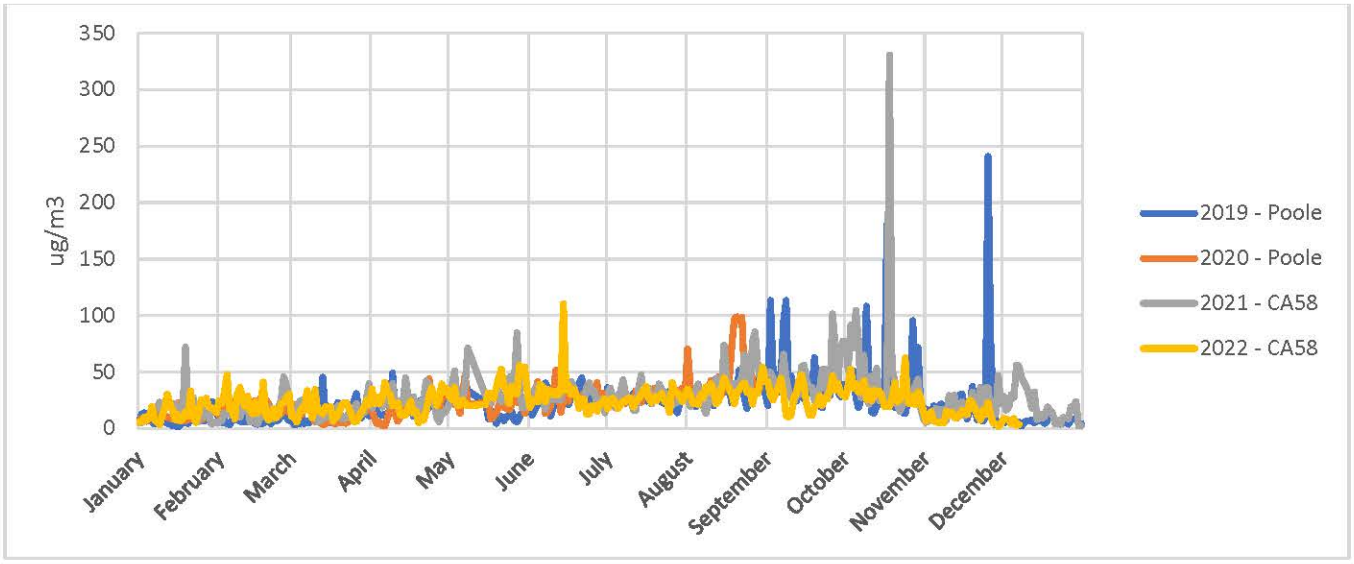
Note: 2020 Poole data through August 2020. 2022 CA-58 data through December 2022

Table 3: Mojave PM2.5 Daily Average Comparison: Poole and CA-58



Note: 2020 Poole data through August 2020. 2022 CA-58 data through December 2022

Table 4: Mojave PM10 Daily Average Comparison: Poole and CA-58

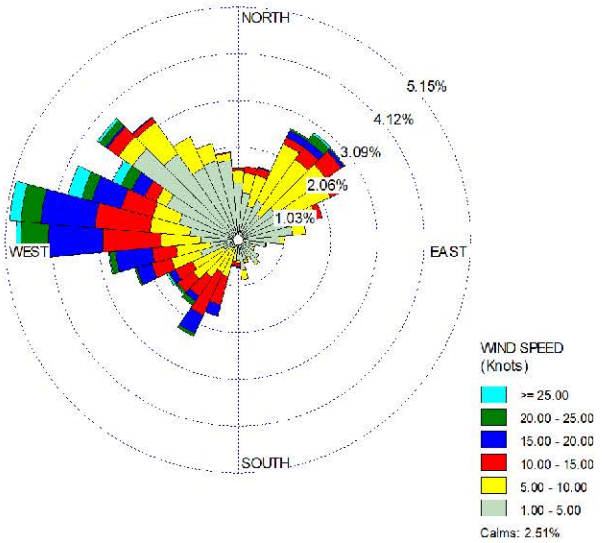


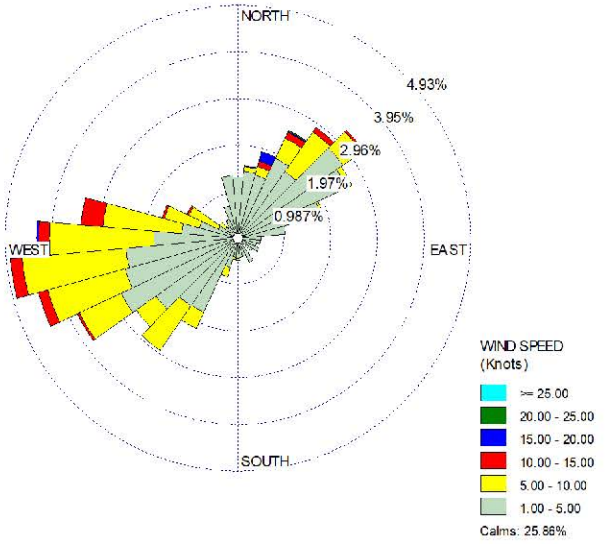
Note: 2020 Poole data through August 2020. 2022 CA-58 data through December 2022

Mojave wind roses below are based on recorded measurements at:

1. Mojave – 923 Poole Street during 2019-2020. End of data available is August 31, 2020. Left column figures.
2. Mojave – CA-58 Business during 2021-2022. First data January 6, 2021, through December 14, 2022. Right column figures.

Figure 2: Mojave Seasonal Wind Rose Comparison: December through February

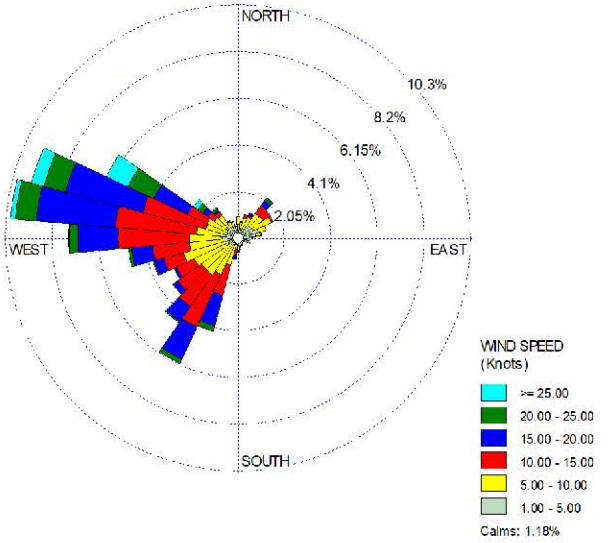


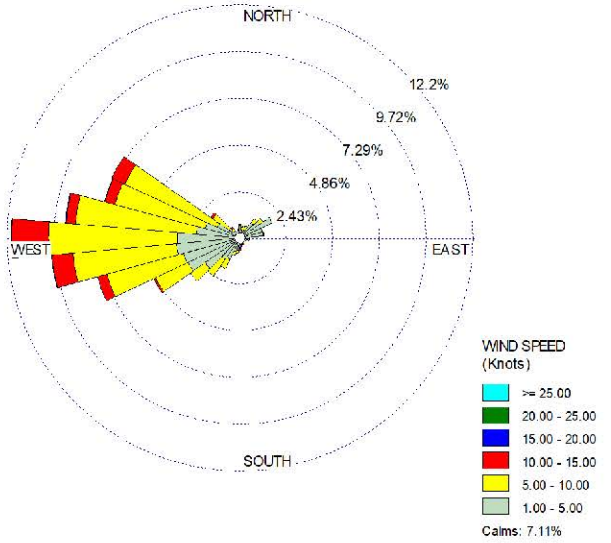


Poole: 2019-2020

CA-58: 2021-2022

Figure 3: Mojave Seasonal Wind Rose Comparison: March through May

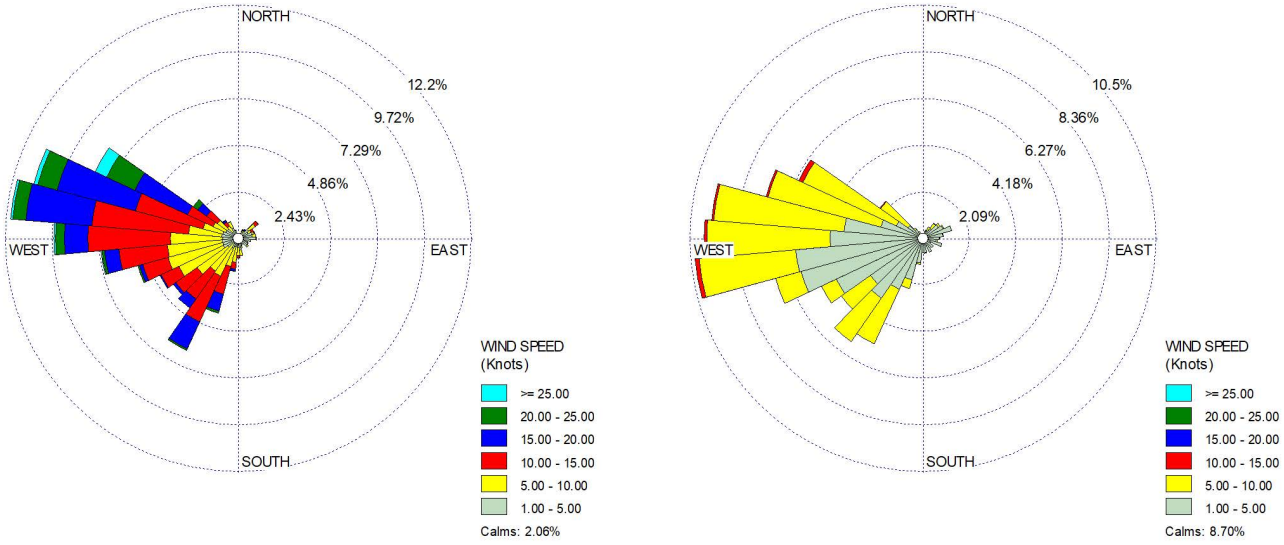




Poole: 2019-2020

CA-58: 2021-2022

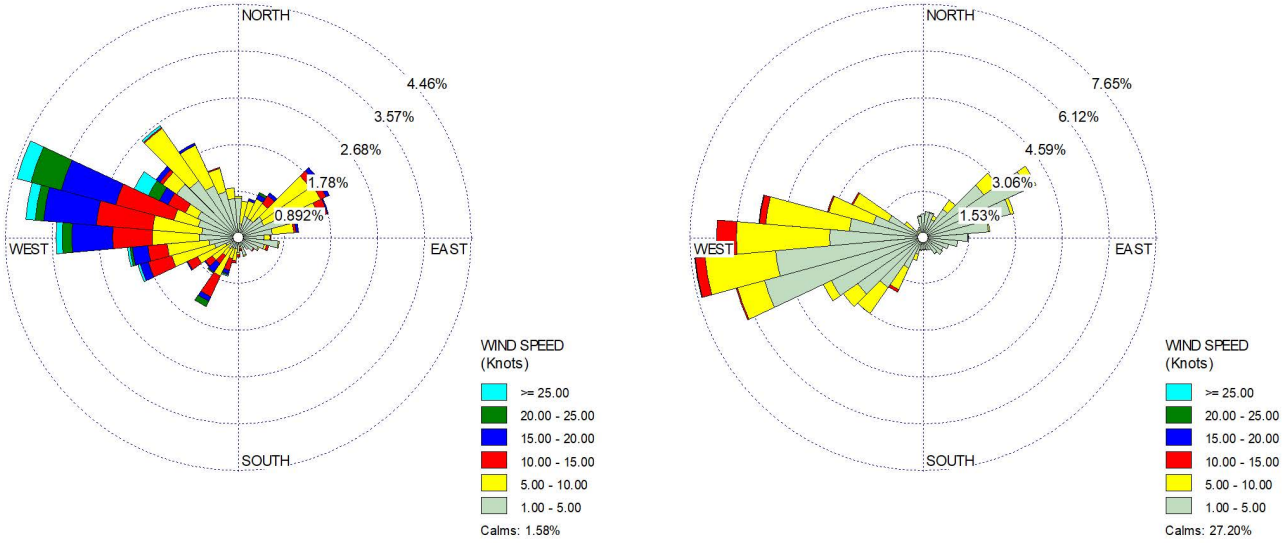
Figure 4: Mojave Seasonal Wind Rose Comparison: June through August



Poole: 2019-2020

CA-58: 2021-2022

Figure 5: Mojave Seasonal Wind Rose Comparison: September through November



Poole: 2019-2020

CA-58: 2021-2022

Attachment 3
Mojave - Poole Street
Detailed Site Report

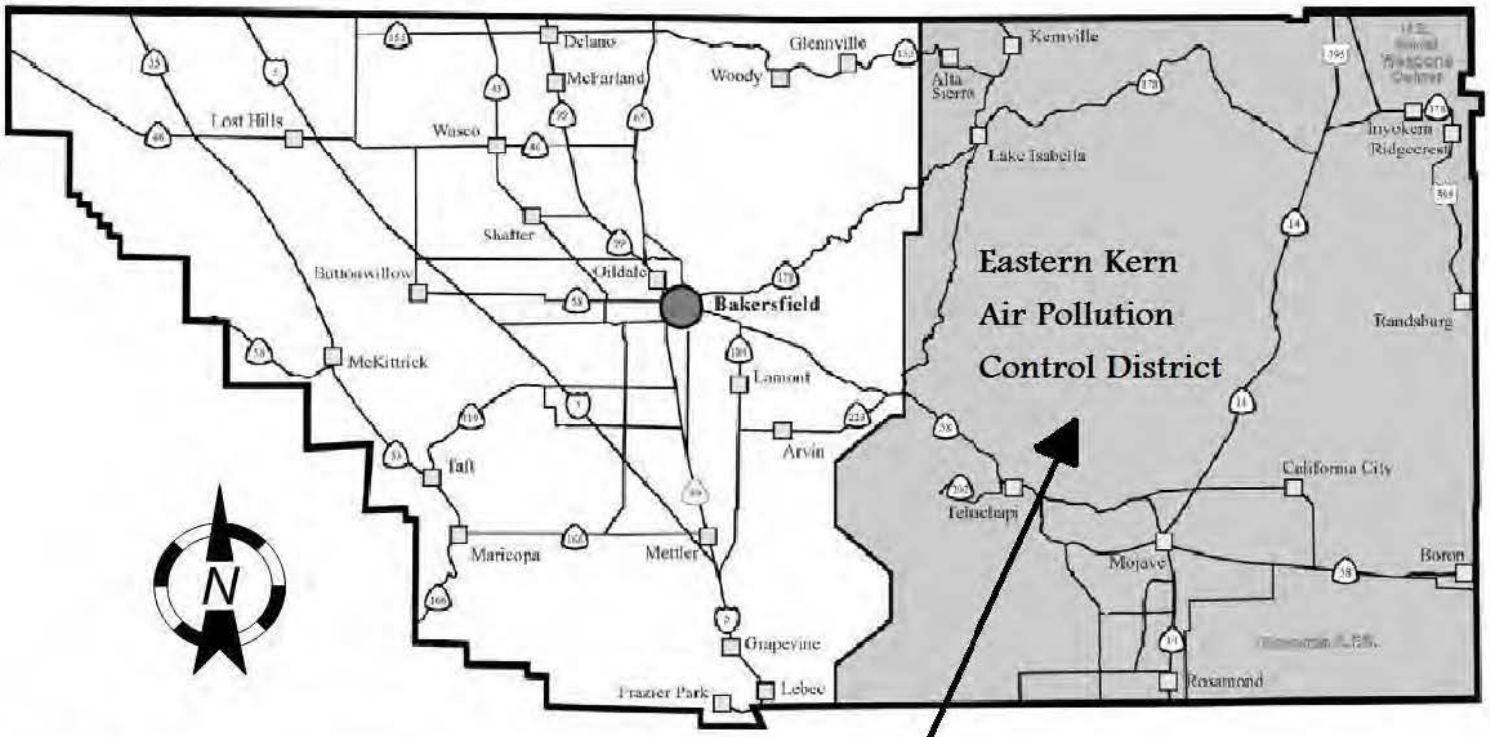
Local Site Name	Mojave				
AQS ID	06-029-0011				
GPS Coordinates	35.05045, -118.14778				
Street Address	923 Poole Street, Mojave, 93501				
County	Kern				
Distance to roadways (meters)	885 to CA-58				
Traffic Count (AADT,year)	17,000 (2015)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Highest Concentration	Population Exposure	Highest Concentration		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	ARB	ARB	ARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	ARB	ARB	ARB		
Spatial scale	Regional	Neighborhood	Neighborhood		
Monitoring start date	8/1/1993	6/4/2013	4/1/2011		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.1	4.4	4.5		
Distance from supporting structure (meters)	1.5	1.8	1.9		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.8	N/A	N/A		
Will there be changes within the next 18 months?	yes	yes	yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Semi-Monthly	Semi-Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	1/31/2019	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	1/31/2019 7/24/2019	1/31/2019 7/24/2019		

Attachment 4
Mojave - CA-58 Business
Detailed Site Report

Local Site Name	Mojave				
AQS ID	60290011				
GPS Coordinates	35.04649, -118.16295				
Street Address	1773 CA-58 Business, Mojave CA 93501				
County	Kern				
Distance to roadways (meters)	60m to CA-58				
Traffic Count (AADT,year)	17,000 (2015)				
Ground Cover	Dirt/Soil				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Highest Concentration	Population Exposure	Highest Concentration		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	ARB	ARB	ARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	ARB	ARB	ARB		
Spatial scale	Regional	Neighborhood	Neighborhood		
Monitoring start date	9/22/2020	10/1/2020	10/1/2020		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.1	4.4	4.5		
Distance from supporting structure (meters)	1.5	1.8	1.9		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.8	N/A	N/A		
Will there be changes within the next 18 months?	Yes	Yes	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Semi-Monthly	Semi-Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	NA	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A		

Attachment 5
Map of Eastern Kern APCD Air Monitoring Network

Eastern Kern Air Pollution Control District Boundary Map



April 05, 2024

Dr. Dena Vallano, Manager
Monitoring and Analysis Section
U.S. Environmental Protection Agency, Region 9 Air Division
75 Hawthorne Street
San Francisco, California 94105
Vallano.Dena@epa.gov

Dear Dr. Vallano,

The California Air Resources Board (CARB) requests approval from the U.S. Environmental Protection Agency (U.S. EPA) for the relocation of all monitoring parameters (O3, PM2.5, and PM10) at the Mojave – 1773 CA-58 Business, Mojave 93501(AQS: 060290019) (CA-58) monitoring station to 3200 Pat Avenue, Mojave 93501(AQS: 060290020) (Pat Avenue). Justification for relocation is based on 40CFR, §58.14(c)(6): *A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.*

This request comes as the final step in a series of relocations for the Mojave monitoring station, resultant of land use changes beyond CARB's control. U.S. EPA recently approved the temporary relocation from the original Poole location to CA-58 (see Attachments), when monitoring operations at the original Poole Street location were abruptly suspended and the shelter temporarily relocated to CA-58. CARB's continued efforts to secure another lease within the Mojave Air and Space Port (MASP) perimeter were unsuccessful as MASP would not consider lease periods greater than one-year and limited potential properties to those with existing utility meters only; requiring CARB to assume full non-refundable financial responsibility for required tenant improvements without consideration for extending one-year lease periods.

Ineffective negotiations with MASP over the course of two years forced CARB to expand the search area beyond the MASP perimeter. In consultation with U.S. EPA and CARB's Air Quality Science and Planning Division (AQPSD), CARB evaluated several potential nearby locations and ultimately secured a lease agreement with the Mojave Unified School District. In continued collaboration with the Eastern Kern APCD, the shelter was relocated from CA-58 to Pat Avenue in March 2023.

Pat Avenue is located approximately 2300 meters northwest of the CA-58 site as shown in Figure 1 of Attachment 2. As with CA-58, Pat Avenue shares land use with another local public building, specifically a former middle school currently utilized for school District offices and resides adjacent to a small parking lot as shown in Figure 2.

A residential track development surrounds Pat Avenue to the north and west, approximately 70 meters from the monitoring station. In accordance with 40 CFR, §58.14(c)(6), the Pat Avenue location's proximity to the CA-58 location will maintain the existing scale of representation without changes in monitored parameters or sampling methods as viewed in Figure 1. Analysis of 2018 through 2022 CA-58 data included in Attachment 1 confirm all monitored parameters (O3, PM2.5 and PM10) do not meet the established minimum five-year attainment criteria. With respect to the region's ongoing non-attainment status, the Pat Avenue relocation shall remain in compliance with 40CFR, Part 58, Appendix E requirements.

Beyond the adjacent neighborhood at Pat Avenue, the topography remains consistent with CA-58; mountainous terrain to the north and west, MSAP to the northeast, and the remaining southern and eastern areas remain largely undeveloped. Major contributors of stationary emission sources in the region remain unchanged and are comprised of permitted mining, cement production, commercial aerospace (MASP), agricultural, and military operations. The main objective of the Mojave monitoring station is the capture of regional transport emissions through the Tehachapi Mountain pass between the San Joaquin and South Coast air basins. Consistent with areas dominated by transport emissions, ozone values in Mojave typically peak in the late afternoon and evening hours lasting overnight.

Although Pat Avenue and CA-58 are accessible via SR-14, Pat Avenue is approximately 1400 meters west of SR-14 with an expected reduction in vehicle traffic given its residential location as compared to CA-58, which was located west of SR-14 in a thoroughfare between SR-14 and SR 58. Based on a 2022 peak area traffic count of 17,000 vehicles per day, Pat Avenue's approximate 1400-meter distance to SR-14 meets both gaseous and PM minimum inlet criteria as referenced in Attachment 2 tables. The Pat Avenue relocation is west of CA-58 and directly within the predominant westerly wind pattern of the region, CARB staff do not anticipate any negative impacts in captured transport emissions at Pat Avenue.

Attachment 2, Tables 3 through 6, provide a comparative analysis of preliminary daily concentration averages (O3, PM2.5, and PM10) over a one-year period between March 2023 (Pat Avenue inception) through February 2024, demonstrating consistent monitoring trends at Pat Avenue as compared to historical CA-58 trends. Observed anomalies in 2021 PM data collected at CA-58 were resultant of sustained high wind events and consistent with data recorded at CARB's Bakersfield monitoring station. Seasonal wind roses included in Attachment 2, reaffirm the predominant westerly wind pattern for the area. Pat Avenue's location west of SR-14 is expected to measure more accurate regional transport ozone and PM concentrations as measurements have less potential to be influenced by roadway emissions. With respect to the aforementioned consistency in emission sources, regional topography, and wind patterns, coupled with the proximity of Pat Avenue to CA-58; CARB staff have not observed any negative impacts to collected data at Pat Avenue to date.

If you need any additional information, please contact Mr. Adolfo Garcia, Manager, Air Monitoring South Section, at (951)542-3175 or Adolfo.Garcia@arb.ca.gov. CARB thanks all parties involved for their collaboration and continued efforts in successfully relocating the Mojave air monitoring station.

Sincerely,

Kathleen Gill

Kathleen Gill
Chief, Air Quality Surveillance Branch
Monitoring and Laboratory Division
California Air Resources Board

Attachment(s): 5

cc: See next page.

cc:

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Adolfo Garcia, Manager, Air Monitoring South Section

Thomas Lovejoy, Air Resources Engineer, Air Monitoring South Section

Attachment 1
EPA System Modification Analyses

System Modification Analysis 40 CFR 58.14

Site: Mojave - CA-58 BUS (AQS# 060290019)
Pollutant: Ozone (44201)

2018 - 2022 8-Hour Ozone NAAQS

0.070	ppm	<-- Ozone 4th Maximum 8-Hour NAAQS

2018 Design Value (ppm)	2019 Design Value (ppm)	2020 Design Value (ppm)	2021 Design Value (ppm)	2022 Design Value (ppm)	Average Design Value (X) (ppm)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ppm)	80% of NAAQS (ppm)	< 10% Probability of exceeding 80% of NAAQS?
0.085	0.081	0.086	0.082	0.081	0.08	0.00	2.13	5	0.09	0.06	FAIL

Source: EPA Ambient Air Monitoring Network Assessment Guidance; (EPA-454/D-07-001 February 2007), revised December 2015
Source: EPA-AQS AMP450 and AMP480 Reports

Equation from Section 4.1 of the Ambient Air Monitoring Network Assessment Guidance

$$\overline{X} + \frac{t * s}{\sqrt{n}} < 0.8 * NAAQS$$

System Modification Analysis 40 CFR 58.14

Site: Mojave - CA-58 BUS (AQS# 060290019)
Pollutant: PM 2.5 (88101)

2018 - 2022 24-Hour NAAQS

35.000 ug/m^3 <-- PM2.5 98th Percentile 24-Hour NAAQS

2018 Design Value (ug/m3)	2019 Design Value (ug/m3)	2020 Design Value (ug/m3)	2021 Design Value (ug/m3)	2022 Design Value (ug/m3)	Average Design Value (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
21.0	19.0	31.0	31.0	30.0	26.4	5.89	2.13	5	32.0	28.0	FAIL

2018 - 2022 Annual Arithmetic Mean NAAQS

12.000 ug/m^3 <-- PM2.5 Annual Arithmetic Mean NAAQS

2018 Design Value (ug/m3)	2019 Design Value (ug/m3)	2020 Design Value (ug/m3)	2021 Design Value (ug/m3)	2022 Design Value (ug/m3)	Average Design Value (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
6.7	6.4	7.5	7.6	7.1	7.1	0.51	2.13	5	7.5	9.6	PASS

Source: EPA Ambient Air Monitoring Network Assessment Guidance; (EPA-454/D-07-001 February 2007)
Source: EPA-AQS AMP450 and AMP480 Reports

Equation from Section 4.1 of the Ambient Air Monitoring Network Assessment Guidance

$$\overline{X} + \frac{t * s}{\sqrt{n}} < 0.8 * NAAQS$$

System Modification Analysis 40 CFR 58.14

Site: Mojave - CA-58 BUS (AQS# 060290019)
Pollutant: PM 10 (81102)

2018 - 2022 NAAQS 24-Hour Design Concentration

150.000 ug/m^3 <-- PM10 24-Hour NAAQS

2018 Maximum Conc. (ug/m3)	2019 Maximum Conc. (ug/m3)	2020 Maximum Conc. (ug/m3)	2021 Maximum Conc. (ug/m3)	2022 Maximum Conc. (ug/m3)	Average Maximum Conc. (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
82.3	91.7	99.8	106.0	85.7	93.1	9.8	2.13	5	102.4	120.0	PASS

2018 - 2022 NAAQS 24-Hour Maximum Concentration

150.000 ug/m^3 <-- PM10 24-Hour NAAQS

2018 Design Conc. (ug/m3)	2019 Design Conc. (ug/m3)	2020 Design Conc. (ug/m3)	2021 Design Conc. (ug/m3)	2022 Design Conc. (ug/m3)	Average Design Conc. (ug/m3) (X)	Standard Deviation (s)	Student's t value (90% confidence) (t)	Number of Data Values (n)	90% Upper Confidence Interval (ug/m3)	80% of NAAQS (ug/m3)	< 10% Probability of exceeding 80% of NAAQS?
92.0	248.0	113.0	351.0	121.0	185.0	111.2	2.13	5	290.9	120.0	FAIL

Source: EPA Ambient Air Monitoring Network Assessment Guidance; (EPA-454/D-07-001 February 2007)
Source: EPA-AQS AMP450 and AMP480 Reports

Equation from Section 4.1 of the Ambient Air Monitoring Network Assessment Guidance

$$\overline{X} + \frac{t * s}{\sqrt{n}} < 0.8 * NAAQS$$

Attachment 2

Supporting Documentation and Comparative Data Analyses

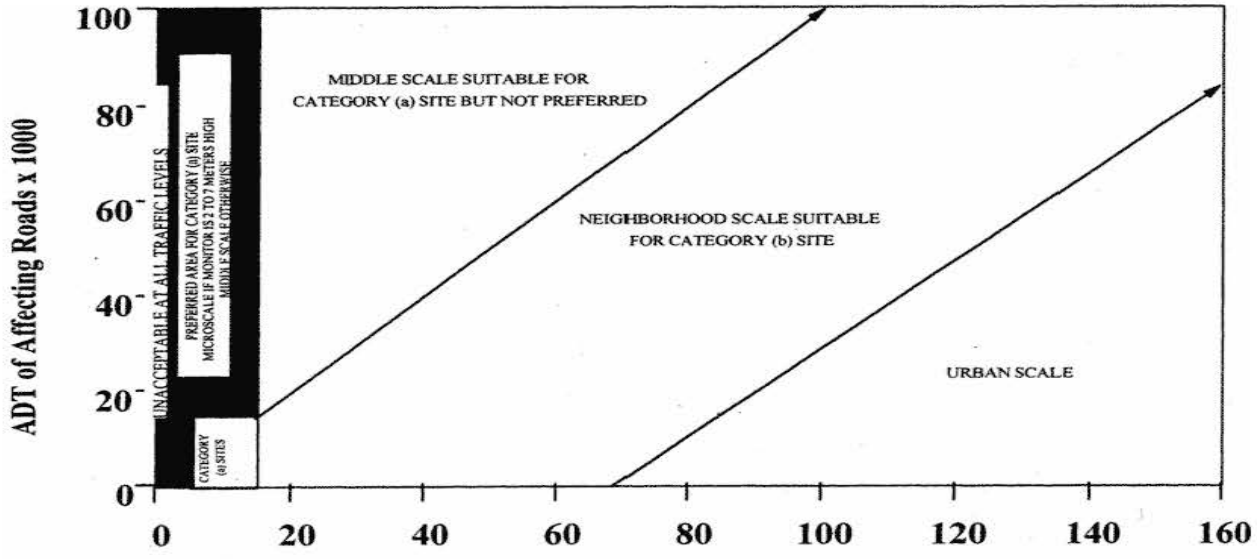
Tables 1 and 2 below are referenced to ensure Ozone and PM inlets at Pat Avenue meet siting criteria per 40CFR, Part 58, Appendix E requirements. A 2022 calendar year traffic count conducted by the California Department of Transportation lists a peak annual average daily traffic volume of 17,000 vehicles per day. Pat Avenue's 1400-meter distance west of SR-14 ensures Pat Avenue PM and gaseous inlets meet the required minimum setback distance.

Table 1: Minimum Separation Distance Between Roadways and Gaseous Inlet Probe

Roadway Average Daily Traffic (vehicle per day)	Minimum Distance[1] (meters)	Minimum Distance[1,2] (meters)
≤1,000	10	10
10,000	10	20
15,000	20	30
20,000	30	40
40,000	50	60
70,000	100	100
≥110,000	250	250

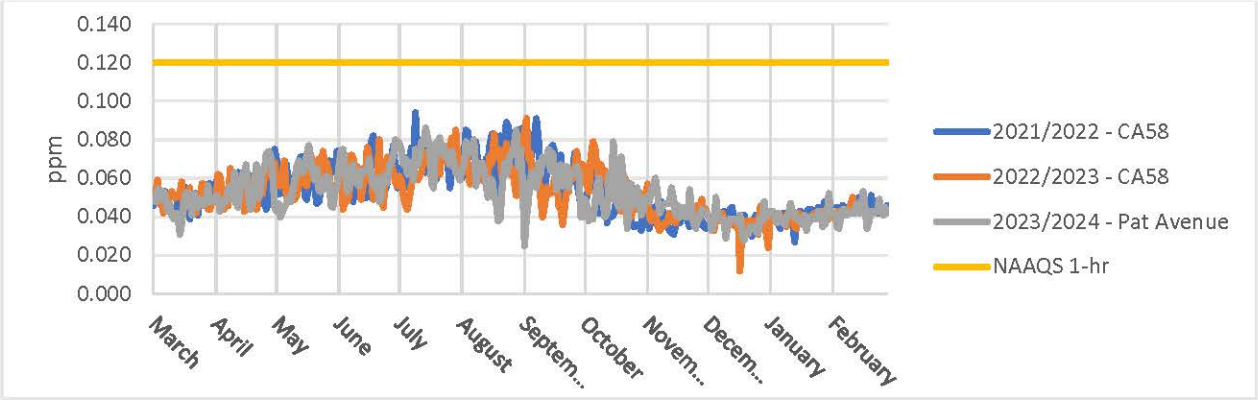
1. Distance from the edge of the nearest traffic lane. The distance for immediate traffic counts should be interpolated from table values based on the actual traffic count.
2. Applicable for ozone monitors whose placement has not already been approved as of December 18, 2006

Table 2: Minimum Distance of PM Samplers To Nearest Traffic Lane (meters)



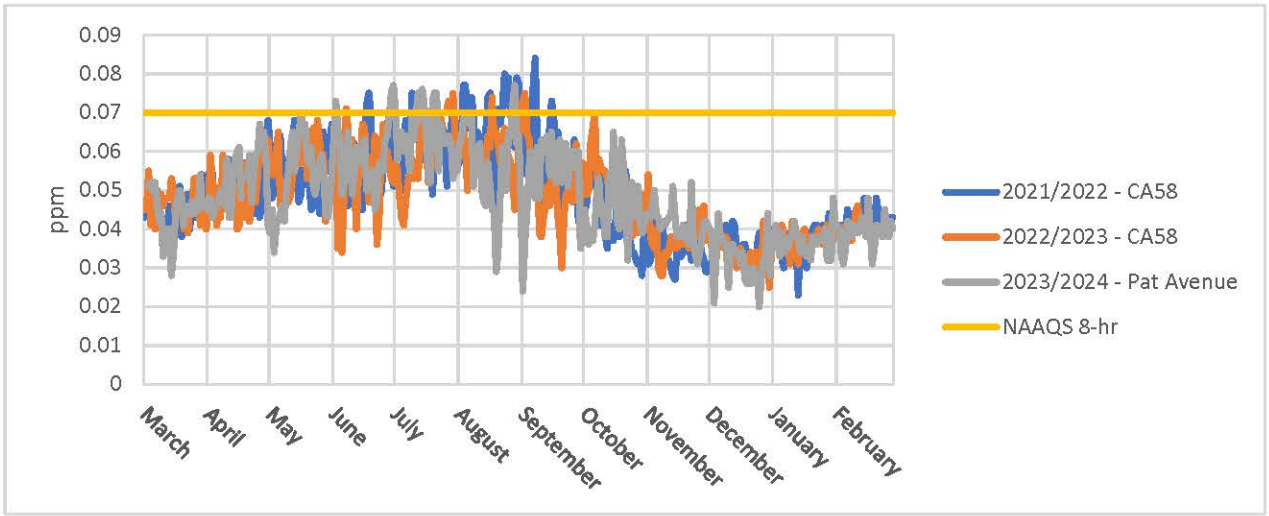
Tables 3 through 6 below represent comparative daily averaged concentration values recorded at CA-58 in 2021-2023 and Pat Avenue in 2023-2024. Pat Avenue monitoring operations commenced in March 2023, the provided tables are organized to provide a one-year period for comparison. Maximum 1-hr daily ozone values are also provided to display consistency in both 1-hr and 8-hr ozone trends between the two locations. Observed anomalies in 2021 PM data collected at CA-58 were resultant of sustained high wind events and consistent with data recorded at CARB's Bakersfield monitoring station.

Table 3: Mojave Daily Maximum 1-Hour Ozone Comparison: CA-58 and Pat Avenue



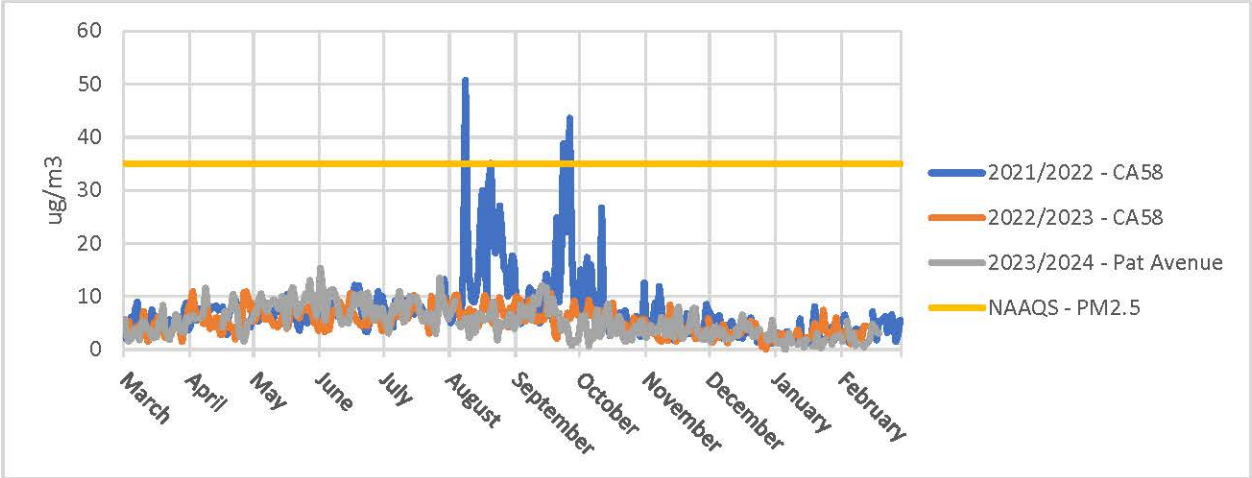
Note: 2023 Pat Avenue data commenced in March 2023

Table 4: Mojave Daily Maximum 8-Hour Ozone Comparison: CA-58 and Pat Avenue



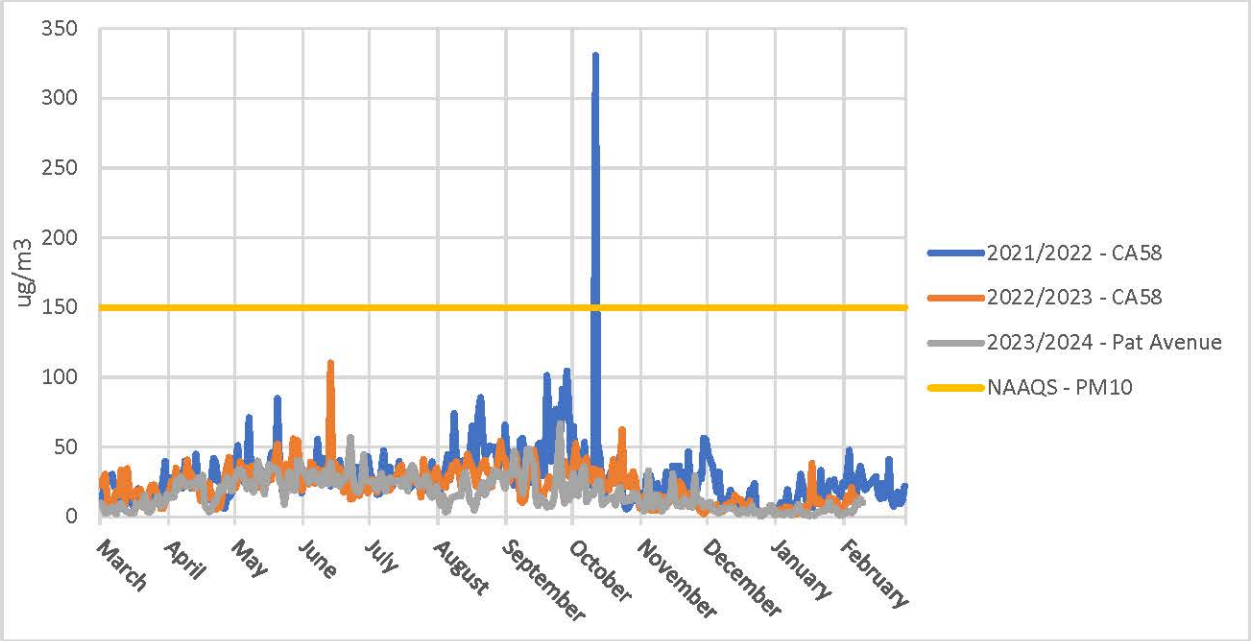
Note: 2023 Pat Avenue data commenced in March 2023

Table 5: Mojave PM2.5 Daily Average Comparison: CA-58 and Pat Avenue



Note: 2023 Pat Avenue data commenced in March 2023

Table 6: Mojave PM10 Daily Average Comparison: CA-58 and Pat Avenue



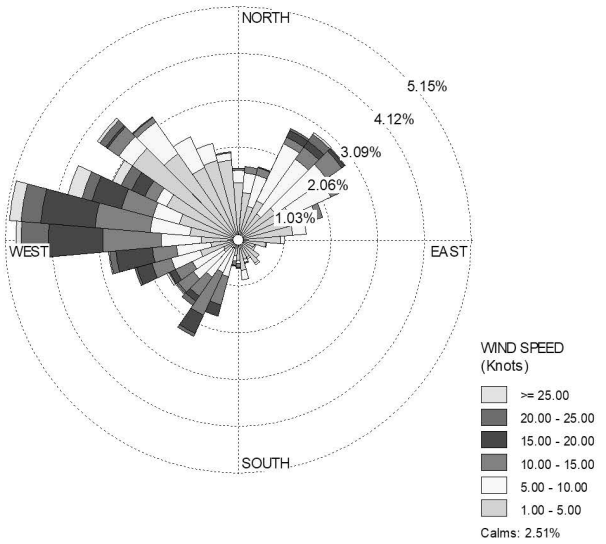
Note: 2023 Pat Avenue data commenced in March 2023

Figure 1: CA-58, and Pat Avenue Site Locations

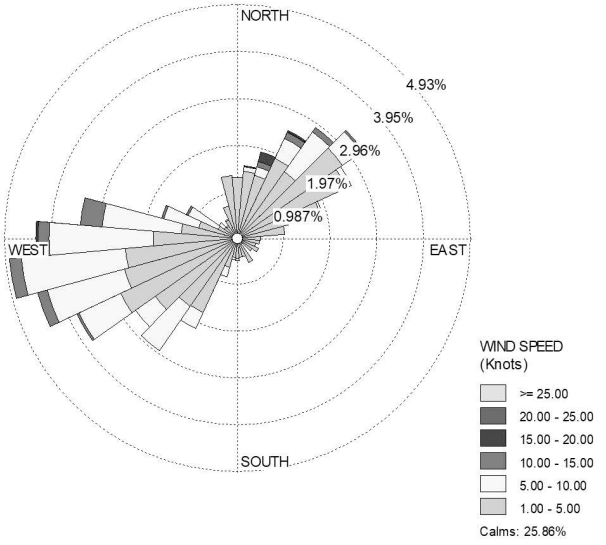
Figure 2: Pat Avenue Site Location

The provided wind roses depict the Mojave area's wind patterns over the 2020 through 2022 calendar years. Wind patterns remain consistent with a predominant westerly wind.

Figure 3: Mojave Seasonal Wind Rose Comparison: December through February

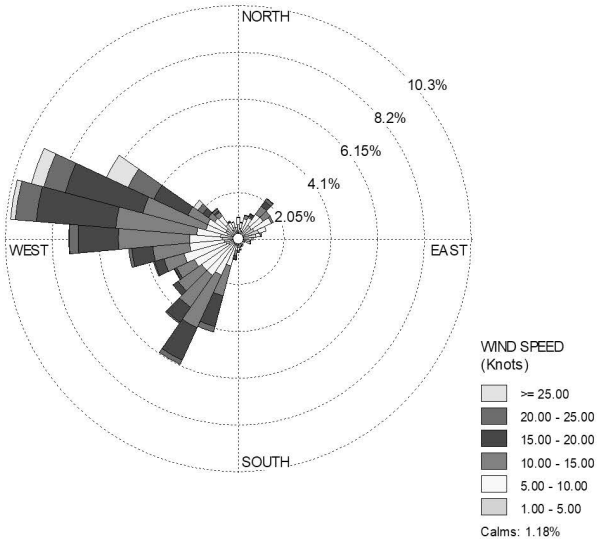


2020-2021

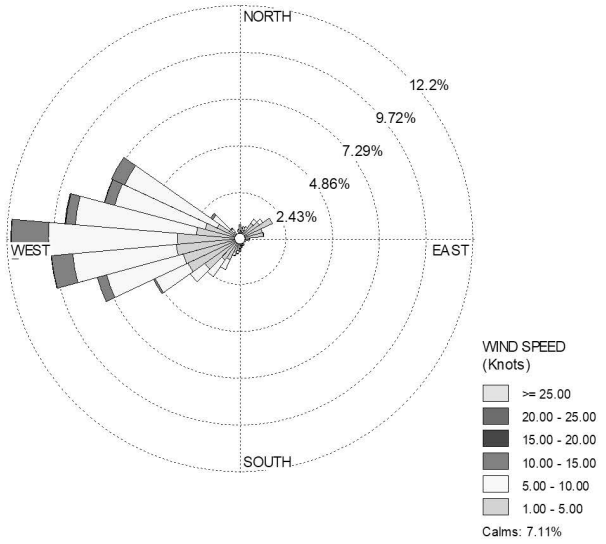


2021-2022

Figure 4: Mojave Seasonal Wind Rose Comparison: March through May

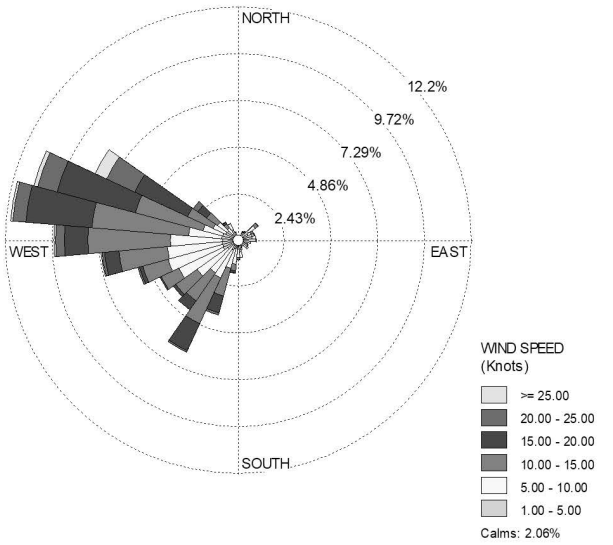


2020-2021

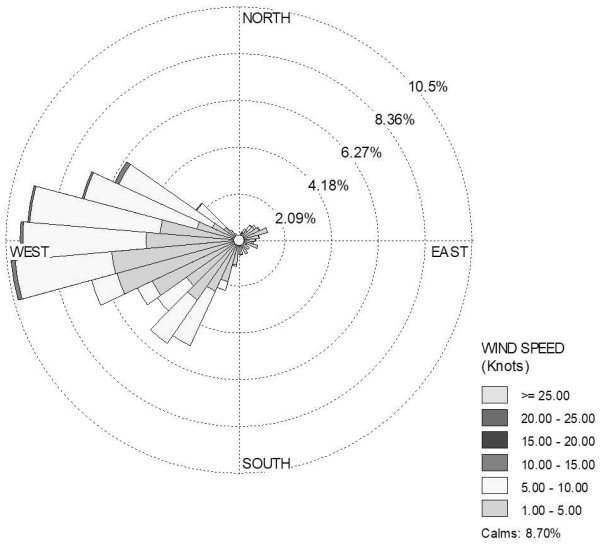


2021-2022

Figure 5: Mojave Seasonal Wind Rose Comparison: June through August

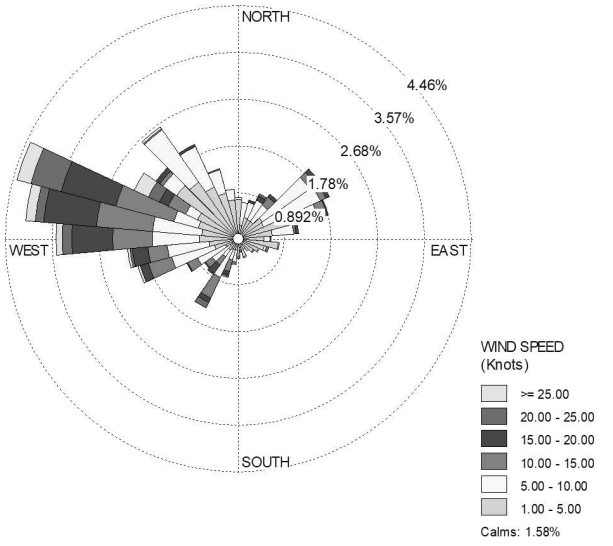


2020-2021

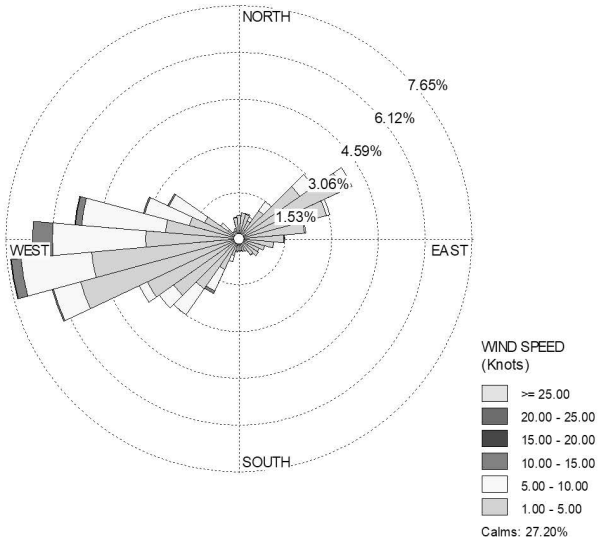


2021-2022

Figure 6: Mojave Seasonal Wind Rose Comparison: September through November



2020-2021



2021-2022

Attachment 3

EPA Approval for Mojave CA-58 Relocation

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

April 11, 2023

Kathleen Gill
Chief, Air Quality Surveillance Branch
California Air Resources Board
4001 Iowa Avenue
P.O. Box 550099
Riverside, California 92507

Dear Kathleen Gill:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board (CARB) relocation of the O_3, $PM_{2.5}$, and PM_{10} State/Local Air Monitoring Station (SLAMS) monitors from the Mojave Poole site (Air Quality System (AQS) Site ID: 06-029-0011) to the Mojave CA-58 site (AQS ID: 06-029-0019). On February 7, 2023, CARB sent a letter to the EPA with a request for EPA approval of this network change. In this letter, CARB explained the need to relocate the Mojave Poole monitoring site due to logistics beyond CARB's control (i.e., land use changes). Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors.

The Mojave Poole O_3, $PM_{2.5}$, and PM_{10} monitors were not eligible for removal under 40 CFR 58.14(c)(1) - (c)(5). These monitor relocations were reviewed under 40 CFR 58.14(c)(6), which describes the relocation requirements if a SLAMS monitor is not eligible for removal under the criteria in 40 CFR 58.14(c)(1) through (c)(5), and states that "[a] SLAMS monitor … may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site."

The original Mojave Poole site was located at 923 Poole Street, Mojave, CA 93501. The relocation site, Mojave CA-58, is located at 1773 CA-58 Business, Mojave, CA 93501, approximately 1,372 meters southwest of the original site location. Both sites have a neighborhood scale of representation, meaning they are expected to have relatively uniform land use in the 0.5 to 4.0 kilometers spatial range. Both sites are in an area characterized by residential and commercial land use. The original and proposed relocation site are expected to measure similar O_3, $PM_{2.5}$, and PM_{10}, concentrations from similar sources due to the consistency in land use and proximity to sources. This relocation will not prevent CARB from meeting 40 CFR part 58, Appendix D requirements.

In addition, CARB provided data for O_3, $PM_{2.5}$, and PM_{10} at Mojave Poole from January 1, 2019 through August 31, 2020 and at Mojave CA-58 from January 2021 through December 2022. The resulting data

supported the expectation of similar concentrations from similar sources for all pollutants. CARB also provided wind roses of data collected at Mojave Poole from January 2019 through August 31, 2020 and Mojave CA-58 from January 6, 2021 through December 14, 2022, showing similar wind speeds and direction between the two sites.

Based on the assessment of the scale of representation and monitoring data at both locations, EPA has determined that CARB's request meets the requirement that the replacement site is at a nearby location with the same scale of representation and does not compromise data needed for implementation of the NAAQS. EPA thus approves relocation of the Mojave Poole O_3, $PM_{2.5}$, and PM_{10} SLAMS monitors to the proposed site, Mojave CA-58. This approval assumes that the new site will meet all 40 CFR part 58 requirements, including the siting requirements specified in Appendix E. Please work with EPA to ensure that the new site meets all relevant requirements. As this is a relocation, the data from the old and new sites will be combined to form one continuous data record for design value calculations. Please note this in the AQS comment field for both the old and the new AQS site. Also, please attach this letter and include the relevant monitor and site information in your next Annual Monitoring Network Plan.

If you have any questions, please feel free to contact me at (415) 972-3134 or Julia Carlstad at (415) 947-4107.

Sincerely,

DENA VALLANO

Digitally signed by DENA VALLANO
Date: 2023.04.11 15:02:49 -07'00'

Dena Vallano, Manager
Monitoring and Analysis Section
Air and Radiation Division

cc (via email): Glen Stephens, Eastern Kern Air Pollution Control District
Gary Ray, Eastern Kern Air Pollution Control District
Walter Ham, CARB
Michael Benjamin, CARB
Michael Miguel, CARB
Manisha Singh, CARB
Sylvia Vanderspek, CARB
Jin Xu, CARB
Melissa Niederreiter, CARB
Adolfo Garcia, CARB
Thomas Lovejoy, CARB

Attachment 4

Detailed Site Reports

Eastern Kern APCD

Local Site Name	Mojave				
AQS ID	06-029-0019				
GPS Coordinates	35.05045, -118.14778				
Street Address	1773 CA-58 , Mojave, 93501				
County	Kern				
Distance to roadways (meters)	64 to CA-58				
Traffic Count (AADT,year)	19,000 (2017)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Highest Concentration	Population Exposure	Highest Concentration		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	ARB	ARB	ARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	ARB	ARB	ARB		
Spatial scale	Regional	Neighborhood	Neighborhood		
Monitoring start date	8/1/1993	6/4/2013	4/1/2011		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.1	4.4	4.5		
Distance from supporting structure (meters)	1.5	1.8	1.9		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.65	N/A	N/A		
Will there be changes within the next 18 months?	Yes	Yes	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Semi-Monthly	Semi-Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/2/2022	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/02/2022 08/30/2022	02/02/2022 08/30/2022		

Eastern Kern APCD

Local Site Name	Mojave				
AQS ID	06-029-0020				
GPS Coordinates	35.04944, -118.18893				
Street Address	3200 Pat Avenue, Mojave, 93501				
County	Kern				
Distance to roadways (meters)	1,367 to SR 14				
Traffic Count (AADT,year)	17,000 (2022)				
Ground Cover	Dirt/Soil				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Highest Concentration	Population Exposure	Highest Concentration		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale	Regional	Urban	Urban		
Monitoring start date	3/8/2023	3/8/2023	3/8/2023		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.1	4.4	4.5		
Distance from supporting structure (meters)	1.5	1.8	1.9		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.5	N/A	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Semi-Monthly	Semi-Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/7/2024	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	9/19/2023 3/7/2024	9/19/2023 3/7/2024		

Attachment 5

Site Photos – Pat Avenue

Photo 1: Pat Avenue Shelter

Photo 5: Pat Avenue Shelter, Rooftop North View

Photo 3: Pat Avenue Shelter, Rooftop East View

Photo 4: Pat Avenue Shelter, Rooftop South View

Photo 2: Pat Avenue Shelter, Rooftop West View

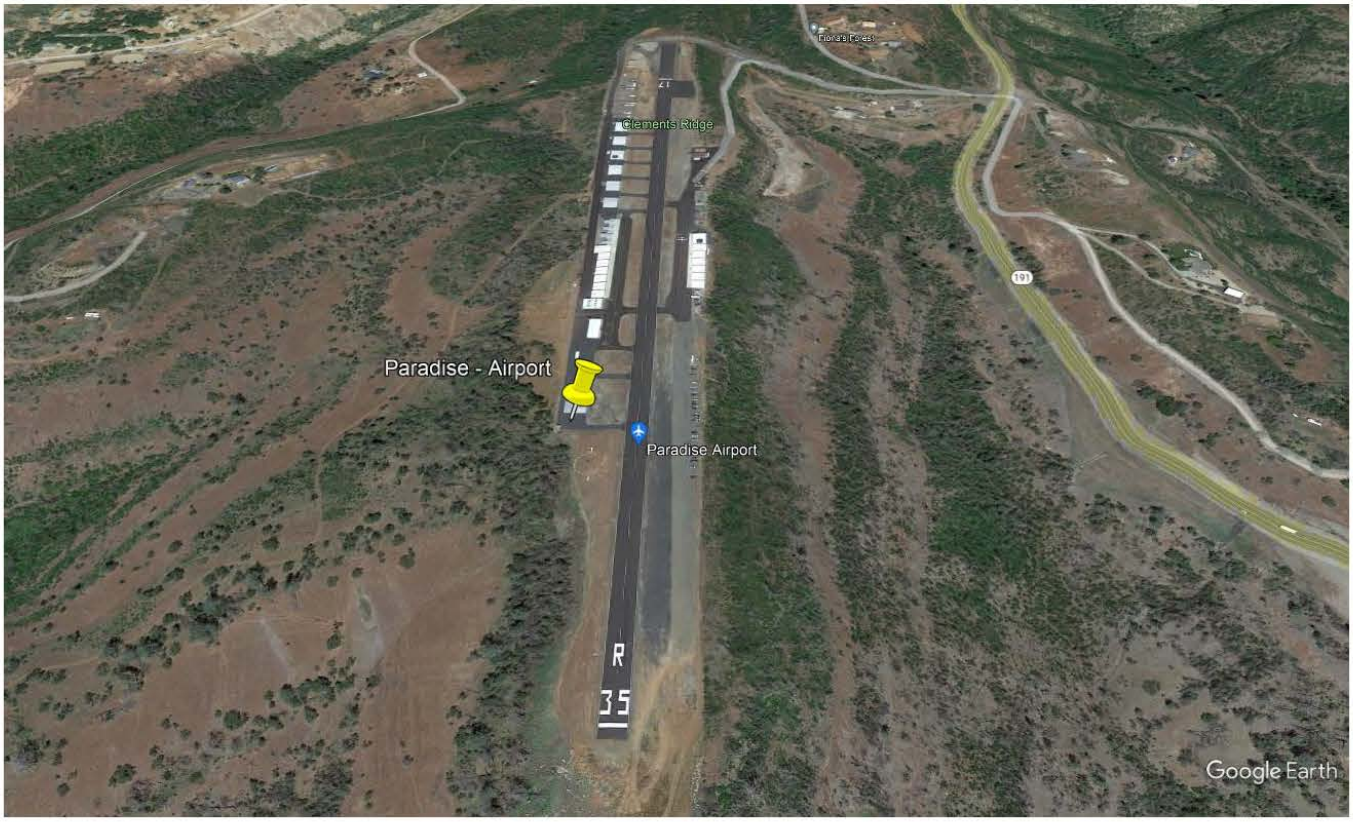
July 18, 2023

Ms. Dena Vallano, PhD
U.S. Environmental Protection Agency, Region 9
Air and Radiation Division
Monitoring and Analysis Section (AIR 2-3)
75 Hawthorne Street
San Francisco, California 94105
vallano.dena@epa.gov

Dear Ms. Vallano:

The California Air Resources Board (CARB) is requesting approval from U.S. EPA to relocate the ambient air monitoring station at Paradise – Airport (AQS # ***060070007)*** to a new location at 5921 Clark Road, Paradise, CA 95969. The basis for this relocation is per 40CFR Part 58.14 (6): *A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.*

Paradise – Airport monitoring station (ozone/meteorology): The site address is 4405 Airport Road (Airport Road is connected to Clark Road). The Paradise – Airport station is a trailer which resides near the southern end of the Paradise Airport (site map below). Numerous site issues have developed over the last several years, ranging from site access, trailer condition, air conditioning/heating repairs, internet communications, and end-of-lease inquiries from property owners. The Airport trailer has reached its end-of-life and is estimated to be unusable for ambient air monitoring needs by the end of summer 2023. As the Airport monitoring site is a trailer, current and future air conditioning/heating repairs have become increasingly difficult, if not impossible. Airport activities have also increased which may potentially impact data quality (i.e. airplane/helicopter activity, vehicular traffic, emergency evacuee/staging area, etc.). In addition, the station operator was previously approached by airport property managers who inquired how much longer we planned to remain onsite as there is potential interest to repurpose the area where the trailer sits. Proactively, CARB began the long process to investigate alternative monitoring locations resulting in a suitable building location at 5921 Clark Road. This new location resides approximately 3.5 miles north of the existing Airport station. Early discussions with CARB's Air Quality Planning and Science Division (AQPSD) resulted in a new site location request, with AQPSD requesting the new site to reside within a block or two of the Clark Road corridor, between Pearson Road and south of the Theater. The new 5921 Clark site complies with this request.



Paradise – Airport Monitoring Station

In addition, CARB operates a non-FEM PM2.5 continuous monitor located at 6701 Clark Road, identified as the Paradise – Theater monitoring site. The PM2.5 monitor is non-FEM, the data collected/reported is utilized for informational purposes, such as Air Quality Index (AQI) and agricultural burning. During the 2018 Camp Fire, the Paradise Theater building was partially damaged and the theater is not planned to reopen. CARB was informed by the Butte County Air Pollution Control Officer that the Theater may be demolished at a later unknown date. Routine Theater rooftop access is not an ideal situation for staff, creating safety concerns when staff install, remove and/or maintain rooftop monitoring equipment. The new 5921 Clark Road site resides approximately 1.7 miles to the south-southwest of the Theater and will be a beneficial opportunity to combine two sites (Airport and Theater) into a single site.

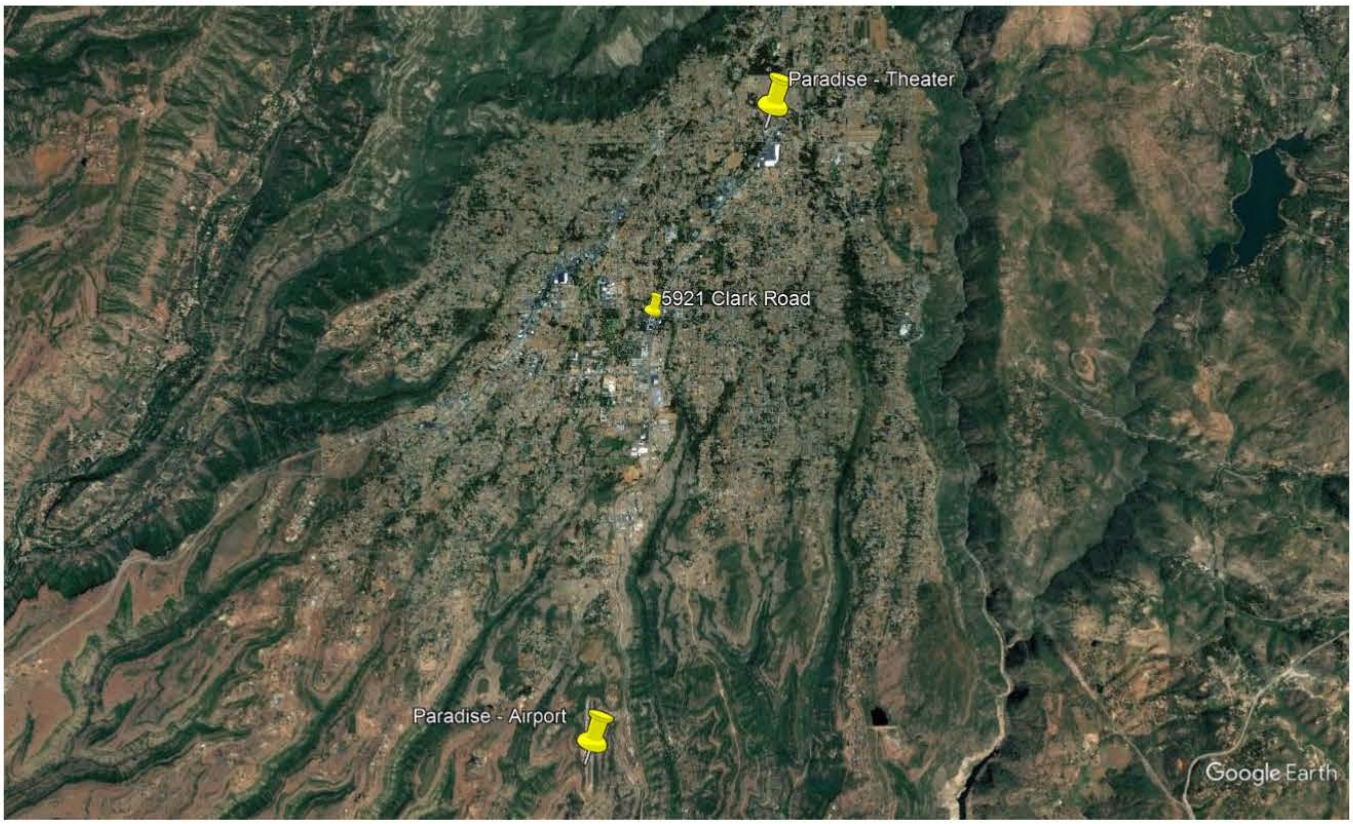
Paradise – Theater Monitoring Station

The new Paradise monitoring station (5921 Clark Road): As site relocations are taking CARB up to two (2) years or more, CARB proactively reached out to AQPSD to request approval to close/relocate both sites to a single location. The new Paradise monitoring station is located between the Airport and Theater sites (site map below). As this new site will reside within a permanent building, site repairs (including air conditioning/heating repairs), will proceed within the lease process, a process which significantly simplifies and expedites repair requests. This new Paradise site meets siting criteria and the building property management team has been readily agreeable to all site modification requests.

The proposed start date for the new Paradise – Clark site is May 2023, the proposed shutdown date for the Paradise – Airport site will at close of summer 2023, possibly sooner if the station trailer and/or air conditioning system cease to function as required. No ozone monitoring downtime is expected to occur between the closure of the Paradise - Airport site and the startup of the new Paradise - Clark site.

New Paradise Monitoring Site: 5921 Clark Road.

The map below displays all three (3) sites: Airport to the south, Theater to the north-northeast and the new site between them.



Map including all three (3) sites: New 5921 site resides between Airport and Theater

Seasonal wind speeds and direction at the new location are expected to remain similarly consistent. All parameters (and methods) previously monitored at the Airport and Theater stations will be monitored at 5921 Clark Road. Limited term parallel ozone monitoring is planned at Airport and the new location although the Airport site will most likely fail to meet inside station requirements when ambient temperatures increase.

Attachment 1 includes results of the "Site Closure Test', "DV metrics", "time series" (8-hr max O3 concentrations 2028 – 2022), "detailed site table", "ozone site year" (2003 – 2022), "ozone site day" (2018 – 2022) and "ozone site day pivot" (2022).

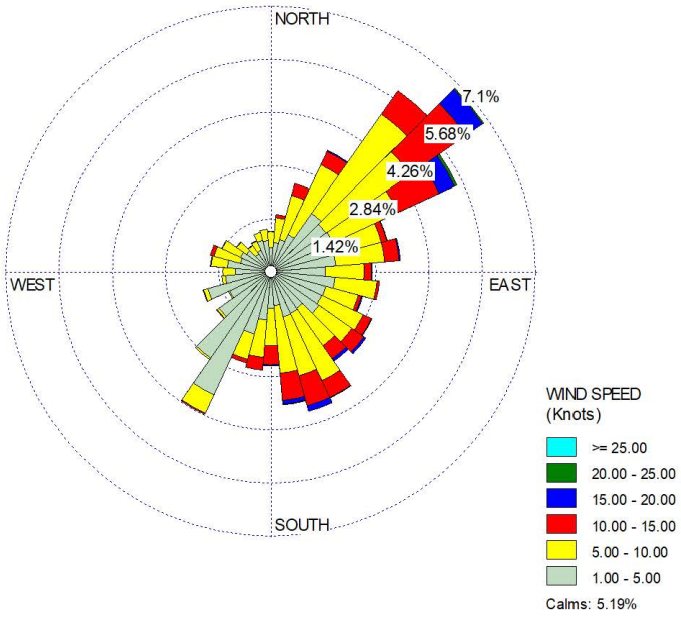
Attachment 2 includes displays the traffic count information.

The preliminary parallel monitoring data is not available.

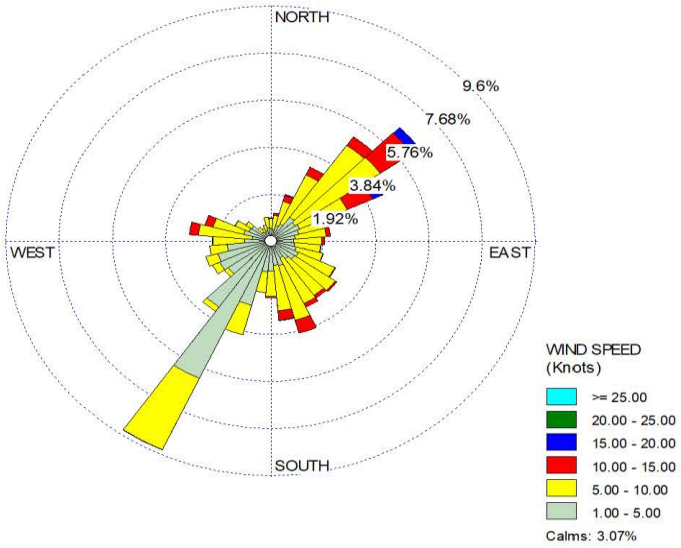
The table below displays the DV values for the past five years plus preliminary 2023 data:

Year	2018	2019	2020	2021	2022	2023 (preliminary)
0.070 ppm 8-hr standard Design Value	0.079	0.074	0.073	0.07	0.071	0.064

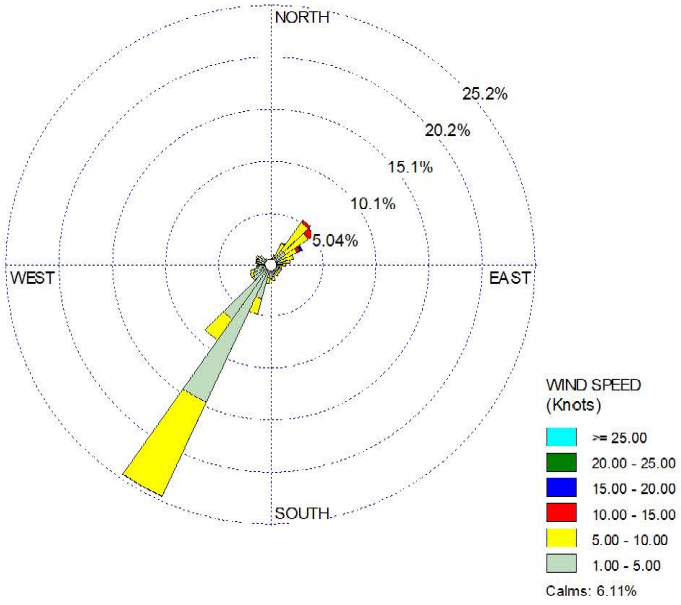
The following two pages display Paradise – Airport wind roses for the 2019 – 2021 time period. These wind roses are representative of the new Paradise site at 5921 Clark Road. Meteorology (wind) data was/is not measured at the Paradise-Theater monitoring site so the nearby Paradise – Airport (at 4405 Airport Road) 2019-2021 wind data was utilized for this analysis.



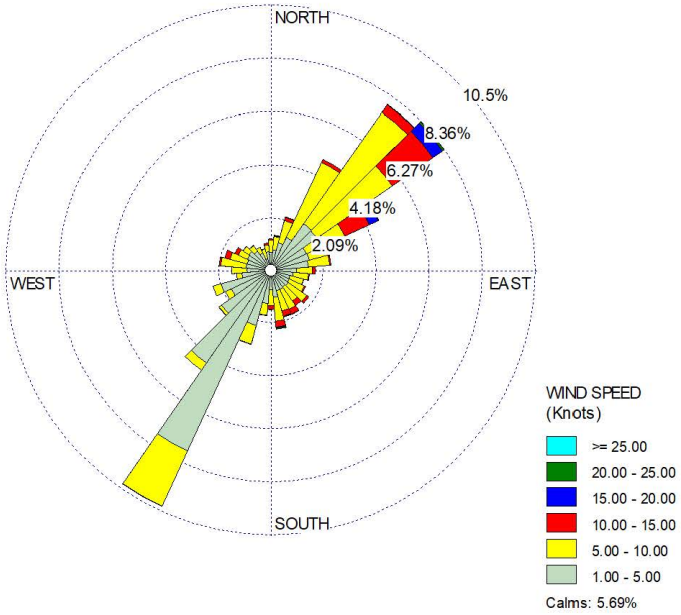
January, February, December during 2019-2021



March – May during 2019-2021



June – August during 2019-2021



September – November during 2019-2021

The new Paradise site at 5921 Clark is deemed representative of the exposure to sensitive groups, meets the siting criteria for the air monitoring network, and has similar spatial and land-use patterns as the Airport monitoring site. As the new 5921 Clark Road site is located 3.5 miles from Airport, the new Paradise site is expected to measure similar ozone levels while being located nearer to Paradise residents.

If you have any questions or require additional information, please contact Mr. Mac McDougall at (916)327-4720 or via email at mac.mcdougall@arb.ca.gov.

Sincerely,

Kathy Gill

Kathy Gill

Chief, Air Quality Surveillance Branch

Monitoring and Laboratory Division

cc: See next page

cc:

Julia Carlstad, Ph.D., U.S. EPA, Region 9, Monitoring and Analysis Section (Air-2-3)

Walter Ham, Chief, Monitoring and Laboratory Division

Mike Miguel, Assistant Chief, Monitoring and Laboratory Division

Michael T. Benjamin, Chief, Air Quality Planning and Science Division

Sylvia Vanderspek, Chief, Air Quality Planning Branch

Mac McDougall, Manager, Air Monitoring North Section, Air Quality Surveillance Branch

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

October 30, 2023

Sylvia Vanderspek, Branch Manager
Air Quality Planning Branch
California Air Resources Board
1001 I Street
Post Office Box 2815
Sacramento, California 95812

Dear Branch Manager Vanderspek:

Thank you for your submission of the California Air Resources Board (CARB) *Annual Network Plan Covering Monitoring Operations in 25 California Air Districts, June 2023* ("Plan") on June 28, 2023. We have reviewed the submitted document based on the requirements set forth in 40 CFR Part 58. Based on the information provided in the plan, the U.S. Environmental Protection Agency (EPA) approves all portions of the network plan except those specifically identified below. With this plan approval, we also formally approve the O_3 season waivers for five O_3 sites: Echo Summit (Air Quality System (AQS) ID: 06-017-0012), Cool (AQS ID: 06-017-0020), Jerseydale (AQS ID: 06-043-0006), Sutter Buttes (AQS ID: 06-101-0004), and Tuscan Butte (AQS ID: 06-103-0004) for November 2023-March 2024. Please note that an updated request including 2023 data will be required for future ozone season waiver approvals after March 31, 2024. More information about these approvals is included in Enclosure A. With this plan approval, we also formally approve the following system modification: the relocation of Paradise – Airport (Air Quality System (AQS) Site ID: 06-007-0007) to the Paradise - Clark site (AQS ID: 06-007-2003). More information about this approval is included in Enclosure C.

In the State of California, ten district monitoring agencies submitted annual monitoring network plans this past year in accordance with 40 CFR 58.10. EPA received plans covering the 2022 calendar year from:

- Bay Area Air Quality Management District,
- Monterey Bay Air Resources District,
- North Coast Unified Air Pollution Control District,
- Sacramento Metropolitan Air Quality Management District,
- Santa Barbara County Air Pollution Control District,
- San Diego County Air Pollution Control District,
- San Joaquin Valley Air Pollution Control District,
- San Luis Obispo County Air Pollution Control District, and
- South Coast Air Quality Management District.

EPA has reviewed and approved all of the monitoring agency plans listed above with the exception of

the Great Basin Unified Air Pollution Control District and Sacramento Metropolitan Air Quality Management District, which were submitted late.[1] EPA has provided specific comments on all other plans we received from California local agencies through separate letters and have forwarded these to CARB. Please refer to these responses for additional comments pertinent to CARB's network. We have also highlighted those elements related to CARB sites in local agency plans where EPA is not taking action in Enclosure B.

Please note that we cannot approve portions of the annual network plan for which the information in the plan is insufficient to judge whether the requirement has been met, or for which the information provided does not meet the requirements as specified in 40 CFR 58.10 and the associated appendices. EPA Region 9 also cannot approve portions of the plan for which the EPA Administrator has not delegated approval authority to the regional offices. Enclosure A (*A. Annual Monitoring Network Plan Checklist*) is the checklist EPA used to review your plan for items that are required to be included in the annual network plan along with our assessment of whether the plan submitted by your agency addresses those requirements. Items highlighted in yellow are those EPA Region 9 is not acting on, as we either lack the authority to approve the specific item, or we have determined that a requirement is either not met or information in the plan is insufficient to judge whether the requirement has been met. Please note that we are not acting on the following system Stockton (AQS ID: 06-077-1003), Chico (AQS ID: 06-007-0008), and Modesto (AQS ID: 06-099-0005) CO monitors: they are required by a CO maintenance plan. The maintenance plan will have to be revised before EPA can approve on these requests. Items highlighted in green in Enclosure A require attention in order to improve next year's plan. All comments conveyed via this letter and enclosures should be addressed prior to submittal of next year's annual monitoring network plan to EPA.

Additionally, EPA supports state and local government partners in advancing environmental justice efforts while ensuring compliance with applicable civil rights laws. To this end, we see an opportunity for all monitoring organizations to address and advance environmental justice in their annual network plans. Through the development and implementation of annual network plans, activities to advance environmental justice could include identifying monitoring sites in or near communities with environmental justice concerns, describing how environmental justice is considered in network design, considering environmental justice factors in siting, relocating, or discontinuing air monitors, and engaging with specific communities when plans are out for public comment. EPA encourages monitoring organizations to continue considering these issues throughout the year, and to convey yearly updates to the public and EPA on these important areas through the annual network plan process. EPA's EJSCREEN mapping and screening tool, including the environmental justice indexes and demographic indicators, may be useful in support of these efforts.[2] We also encourage you to provide us with any suggestions or requests that could further advance environmental justice in your ambient air monitoring programs.

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[1] EPA has not received the 2023 Great Basin Unified Air Pollution Control District Annual Network Plan. Sacramento Metropolitan Air Quality Management District's *2023 Annual Network Plan* was received by EPA on October 17, 2023. EPA's reviews are forthcoming and are not included in Enclosure B due to the late submittals. EPA will copy CARB on our responses to these plans. Please refer to these upcoming responses for additional comments pertinent to CARB's network.

[2] U.S. EPA. 2022. EJScreen: Environmental Justice Screening and Mapping Tool, Version 2.0, https://www.epa.gov/ejscreen.

If you have any questions regarding this letter or the enclosures, please feel free to contact me at (415) 972-3134 or Julia Carlstad at (415) 947-4107.

Sincerely,

DENA VALLANO

Digitally signed by DENA VALLANO
Date: 2023.10.30 15:08:24 -07'00'

Dena Vallano, Manager
Monitoring and Analysis Section

Enclosures:

A. Annual Monitoring Network Plan Checklist
B. Elements Related to CARB Sites in Local Agency Plans where EPA is Not Taking Action
C. Approval of Relocation of Paradise – Airport to Paradise – Clark

cc (via email): Michael Benjamin, CARB
Michael Miguel, CARB
Jin Xu, CARB
Alicia Adams, CARB
Sunghoon Yoon, CARB
Manisha Singh, CARB
Kathleen Gill, CARB
Michael Werst, CARB
Melissa Niederreiter, CARB

C. Approval of Relocation of Paradise - Airport to Paradise - Clark

This enclosure provides the U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board (CARB) relocation of the O_3 State/Local Air Monitoring Station (SLAMS) monitor from the Paradise - Airport site (Air Quality System (AQS) Site ID: 06-007-0007) to the Paradise - Clark site (AQS ID: 06-007-2003). On July 18, 2023, CARB sent a letter to the EPA with a request for EPA approval of this network change. In this letter, CARB explained the need to relocate the Paradise – Airport monitoring site due to logistics beyond CARB's control (i.e., aging site infrastructure, internet communications, and end-of-lease inquiries from the property owners). Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors. CARB also included in this request the relocation of a non-FEM $PM_{2.5}$ monitor located at the Paradise – Theater monitoring site, but since this is a non-regulatory monitor, EPA approval is not required for this relocation, and it is outside the scope of this letter.

The Paradise – Airport O_3 monitor was not eligible for removal under 40 CFR 58.14(c)(1) - (c)(5). This monitor relocation was reviewed under 40 CFR 58.14(c)(6), which describes the relocation requirements if a SLAMS monitor is not eligible for removal under the criteria in 40 CFR 58.14(c)(1) through (c)(5), and states that "[a] SLAMS monitor … may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site."

The original Paradise - Airport site was located at 4405 Airport Road, Paradise, CA 95969. The relocation site, Paradise – Clark site, is located at 5921 Clark Road, Paradise, CA 93277, approximately 3.5 miles north of the original site location. Both sites have a regional scale of representation, meaning they are expected to have relatively uniform land use hundreds of kilometers spatial range. Both sites are in an area characterized by residential and undeveloped land use. The original and proposed relocation site are expected to measure similar O_3 concentrations from similar sources due to the consistency in land use and proximity to sources. This relocation will not prevent CARB from meeting 40 CFR part 58, Appendix D requirements.

In addition, CARB provided wind roses of data collected at Paradise –Airport from January 2019 through December 2021, and indicated that winds are expected to be similar at Paradise - Clark. The primary wind direction at Paradise - Airport was northeast during fall, winter, and spring, and southwest during summer. CARB also stated that limited parallel monitoring at both sites is also planned, but the data from that parallel monitoring was not available at the time of the request.

Based on the assessment of the scale of representation and discussion of wind data from Paradise - Airport, EPA has determined that CARB's request meets the requirement that the replacement site is at a nearby location with the same scale of representation and does not compromise data needed for implementation of the NAAQS. EPA thus approves relocation of the Paradise - Airport O_3 SLAMS monitor to the proposed site, Paradise - Clark. This approval assumes that the new site will meet all 40 CFR part 58 requirements, including the siting requirements

specified in Appendix E. Please work with EPA to ensure that the new site meets all relevant requirements. As this is a relocation, the data from the old and new sites will be combined to form one continuous data record for design value calculations. Please note this in the AQS comment field for both the old and the new AQS site. Also, please attach this enclosure and include the relevant monitor and site information in your next Annual Monitoring Network Plan.

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

OFFICE OF THE
REGIONAL ADMINISTRATOR

May 30, 2023

Kathleen Gill
Chief, Air Quality Surveillance Branch
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, California 95812

Dear Kathleen Gill:

This letter provides the U.S Environmental Protection Agency's (EPA) review and approval for the California Air Resource's Board (CARB) discontinuation of the CO State/Local Air Monitoring Station (SLAMS) monitor at the Calexico ((Air Quality System (AQS) Site ID: 06-025-0005) monitoring site. A letter requesting EPA approval of this network change was submitted to EPA on September 9, 2022. This letter also included a request for closure for the CO SLAMS monitors at Chico – East (AQS Site ID: 06-007-0008), Stockton – University Park (AQS Site ID: 06-077-1003), and Modesto -14th Street (AQS Site ID:06-099-0005), and EPA is still reviewing those requests. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors. EPA has reviewed CARB's discontinuation request and data associated with this monitor and concluded that the criteria contained in 40 CFR 58.14(c)(1) are met for the Calexico site; EPA therefore approves discontinuation of the CO SLAMS monitor at the Calexico site.

Discontinuation of the Calexico CO SLAMS monitor was reviewed by EPA against criteria contained in 40 CFR 58.14(c)(1). According to certified data submitted to EPA's AQS, the Calexico CO monitor was in attainment of the 1971 1-hour CO and 8-hour CO National Ambient Air Quality Standards (NAAQS) based on the five most recent design values (design values 2018-2022, encompassing data years 2016-2022). EPA has determined that, based on design values from 2018-2022, there is a less than 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at this site. The Calexico CO monitor is not specifically required by an attainment or maintenance plan and is not located in a nonattainment or maintenance area. This monitor is not needed to fulfill 40 CFR 58 Appendix D CO minimum monitoring requirements. Therefore, the closure of the Calexico monitoring site will not prevent CARB from meeting 40 CFR 58 Appendix D requirements.

Based on these analyses, EPA approves CARB's discontinuation of the Calexico CO SLAMS monitor. Please include this enclosure and the relevant monitor and site information in next year's annual monitoring network plan.

If you have any questions, please feel free to contact me at (415) 972-3134 or Julia Carlstad at (415) 947-4107.

Sincerely,

DENA VALLANO

Digitally signed by DENA VALLANO
Date: 2023.05.30 09:39:20 -07'00'

Dena Vallano, Manager
Monitoring and Analysis Section
Air and Radiation Division

cc (via email): Mike Miguel, CARB
Michael T. Benjamin, CARB
Sylvia Vanderspek, CARB
Mac McDougall, CARB
Adolfo Garcia, CARB
Walter Ham, CARB
Manisha Singh, CARB
Jin Xu, CARB
Melissa Niederreiter, CARB

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

September 7, 2023

Ms. Dena Vallano
Air Quality Analysis Office
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA. 94105

Subject: **Update on PAMS Monitoring at Sacramento- Del Paso Manor, (AQS ID: 06-067-0006) Ambient Air Monitoring Site**

Dear Ms. Vallano,

The District sent a request on December 20, 2022 to the Environmental Protection Agency (EPA) requesting approval to remove speciated VOC measurements and reactive oxides of nitrogen from Folsom-Natoma Street and speciated VOC measurements from Elk Grove Bruceville station. The request was approved through a letter from EPA received on March 20, 2023. This letter is to provide a status update on the additional information provided in the December 20, 2022 letter on the malfunction status of the VOC Xontech 910A sampler and Carbonyl Xontech 925 sampler at the Del Paso Manor station since 2021.

Renovation and construction work at Sacramento Del Paso Manor has taken significantly longer than expected due to station power needs and complications. The District is working with appropriate parties to bring enough power to the area to operate the station properly. While we are working diligently on the renovation to accommodate the new PAMs re-engineering requirements, the process has been delayed significantly. Therefore, VOC and carbonyl sampling at the Del Paso Manor site is not expected to resume until summer 2024.

We look forward to discussing this further if necessary. If you have any questions, please contact Janice Lam Snyder at jlam@airquality.org or (916) 491-0929.

Sincerely,

Mark S. Loutzenhiser

Mark Loutzenhiser
Division Manager
Monitoring, Planning, and Rules Division
Sac Metro Air Quality Management District

CC:
Shaye Hong, USEPA
Kyle Vagadori, CARB, MLD
Peishi (Bob) Gu, CARB, Planning
Janice Lam Snyder, SMAQMD, Program Manager
Levi Ford, SMAQMD, Air Monitoring
David Yang, SMAQMD, Planning

ICAPCD IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT

TECHNICAL MEMORANDUM

EL CENTRO, CALIFORNIA $PM_{2.5}$ FILTER BASED SAMPLING SHUTDOWN

April 18, 2024

Monitor ID: 06-025-1003
Parameter: 88101
Screening Group: San Diego APCD
Site Address: 150 S 9th Street, El Centro, CA

Justification for the shutdown of the R & P Model 2025 $PM_{2.5}$ Sequential Air Sampler w/VSCC (Sampler) on January 18, 2022.

TABLE A - HISTORICAL MONITORING METHODS IN EL CENTRO

Begin Date	End Date	Method Code	Filter Based Sample Collection
Jan 01, 1999	Jan 25, 2002	120	Anderson RAAS2.5-300 PM2.5 Seq w/WINS
Jan 26, 2002	Dec 31, 2004	118	R & P Model 2025 PM2.5 Sequential w/WINS
Jan 01, 2005	Jun 30, 2006	120	Anderson RAAS2.5-300 PM2.5 Seq w/WINS
Jul 01, 2006	Apr 01, 2016	118	R & P Model 2025 PM2.5 Sequential w/WINS
Apr 02, 2016		145	R & P Model 2025 PM2.5 Sequential air sampler w/VSCC
Nov 15, 2021		209	Met One BAM-1022 Mass Monitor w/VSCC Beta Attenuation or TE-PM2.5C

As noted above, $PM_{2.5}$ sampling has occurred at the El Centro monitoring site since January 1, 1999, using gravimetric sampling on a 1:3-day sampling schedule. As part of the quality assurance monitoring staff conducted one-point flow rate verifications every 30 days separated by 14 days. As a practical matter, staff conducted one-point flow rate verifications every 14 days.

On May 14, 2021, the Sampler located at the Brawley Air Monitoring station failed a one-point flow verification. On May 17, 2021, the Air District reached out to the San Diego Air Pollution Control District (SDAPCD) to discuss and confer on the issues with the Brawley Sampler and next steps. Immediately after confirming a conference call with the United States Environmental Protection Agency (U.S. EPA), the Air District reached out the California Air Resources Board (CARB) for assistance. During these discussions, the Air District requested the replacement of the Brawley and El Centro Samplers with continuous air monitoring instruments.

On June 21, 2021, CARB responded via email addressing two issues regarding the use of a BAM-1022 in the network at the Brawley monitoring station and the permanent network changes at Brawley and El Centro air monitoring stations.[1] Despite U.S. EPA considering the proposal a method change and not a discontinuation, thus not requiring a letter or parallel

[1] Email from CARB, Leah Mathews to Imperial County, Monica Soucier, dated June 21, 2021

monitoring, SDAPCD required a letter to update the Air Quality System maintained by U.S. EPA and CARB required parallel sampling.[2]

On November 12, 2021, the Air District installed a BAM 1022 and commenced a zero-background test which ended November 15, 2021.[3]

On December 22, 2021, the Air District reached out once again to CARB and EPA regarding the shutdown of the Sampler in El Centro constituting notification.[4] The Air District received a response from U.S. EPA and shut the El Centro Sampler on January 18, 2022.[5]

Attached is the final Chain of Custody indicating the shutdown of the El Centro Sampler.

TABLE B - ONE-POINT FLOW RATE VERIFICATION FOR 2021 AT EL CENTRO

Sample Run Begin Date	Sample Run End Date	Flow Audit	Flow Audit Result	Final Calibration	Data Review
Jan 01, 2021	Jan 14, 2021	Jan 14, 2021	Pass	Pass	Annual Calibration performed
Jan 15, 2021	Jan 28, 2021	Jan 27, 2021	Pass		
Jan 29, 2021	Feb 11, 2021	Feb 16, 2021	Pass		
Feb 12, 2021	Feb 25, 2021	Feb 25, 2021	Pass		
Feb 26, 2021	Mar 11, 2021	Mar 16, 2021	Pass		
Mar 12, 2021	Mar 25, 2021	Mar 30, 2021	Pass		
Mar 26, 2021	Apr 08, 2021	Apr 14, 2021	Pass		
Apr 09, 2021	Apr 22, 2021	Apr 29, 2021	Pass		
Apr 23, 2021	May 06, 2021	May 14, 2021	Pass		
May 07, 2021	May 20, 2021	May 27, 2021	Pass		
May 21, 2021	Jun 03, 2021	Jun 14, 2021	Pass		
Jun 04, 2021	Jun 17, 2021	Jun 29, 2021	Pass		
Jun 18, 2021	Jul 01, 2021	Jul 14, 2021	Pass		
Jul 02, 2021	Jul 15, 2021	Jul 28, 2021	Pass		
Jul 16, 2021	Jul 29, 2021	Aug 12, 2021	Pass		
Jul 30, 2021	Aug 12, 2021	Aug 30, 2021	Pass		
Aug 13, 2021	Aug 26, 2021	Sep 08, 2021	Pass		
Aug 27, 2021	Sep 09, 2021	Sep 23, 2021	Pass		
Sep 10, 2021	Sep 23, 2021	Oct 06, 2021	Pass		
Sep 24, 2021	Oct 07, 2021	Oct 14, 2021	Pass	PASS	Semi-Annual Calibration performed
Oct 08, 2021	Oct 21, 2021	Oct 20, 2021	Pass		
Oct 22, 2021	Nov 04, 2021	Nov 02, 2021	Pass		
Nov 05, 2021	Nov 18, 2021	Nov 16, 2021	Pass		
Nov 19, 2021	Dec 02, 2021	Dec 01, 2021	Pass		
Dec 03, 2021	Dec 16, 2021	Dec 16, 2021	Pass		
Dec 17, 2021	Dec 30, 2021	Jan 13, 2022	Pass		
Jan 01, 2022	Jan 18, 2022	Jan 18, 2022	Pass		Instrument Shut Down

Monica N Soucier

Monica N Soucier
APC Division Manager

[2] Email from SDAPCD, David Medina to CARB, Harleen Khangura, dated January 19, 2022
[3] November 2021 Logbook entries for the El Centro Air Monitoring Station
[4] Email from Imperial County, Monica Soucier to CARB & U.S. EPA, Greg Gilani & Dena Vallano, dated December 22, 2021
[5] Email from U.S. EPA, Jennifer Williams, to the Air District, Monica Soucier, dated December 22. 2021

From: Mathews, Leah@ARB
To: Monica Soucier
Cc: Ismael Garcia; Michael Green; Jon Barroqa; Matt Dessert; Vallano, Dena; Gilani, Greg@ARB
Subject: RE: Discontinuation of R&P Samplers at the Brawley and El Centro Monitoring Sites
Date: Monday, June 21, 2021 10:34:52 AM

Good morning all,

I have met internally with AQPSD at CARB, and discussed with U.S. EPA regarding two issues:

1. Temporary use of the BAM-1022 in the network at Brawley.
2. Permanent network changes at Brawley and El Centro, converting filter based PM2.5 FRMs to continuous BAM-1022 PM2.5 monitoring.

Regarding item 1:

- CARB and U.S. EPA have no concerns and there is no network impact or collocation concerns utilizing a BAM-1022 temporarily at Brawley.
- There will need to be an update to AQS to include this change. CARB will need AQS access to upload data for the site. I will be working with EPA to get this sorted shortly.

Regarding item 2:

- There are no network or collocation impacts should Imperial move permanently to continuous PM2.5 monitoring with a BAM-1022 at El Centro and/or Brawley.
- U.S. EPA considers this a method change, not a discontinuation (unless there will be a major lapse in between the shutdown of the FRM and start of the FEM), so typically would not require a letter or parallel monitoring. A email notification to U.S. EPA or the method change would suffice. This is also consistent with the guidance given by Michael in the letter you attached.
- CARB AQPSD has requested Imperial maintain filter-based monitoring at the El Centro site through the end of the year, for reasons related to data completeness and attainment.
- CARB's AQPSD has requested parallel monitoring between the FRM and the BAM-1022 and at El Centro through the end of the year (I understand we don't know exactly when the new BAM will start at the El Centro site).

Please let me know if you have any questions.

Thank you,

Leah Mathews
Air Pollution Specialist
California Air Resources Board
Email: leah.mathews@arb.ca.gov
Phone: (530) 908-2689

From: Medina, David
To: Khangura, Harleen@ARB; Monica Soucier
Cc: Cooper, Ashley@ARB
Subject: RE: Shutdown of the R&P PM2.5 Unit at El Centro
Date: Wednesday, January 19, 2022 12:02:17 PM
Attachments: image001.png

Hi Leena,

We have not sent filters for the second half of January. Monica had mentioned that CARB would be issuing an official letter for shutdown. I believe you may be working on this with Monica. We would need the letter for our official records since we will shut it down in AQS. We received a similar letter for the Brawley shutdown back in August. Please let me know if you need additional information.

David Medina, Ph. D.
Sr. Air Pollution Chemist
Monitoring and Technical Services Division
Ambient Monitoring Section
david.medina@sdapcd.org

In-Office: M-F, 7 AM – 3:30 PM
10124 Old Grove Rd, San Diego, CA 92131
Phone: (858) 586-2780 Mobile: (858) 935-5866

San Diego County Air Pollution Control District

www.sdapcd.org

From: Khangura, Harleen@ARB <Harleen.Khangura@arb.ca.gov>
Sent: Wednesday, January 19, 2022 11:49 AM
To: monicasoucier <monicasoucier@co.imperial.ca.us>
Cc: Medina, David <David.Medina@sdapcd.org>; Cooper, Ashley@ARB <Ashley.Cooper@arb.ca.gov>
Subject: [External] RE: Shutdown of the R&P PM2.5 Unit at El Centro

Good afternoon Monica and David.

El Centro

November 2021

11/12 0845 IT 23.2 OT 25.5
Sunny W @ 3.5 mph
O3 Stab 0.3 / 21.0
NOx Stab 0.7 / 9.8
BAM 76.7 ug tape ok
Set up 1022 to run zero background
O3 + NOx weekly QC + filter change
Nox Leak SP 5.1 / RC 5.1

1625 IG

11/15 1610 IT 24.5 OT 31.1
Sunny SE @ 3.8 mph
O3 Stab 0.9 / 35.0
NOx Stab 0.7 / 9.4
BAM 40.7 ug tape ok
Ended 1022 zero background test
new background = .0003
Left unit Sampling

IG 1615

11/16 1620 IT 24.2 OT 28.7
Scattered Cloud NNE @ 4.5 mph
O3 Stab 2.0 / 36.9
NOx Stab 1.0 / 16.4
BAM 96.7 ug tape ok
EBAM Leak 0.5 Flow 16.7 / 16.38 } Deltacal
R+P Leak 6 Flow 16.70 / 16.61 } 1096 (9-2-21)
Loaded R+P Filters Downloaded data

IG 1630

From:	Monica Soucier
To:	Gilani, Greg@ARB
Cc:	Vallano, Dena; Kear-Padilla, Lora; Lin.Lu@sdapcd.org; Michael Green; Jon Barroga; Ismael Garcia
Subject:	Shutdown of the R&P PM2.5 Unit at El Centro
Date:	Wednesday, December 22, 2021 9:48:00 AM
Attachments:	EMAIL 20210621 Shutdown of R&P Samplers at the Brawely.pdf El Centro PM 25 BAM 1022.xlsx
Importance:	High

Good morning Greg and Dena

I hate the fact that I am sending this so.... last minute. Anyway, attached is a June 2021 recap of a conversation acknowledging the shutdown of the R&P unit in Brawley and El Centro. Because, San Diego APCD supplies the filters for the R&P unit there is some urgency to this email request.

The Air District would like to shut down the R&P unit at the El Centro site effective December 31, 2021.

The last bullet point in the attached email indicates parallel monitoring between the FRM and the BAM-1022 at El Centro through the end of the year. There was an acknowledgement that the date of installation of the BAM-1022 at the El Centro site was unknown at the time of the writing of the email.

- The BAM-1022 unit at El Centro finalized the zero background test on November 15, 2021 at 16:10 hours.
- Once San Diego APCD submits the filter weight results into USEPA's AQS comparison data should include approximately 15 filter based samples, assuming no issues, encompassing November 16 , 2021 through December 31, 2021.

Again I apologize for the late request **but we do need to let San Diego APCD know by Monday, December 27, 2021 whether we will require additional filters for the R&P unit for January 2022.**

P.S. AQMIS2 currently has data populated back to December 4, 2021.

ICAPCD
IMPERIAL COUNTY
AIR POLLUTION CONTROL DISTRICT
Monica N. Soucier, MSL
APC Division Manager
Planning and Monitoring
150 S 9th Street
El Centro, CA 92243
P. 442.265.1800
F. 442.265.1799

From: Williams, Jennifer
To: Monica Soucier; Tsai, Sheila; Kay, Rynda
Cc: Gilani, Greg@ARB; Yoshimura, Gwen
Subject: RE: Shutdown of the R&P PM2.5 Unit at El Centro
Date: Wednesday, December 22, 2021 12:55:47 PM

Hello Monica,

Apologies as I wasn't involved in earlier conversations, but from what I see in the correspondence, El Centro PM2.5 will essentially have a method change-out from an R&P to a BAM 1022, reporting regulatory data? If that is the case, EPA approval is not required, but will note QA collocation should be re-assessed if necessary, and this change should be reflected in future air monitoring network plans and in AQS.

Please let me know if you have any questions.

Thanks,
Jennifer

From: Monica Soucier <MonicaSoucier@co.imperial.ca.us>
Sent: Wednesday, December 22, 2021 10:18 AM
To: Williams, Jennifer <Williams.Jennifer@epa.gov>; Tsai, Sheila <Tsai.Sheila@epa.gov>; Kay, Rynda <Kay.Rynda@epa.gov>
Cc: Gilani, Greg@ARB <greg.gilani@arb.ca.gov>
Subject: Shutdown of the R&P PM2.5 Unit at El Centro
Importance: High

Hi

I sent this to Dena and Gwen both had Auto replies – So I am forwarding to you all

Monica N. Soucier, MSL
APC Division Manager
Planning and Monitoring
150 S 9th Street
El Centro, CA 92243
P. 442.265.1800
F. 442.265.1799

From: Monica Soucier
Sent: Wednesday, December 22, 2021 9:48 AM
To: Gilani, Greg@ARB <greg.gilani@arb.ca.gov>

SAN DIEGO AIR POLLU[TION] CONTROL DISTRICT
24-HOUR FIELD SAMPLE/CHAIN OF CUSTO[DY] REPORT FOR PM2.5 SEQUENTIAL SAMPLER

Site Name: **EL CENTRO** AQS #: **06-025-1003** Sampler: **R & P** Sampler S/N: **214970109** Field Tech.: [illegible]

Filter Serial #	T061 9193	T061 9194	T061 9195	T061 9197	T061 9198		T061 9199	T061 9200	T061 8876
Filter Data	**sample**	**sample**	**sample**	**sample**	**sample**		**field blank**	**trip blank**	**spare**
Filter I.D.:	21 002 22	21 005 22	21 008 22	21 011 22	21 014 22		21 00122 B	21 00122 T B	21 030 22
Port No.:	I	II	III	IV	V				
Start Date:	Jan 02 2022	Jan 05 2022	Jan 08 2022	Jan 11 2022	Jan 14 2022		2022		Jan 2022
Received from Laboratory									
Date/Time (PST):	12/28/21 1415								
Name:	[illegible]								
Installed in Sampler / Start Temperature Datalogger (Hold START button for 10 seconds)									
Date/Time (PST):	12/29/21 1105								
Name:	[illegible]								
Removed from Sampler									
Date/Time (PST):	1/3/22 1050	1/6/22 0800	1/10/22 0740	1/12/22 1530	1/18/22 0750		1/6/22 0800		
Name:	MG	IG	IG	IG	IG		IG		
Flag Code:									
Local Conditions:									
Avg. Amb. Temp.		12.8	14.0	16.0	18.5		8.0		
Placed in Station Refrigerator									
Date/Time (PST):	1/3/22 1055	1/6/22 0805	1/10/22 0745	1/12/22 1535	1/18/22 0755		1/6/22 0805	12/29/21 1115	
Name:	MG	IG	IG	IG	IG		IG	[illegible]	
Datalogger Temp.:	7.2	7.5	7.7	8.0	8.0		7.5	0.5	
Removed from Station Refrigerator									
Date/Time (PST):	~~1/18/22 1550~~	1/19/22 1535							
Name:	IG 1/18	IG							
Datalogger Temp.:		5.8							
Placed in Laboratory Refrigerator									
Date/Time (PST):									
Name:									
Datalogger Temp.:									

Tare Weight Date	
Date/Time (PST):	12/22/21 14:38
Name:	M. Lu
Placed in PM2.5 Laboratory	
Date/Time (PST):	
Name:	

Sampler Flag Codes:

F. Flowrate 5-min average, out of specification
T. Filter Temp. differential, 30 min. interval out of specification
E. Elapsed Sample Time, out of specification

Local Condition Codes:

A. High Winds | E. Forest Fire | N. Sanding/Salting Streets | L. Highway Construction
K. Farming Nearby | J. Construction Nearby | P. Roofing Operations | Q. Prescribed Burn

RECORD DATE(S) WHEN COMMENTS ARE MADE

Lab Blank # 1000122 B

Temperature Datalogger S/N: 119101565

Comments: 1/13 - Leak: 6 Flow: 16.70 / 16.55 Delta Cal 1096 (9-2-21)

1/18 - Instrument Shutdown Leak: 7 Flow: 16.67 / 16.53 Delta Cal 1096 (9-2-21) Unit left powered off

1/19 - All Filters removed 1/19/22 including 9193

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

October 28, 2022

Sylvia Vanderspek, Chief
Air Quality Planning Branch
California Air Resources Board
Post Office Box 2815
Sacramento, California 95812

Dear Chief Vanderspek:

Thank you for your submission of the California Air Resources Board (CARB) *Annual Network Plan Covering Monitoring Operations in 25 California Air Districts, July 2022* ("Plan") on June 29, 2022. We have reviewed the submitted document based on the requirements set forth in 40 CFR Part 58. Based on the information provided in the plan, the U.S. Environmental Protection Agency (EPA) approves all portions of the network plan except those specifically identified below. With this plan approval, we also formally approve the O_3 season waivers for five O_3 sites: Echo Summit (Air Quality System (AQS) ID: 06-017-0012), Cool (AQS ID: 06-017-0020), Jerseydale (AQS ID: 06-043-0006), Sutter Buttes (AQS ID: 06-101-0004), and Tuscan Butte (AQS ID: 06-103-0004) for November 2022-March 2023. Please note that an updated request including 2022 data will be required for future ozone season waiver approvals after March 31, 2023. More information about these approvals is included in Enclosure A. With this plan approval, we also formally approve the following system modifications: the discontinuation of White Cloud O_3 SLAMs monitoring (AQS ID: 06-057-0007), and the discontinuation of Anderson Springs (AQS ID: 06-033-3010) and Glenbrook (AQS ID: 06-033-3011) PM_{10} SLAMS monitoring. More information about these approvals is included in enclosures C and D, respectively.

In the State of California, ten district monitoring agencies submitted annual monitoring network plans this past year in accordance with 40 CFR 58.10. EPA received plans covering the 2021 calendar year from:

- Bay Area Air Quality Management District,
- Great Basin Unified Air Pollution Control District,
- Monterey Bay Air Resources District,
- North Coast Unified Air Pollution Control District,
- Sacramento Metropolitan Air Quality Management District,
- Santa Barbara County Air Pollution Control District,
- San Diego County Air Pollution Control District,
- San Joaquin Valley Air Pollution Control District,
- San Luis Obispo County Air Pollution Control District, and
- South Coast Air Quality Management District.

EPA has reviewed and approved all of the monitoring agency plans listed above with the exception of the Great Basin Unified Air Pollution Control District, Sacramento Metropolitan Air Quality Management District, and San Joaquin Valley Air Pollution Control District plans, which were submitted late.[1] EPA has provided specific comments on all other plans we received from California local agencies through separate letters and have forwarded these to CARB. Please refer to these responses for additional comments pertinent to CARB's network. We have also highlighted those elements related to CARB sites in local agency plans where EPA is not taking action in Enclosure B.

Please note that we cannot approve portions of the annual network plan for which the information in the plan is insufficient to judge whether the requirement has been met, or for which the information provided does not meet the requirements as specified in 40 CFR 58.10 and the associated appendices. EPA Region 9 also cannot approve portions of the plan for which the EPA Administrator has not delegated approval authority to the regional offices. Enclosure A (*A. Annual Monitoring Network Plan Checklist*) is the checklist EPA used to review your plan for items that are required to be included in the annual network plan along with our assessment of whether the plan submitted by your agency addresses those requirements. Items highlighted in yellow are those EPA Region 9 is not acting on, as we either lack the authority to approve the specific item, or we have determined that a requirement is either not met or information in the plan is insufficient to judge whether the requirement has been met. Items highlighted in green in Enclosure A require attention in order to improve next year's plan. All comments conveyed via this letter and enclosures should be addressed prior to submittal of next year's annual monitoring network plan to EPA.

Additionally, EPA supports state and local government partners in advancing environmental justice efforts while ensuring compliance with applicable civil rights laws. To this end, we see an opportunity for all monitoring organizations to address and advance environmental justice in their annual network plans. Through the development and implementation of annual network plans, activities to advance environmental justice could include identifying monitoring sites in or near communities with environmental justice concerns, describing how environmental justice is considered in network design, considering environmental justice factors in siting, relocating, or discontinuing air monitors, and engaging with specific communities when plans are out for public comment. EPA encourages monitoring organizations to continue considering these issues throughout the year, and to convey yearly updates to the public and EPA on these important areas through the annual network plan process. EPA's EJSCREEN mapping and screening tool, including the environmental justice indexes and demographic indicators, may be useful in support of these efforts.[2] We also encourage you to provide us with any suggestions or requests that could further advance environmental justice in your ambient air monitoring programs.

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[1] EPA received the Great Basin Unified Air Pollution Control District's *2022 Annual Air Quality Monitoring Network Plan* on August 22, 2022, Sacramento Metropolitan Air Quality Management District's *2022 Annual Network Plan* on Sept 12, 2022, and San Joaquin Valley Air Pollution Control District's *2022 Air Monitoring Network Plan* on October 11, 2022. EPA's reviews are forthcoming and are not included in Enclosure B due to the late submittals. EPA will copy CARB on our responses to these plans. Please refer to these upcoming responses for additional comments pertinent to CARB's network.

[2] U.S. EPA. 2022. EJScreen: Environmental Justice Screening and Mapping Tool, Version 2.0, https://www.epa.gov/ejscreen.

If you have any questions regarding this letter or the enclosures, please feel free to contact me at (415) 947-4134 or Dena Vallano at (415) 972-3134.

Sincerely,

Yoshimura, Gwen Digitally signed by Yoshimura, Gwen
Date: 2022.10.28 13:48:31 -07'00'

Gwen Yoshimura, Manager
Air Quality Analysis Office

Enclosures:

A. Annual Monitoring Network Plan Checklist
B. Elements Related to CARB Sites in Local Agency Plans where EPA is Not Taking Action
C. Approval of Discontinuation of White Cloud O_3 SLAMS monitoring
D. Approval of Discontinuation of Anderson Springs and Glenbrook PM_{10} SLAMS monitoring

cc (via email): Michael Benjamin, CARB
Michael Miguel, CARB
Jin Xu, CARB
Alicia Adams, CARB
Sunghoon Yoon, CARB
Manisha Singh, CARB
Kathleen Gill, CARB
Michael Werst, CARB
Melissa Niederreiter, CARB

D. Approval of Discontinuation of Glenbrook and Anderson Springs PM_{10} SLAMS monitoring

Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors. On December 21, 2021, Lake County Air Quality Management District (LCAQMD) sent a letter to EPA describing the proposal to discontinue PM_{10} SLAMS monitoring at the Anderson Springs (Air Quality System (AQS) Site ID: 06-033-3010) and Glenbrook (AQS Site ID: 06-033-3011) monitoring sites. The closure date for PM_{10} monitoring at both sites was December 31, 2021 due to resource constraints on their monitoring program and the desire to divert existing resources to more critical monitoring activities. Discontinuation of the PM_{10} SLAMS monitors were reviewed by EPA against criteria contained in 40 CFR 58.14(c)(1) and 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 National Ambient Air Quality Standard (NAAQS) and if the requirements of appendix D to this part, if any, continue to be met." EPA has reviewed LCAQMD's request and data associated with these monitors and concluded that the criteria contained in 40 CFR 58.14(c)(1) are met for the Glenbrook site and the criteria contained in 40 CFR 58.14(c) are met at the Anderson Springs site as described below; EPA therefore approves discontinuation of PM_{10} SLAMS monitoring at the Glenbrook and Anderson Springs sites.

EPA has reviewed and concluded that the criteria contained in 40 CFR 58.1(c)(1) are met for the Glenbrook PM_{10} SLAMS monitor. The Glenbrook PM_{10} monitor was in attainment of the 1987 24-hour PM_{10} NAAQS based on the five most recent design values (design values 2017-2021, encompassing data years 2015-2021). Based on these design values, EPA has determined that there is a less than 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at this site. This monitor is not specifically required by an attainment or maintenance plan and is not located in a nonattainment or maintenance area. This monitor is not needed to fulfill 40 CFR 58 Appendix D PM_{10} minimum monitoring requirements. Therefore, the closure of the Glenbrook monitoring site will not prevent LCAQMD from meeting 40 CFR 58 Appendix D requirements.

EPA has reviewed and concluded that the criteria contained in 40 CFR 58.1(c) are met for the Anderson Springs PM_{10} SLAMS monitor. The Anderson Springs PM_{10} monitor was in attainment of the 1987 24-hour PM10 NAAQS based on the 2019-2021 design values; the 2017 and 2018 design values were invalid due to incomplete quarters in 2015 and 2016[9]. No 24-hour PM_{10} exceedances were recorded from calendar years 2015 through its closure in 2021. Based on the historical data record, we would not expect exceedances to have occurred during the periods of missing data. This monitor is not specifically required by an attainment or maintenance plan. Therefore, the closure of the Anderson Springs monitoring site does not compromise data collection needed for implementation of the PM_{10} NAAQS

[9] The Anderson Springs PM_{10} monitor closed temporarily between 9/14/2015 and 6/30/2016. This monitor therefore had one incomplete quarter in 2015 and two incomplete quarters in 2016 that resulted in invalid 2017 and 2018 design values for the 1987 24-hour PM_{10} NAAQS.

LCAQMD currently operates one other PM_{10} SLAMS site in the Clearlake Micropolitan Statistical Area, Lakeport-S. Main Street (AQS ID: 06-033-3002), exceeding 40 CFR 58 Appendix D minimum monitoring requirements for the area. Therefore, the closure of the Anderson Springs monitoring site will not prevent LCAQMD from meeting 40 CFR 58 Appendix D requirements.

Based on these analyses, EPA approves LCAQMD's discontinuation of the Glenbrook and Anderson Springs PM_{10} SLAMS monitors. Please include this enclosure and the relevant monitor and site information in next year's annual monitoring network plan.

Antelope Valley Air Quality Management District
43301 Division St., Suite 206
Lancaster, CA 93535-4649
661.723.8070

In reply, please refer to AV1122/226

November 14, 2022

Gwen M. Yoshimura
Air Quality Analysis Office, Manager
U.S. EPA Region 9
75 Hawthorne Street
Mail Code: AIR-7
San Francisco, California 94105

Dear Ms. Yoshimura:

The Antelope Valley Air Quality Management District (AVAQMD) is requesting approval from U.S. EPA to relocate all monitors operating at our 43301 Division Street site (Site ID:060379033) to a new location at the Antelope Valley Lancaster Fairgrounds, 2551 West Avenue H in Lancaster, CA (34.725389, -118.178601).

This relocation is a result of AVAQMD being informed by the 43301 Division Street property manager that the lease would not be renewed and AVAQMD must vacate the property no later than December 2022. Upon this notification, the District evaluated various new site locations in the area, and settled on the Fairgrounds as the preferred new site location. This preference was based on a variety of reasons, including that the Fairgrounds Board and AVAQMD Board share many of the same members, ensuring AVAQMD control and access over the Fairgrounds property (avoiding future moves), easily meeting 40 CFR 58 Appendix E sitting requirements, and the logistical advantage of the site located on the same property as AVAQMD offices.

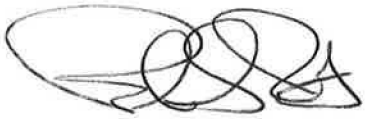
AVAQMD initiated parallel monitoring (performed by Mojave Desert AQMD), reviewed details of the Fairgrounds location, reviewed historical pollutant patterns from the Division site, evaluated local sources for both locations and spatial scales, and evaluated if any monitors qualify for shutdown. The details of the parallel monitoring and these other investigations performed are attached as Appendix A.

AVAQMD believes all monitors qualify for re-location based on 40 CFR 58.14 (b). Additionally, it appears Nitrogen Dioxide qualifies for shutdown under 40 CFR 58.14 (c) 1 and 3 and PM2.5 qualifies for shutdown under 40 CFR 58.14 (c) 1. Note that AVAQMD is not requesting shutdown, just relocation of these monitors.

Upon approval of this request, AVAQMD will request that CARB include a discussion and documentation of this relocation in the 2023 Annual Network Plan.

Please contact me at 661-803-6122 or our consultant, Joel Craig at 805-712-5701 if we can answer any questions or provide any further information.

Sincerely,



Bret Banks
Air Pollution Control Officer

Cc (via email): Joel Craig, Consultant to AVAQMD
Greg Gilani, CARB
Sheila Tsai, EPA Region 9

PROPOSED SITE RELOCATION SUMMARY:

The Antelope Valley Air Quality Management District (AVAQMD) requests EPA approval to move the Lancaster (06-037-9033) air monitoring site from 43301 Division Street to the Lancaster Fairgrounds, 2551 W. Avenue H in the city of Lancaster, CA (34.725389, -118.178601).

Since its inception on July 1, 1997, the AVAQMD conducted air monitoring operations in the District office complex located at 43301 Division Street, Suite 206, Lancaster CA. In January 2022 AVAQMD was informed by the 43301 Division Street property manager that the lease would not be renewed and AVAQMD must vacate the property no later than December 2022. The need to vacate the Division Street location creates a logistical problem beyond the Districts control to continue monitoring operations at the Division Street location.

Upon receiving notification of the need to vacate, the District requested Mojave Desert Air Quality Management District (MDAQMD) staff begin parallel monitoring at the new District office location, the Lancaster Fairgrounds, in preparation for a relocation request. Early in the parallel monitoring period, Mojave staff met with Adolfo Garcia of CARB at the Fairgrounds location to discuss the site move. Adolfo liked the openness of the Fairgrounds site and did not note any issues to be concerned with. Mojave staff utilized a small home-made trailer set up to house air monitoring instrumentation, only large enough for the equipment and one person to crawl into. Performing temporary mobile monitoring is a challenging endeavor under these circumstances. Ozone, PM10, PM2.5, and meteorological parameters began officially recording data in January 2022. Gathering ozone data from the mobile site was quite successful until the monitor was needed for another project and was removed on 6/15/22. The PM measurements were made with a Teledyne T-640x optical instrument and unfortunately on 6/30/22 it was confirmed by Mojave staff that the instrument was operating way out of specification and was adjusted back into specification on that day. Detailed review of QC data from the T-640 confirmed that data prior to the 6/30/22 adjustment could not be validated. This issue limits the PM data available for parallel comparisons. Because of the added complexity of NO2 monitoring and that the NO2 data from the existing Division Street site would easily qualify for shutdown due to a lack of high measurements, no NO2 parallel monitoring was performed.

The District agrees with comments that it would be best to have parallel monitoring data for all seasons of the year. However, that is seldom possible in most site relocations, and considering shortage of equipment and the failed QC checks on the PM monitor resulting in the first 6 month of data being unusable, won't be logistically possible in this situation. The District needs some time prior to December 31, 2022 to accomplish the move and have the Division site building restored to original condition (re-roofing where inlet penetrations were made and removing the hatch to access the roof). Additionally, if parallel monitoring was continued until mid November (to provide time to restore Division street location to original condition), the District would not have other options to move the site. So it appears to deal with logistical issues, the parallel data available now is the best that can be accomplished. Data plots have been updated to include the latest PM data, that covers the some of the fall season.

Reviewing the historical data from the Division street site can be a good indication of how seasonal changes would influence different pollutant concentrations. Review of 2021 data show the highest PM2.5 and PM10 concentrations do occur in the fall. This is somewhat different for PM2.5 in other parts of the state where higher concentrations do occur in the winter months. So this suggests the lack

of winter parallel data for PM parameters would not miss the peak seasonal concentrations. As noted, the parallel PM data available in this analysis runs through mid September, so does include part of the season where highest PM values were seen in the Division street historical data.

Close examination of the high PM values for 2021 at the Division Street site, shows that these very few episode days are always either due to state-wide high energy wind event (10/11/2021) or wildfire smoke impacts (8/16/2021 and 9/23/2021). The high energy wind event showed a PM2.5/10 ratio below 10% elevated windspeeds and high values recorded across much of the state. The wildfire smoke impacts had PM2.5/10 ratio ~60-70%, lower windspeeds and other impacted sites in the area.

Another comment received by the District is that the Fairgrounds site measures higher wind speeds, which could result in higher PM concentrations. It is true that the parallel wind data does show somewhat higher wind speeds occurring at the Fairgrounds site. However, it is important to consider that the Division street site has some significant obstructions just upwind of the wind sensor that likely are reducing the wind speed where the sensor is located. In contrast, the Fairgrounds wind sensor is in a very open space with low surface roughness surrounding the location and no nearby obstructions nearby. A photo and more discussion of this issue is presented in the following section discussion the parallel wind comparisons.

1

The table below summarizes the current site monitor details (taken from CARB 2022 Annual Network Plan):

Site Name		**Lancaster-Division Street**		
AQS ID		06-037-9033		
GIS coordinates		34.66959, -118.13068		
Address		43301 Division St, Lancaster, CA 93535		
County		Los Angeles County		
Dist. to road		118 Meters to Sierra Hwy, 47 meters to Division Street		
Traffic count (AADT, year)		Not Available		
Groundcover		Asphalt		
Representative area		Los Angeles-Long Beach-Anaheim Metropolitan Statistical Area		
Pollutant, POC	**Ozone,1**	**NO2,1**	**$PM_{2.5}$,1**	**PM_{10},2**
Monitor Type	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	NA	NA	NA	NA
Parameter Code	44201	42602	88101	81102
Monitoring Objective	NAAQS, public	NAAQS, public	NAAQS, public	NAAQS, public
Site type(s)	population	Population	population	population
MFG/ Model	TAPI 400	TAPI 200	BAM 1020	BAM 1020
Method Code	087	99	170	122
FRM/FEM or other	FEM	FRM	FEM	FEM
Collecting Agency	Antelope Valley	Antelope Valley	Antelope Valley	Antelope Valley
Reporting Agency	Antelope Valley	Antelope Valley	Antelope Valley	Antelope Valley
Spatial Scale	Middle	Middle	Neighborhood	Neighborhood
Start date	11/1/2001	11/1/2001	11/1/2001	11/1/2001
Operation schedule	Continuous	Continuous	Continuous	Continuous
Sampling season	All Year	All Year	All Year	All Year
Probe height	6.4 m	6.4 m	6.5 m	6.4 m
Distance from supporting structure	1.9 m	1.9 m	2 m	2 m
Distance from obstructions on roof	None	None	None	None
Distance from obstructions not on roof	None	None	None	None
Distance from trees	>10 meters	>10 meters	>10 meters	>10 meters
Distance to furnace or incinerator	None	None	None	None
Unrestricted airflow	360°	360°	360°	360°

1

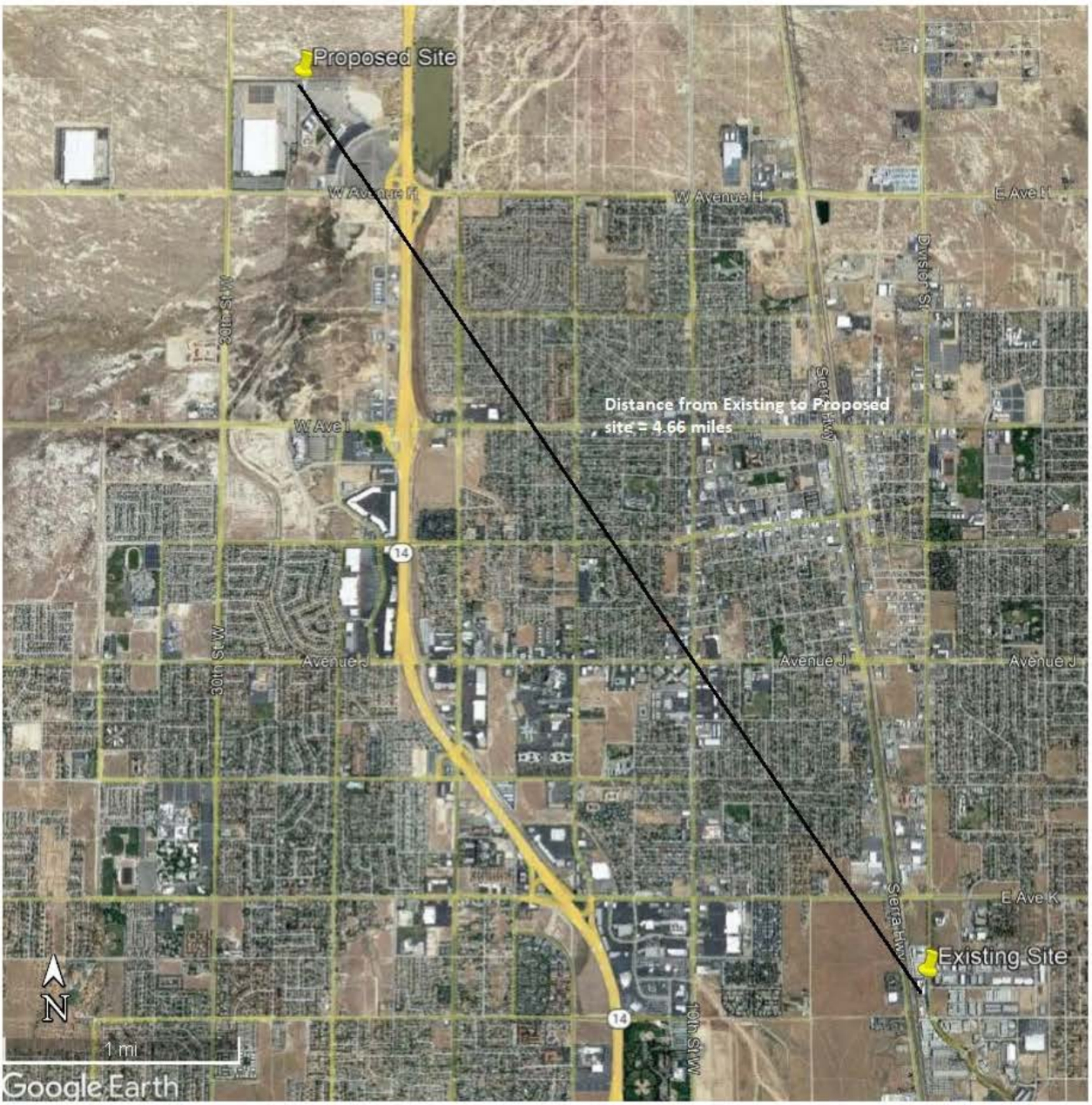
For low volume PM instruments, is any PM instrument within 1 m of the lo-vol? If yes, please list distance (meters) and instrument(s).	NA	NA	No	No
Probe material	Teflon	Teflon	N/A	N/A
Residence time	15.8 s	16.3 s	N/A	N/A
Will there be changes in next 18 months?	Yes-Proposed Move	Yes-Proposed Move	Yes-Proposed Move	Yes-Proposed Move
Frequency of one-point QC check (gaseous)	Every two Weeks	Every two Weeks	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	Monthly
Last annual performance evaluation (gaseous)	9/14/2021	9/14/2021	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	3/25/2021 9/14/2021	3/25/2021 9/14/2021
Is it suitable for comparison against the annual $PM_{2.5}$?	N/A	N/A	N/A	Yes

1

PROPOSED NEW SITE DETAILS:

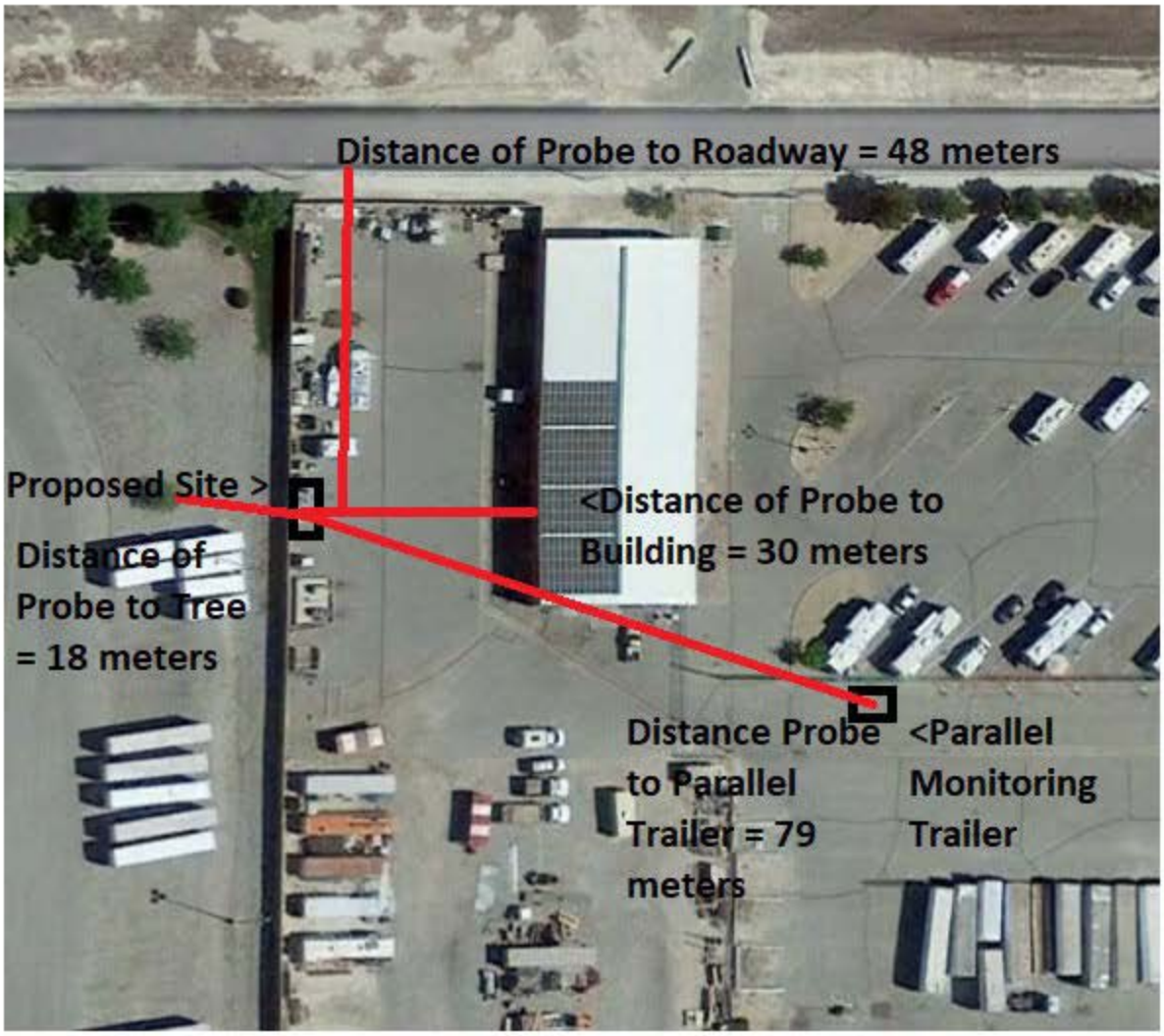
The proposed new site (Lancaster Fairgrounds) will be located in a paved storage area in the northwest portion of the fairground complex. This area is adjacent to the maintenance building and is used for long term storage of equipment. The stored equipment and supplies in this area do not protrude above the site inlets.

The aerial view below shows the proposed site location and the existing Division Street site location:



The aerial view below shows a close up of the proposed site location, the location where parallel monitoring was performed, and distances to potential obstructions and nearby roadways.

1



The aerial view below shows the entire Fairgrounds complex to present distance to higher traveled roadways in the area:

1

The image below shows the specific location of the proposed site. Note that equipment currently stored in this area will be moved to allow the site shelter to be located close to the wall.

1

The proposed site will utilize an 8'X20' modified cargo container for the temperature-controlled shelter with all sample probe inlets located 2 meters above the shelter roof and approximately 4.6 meters above ground level. A ten meter tower will be utilized for the meteorological sensors.

Evaluation of the proposed site shows it meets all siting criteria in 40 CFR 58 Appendix E and will be described as such in the next Annual Network Plan. There are no trees within 10 meters, the closest tree dripline is approximately 18 meters from the probe. The only obstruction is the maintenance building to the east of the proposed site that is greater than two times the distance the building protrudes above the probe height. The closest roadway, has an estimated daily traffic count of <250 (Ave G8), is 48 meters from the probe. The next closest roadway is over 450 meters away. The area due west of the proposed site (west of the wall) is covered with thick gravel or paved, as shown in the image below:

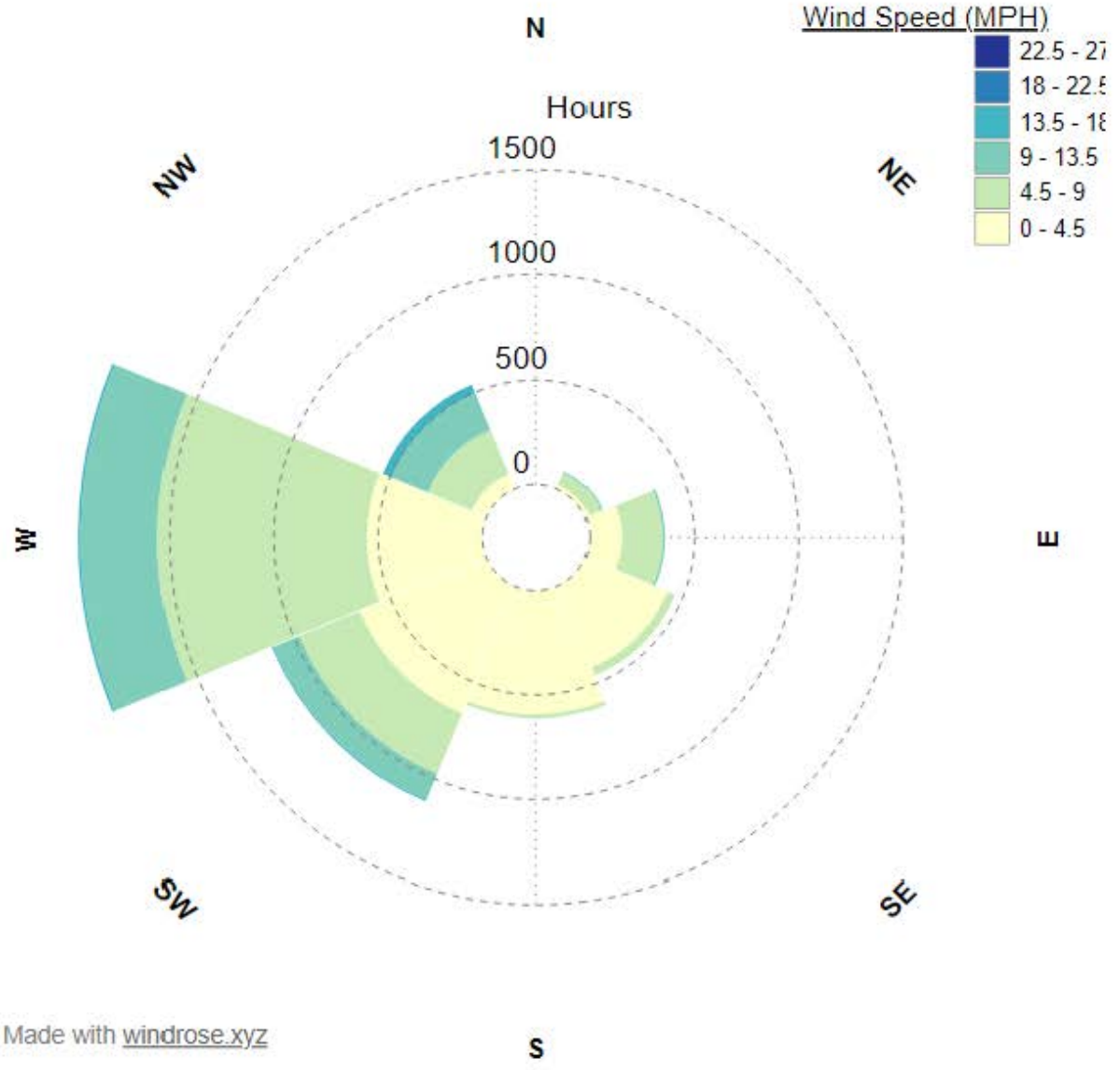
Parallel monitoring was performed by Mojave Desert Air Quality Management District (MDAQMD) for some of the measured parameters, including wind direction and wind speed. Below are windroses for the existing Division Street site and the proposed Fairgrounds site.

When evaluating wind data, it is important to first consider the sensor exposure. Sensors located in an open area, without any nearby obstructions and low surface roughness, will measure significantly higher wind speeds than a sensor located with nearby obstructions and a high surface roughness. Some of the minor differences in wind patterns are likely due to differences in the two site's sensor exposure and surrounding surface roughness. The Division Street site sensor, shown in the following picture is mounted about 3 meters above the roof, and about 7.5 meters above ground level and has numerous buildings nearby, resulting is significant surface roughness in the vicinity. The nearby rooftops and the wall due west of the sensor are upwind of the sensor for the predominate wind direction and are about

1

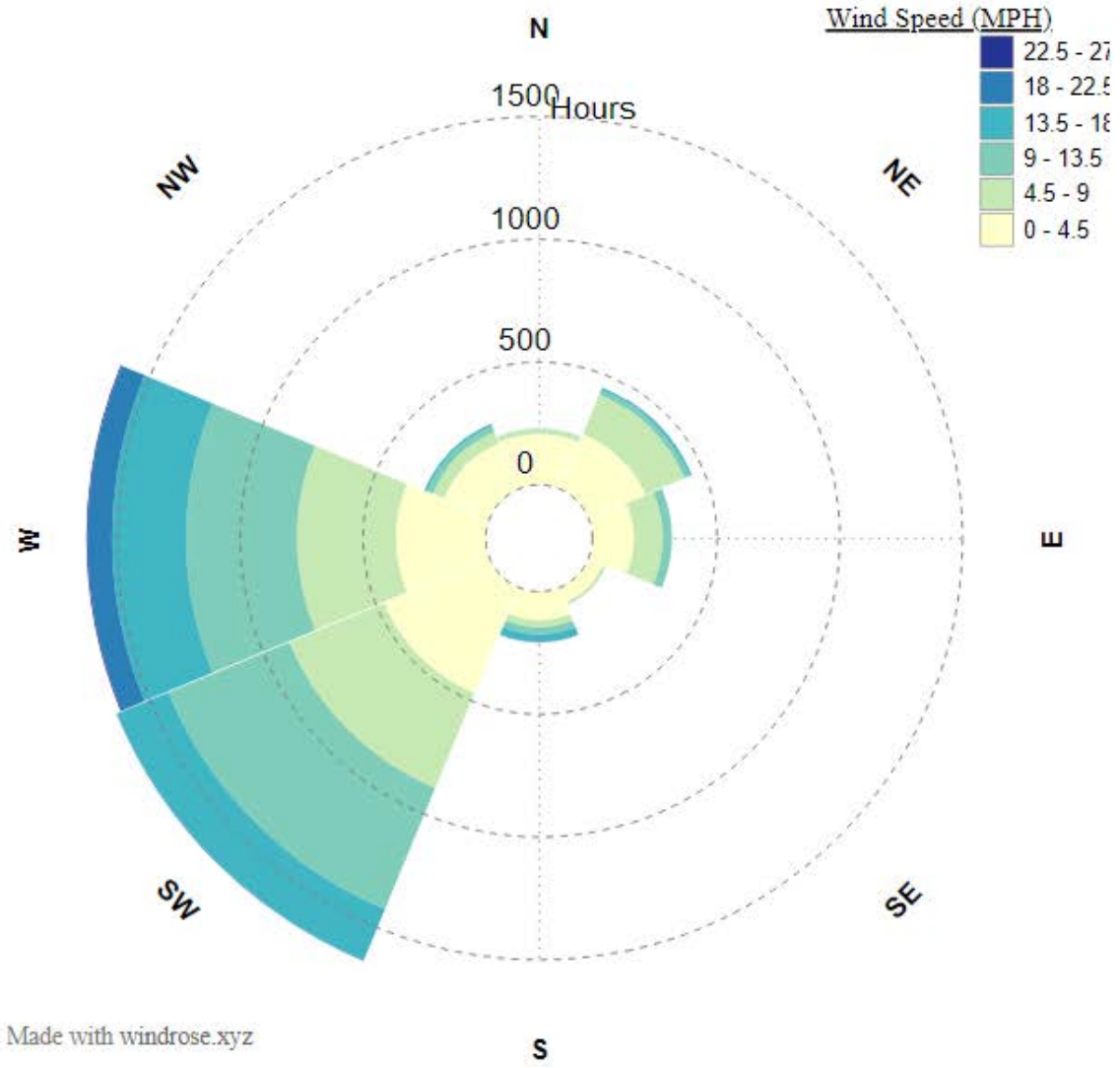
as high as the sensor itself (wall). So the obstructions are biasing the winds measured by the sensor. In contrast, the parallel monitoring wind sensors were mounted about 3 meters above the mobile trailer (used for parallel monitoring) rooftop, and about 4.5 meters above ground level. The parallel monitoring location does not have any significant obstructions upwind from the predominate wind direction resulting in much less surface roughness. Even with the noted differences in sensor exposure, the general wind pattern is quite similar for the two locations. It is likely that the winds in the vicinity of both sites are quite similar in most cases, just that the obstructions at the Division street site lower the wind speed where the sensor is located.

1



Existing Division Street Site Windrose 1/1/2022 through 8/2/2022

1



Proposed Fairgrounds Site Windrose 1/1/2022 through 8/2/2022

1

Evaluating Local Source Impacts and Site Spatial Scale

There are no known non-vehicular associated significant combustion sources in the vicinity of the existing Division Street site or the proposed Fairgrounds site.

Local Vehicular Sources-

Division Street Site:

- The parking lot for the building complex where the site is located is approximately 23 meters east of the site probe. There would only be sporadic emissions from vehicles in the parking lot.
- Division Street edge is about 34 meters (based on Goggle Earth measurements) east of the site probe (note that the previous existing site table taken from CARB annual network plan appears to be in error and also incorrect in AQS). Division Street in this area has a listed ADVT of 13,757[1].
- A railroad that has occasional, but regular traffic is located about 90 meters to the west of the probe. It is estimated that once to twice a day railroad traffic is present.
- Sierra Highway is located about 118 meters west of the site probe. The Sierra Highway is a major thoroughfare through Lancaster and Palmdale with a listed ADVT in this area of 20,450[1].
- A heavy equipment storage area is located about 78 meters to the south of the site probe. Heavy industrial vehicles will periodically be emitting in this storage area in order to move the heavy equipment.

Fairgrounds Site:

- Avenue G8 is located about 48 meters north of the proposed probe and has very little traffic as it is only used to access the northern portion of the Fairgrounds Complex.
- Sporadic vehicular activity in the storage area where the proposed site will be located will occur. This activity will be very rare, typically only to move stored equipment in/or.
- Parking for the maintenance building is located about 25 meters to the west of the proposed probe. Only sporadic vehicular activity accessing the parking lot occurs.
- RV parking that begins about 76 meters to the west of the proposed probe potentially could have occasional gasoline generator operation (as well as occasional RV traffic) emissions.
- A Rite-Aid warehouse container storage area where industrial vehicular traffic occasionally is present is located (area where vehicles can operate) beginning about 27 meters to the west of the proposed probe. Observations by District staff of the operation at this facility show that the area adjacent to the proposed site is only a storage area for containers and have only rare vehicular activity to move stored containers.
- As noted about the other roadways in the area are over 450 meters from the proposed site location and are not heavily traveled roadways (Ave H has a listed ADVT of only 3,750).

[1] Traffic Count | City of Lancaster (cityoflancasterca.org)

1

Local Dust Sources-

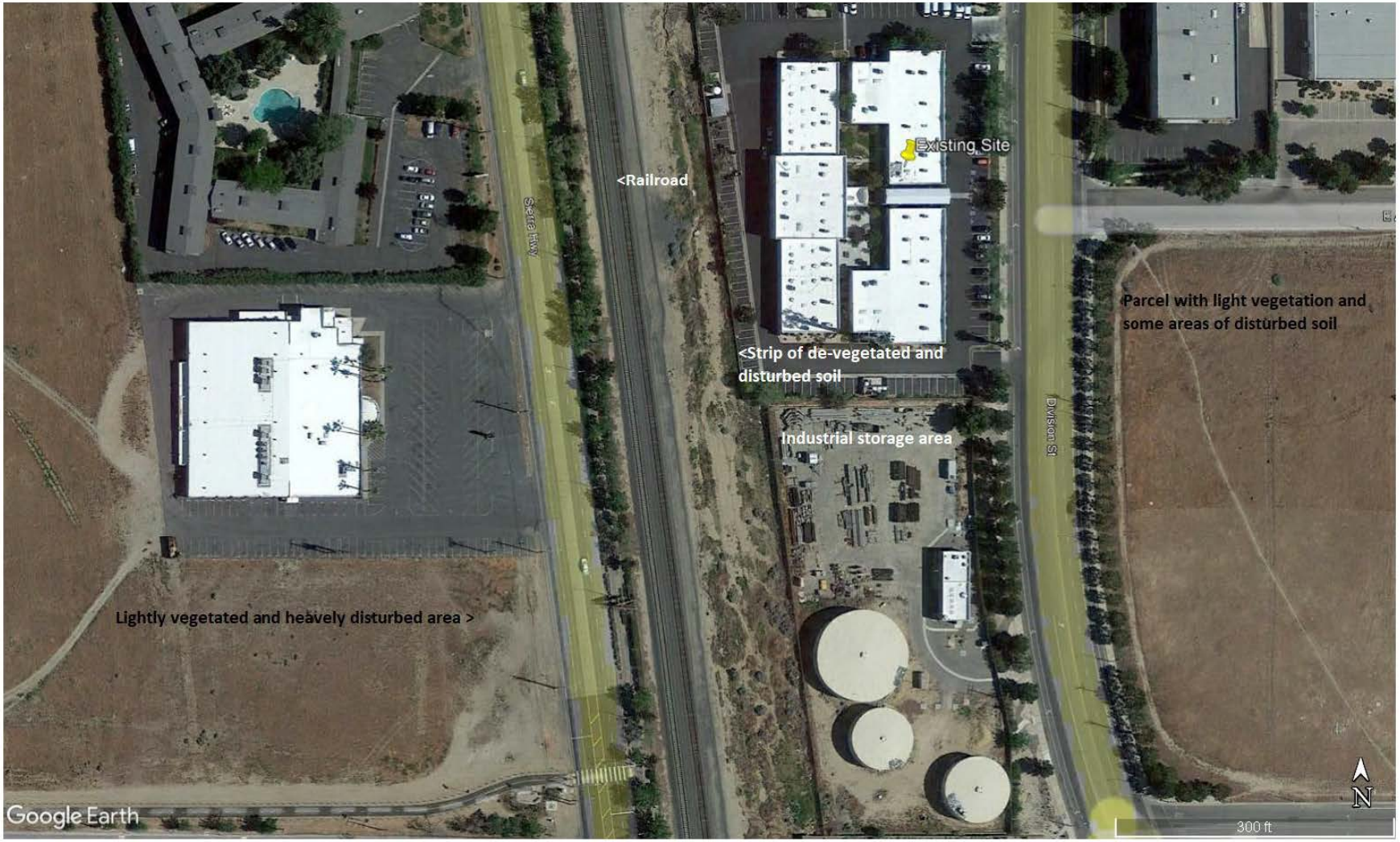
Division Street Site:

- A strip of largely de-vegetated land running north south is located about 65 meters to the west of the probe. This strip adjacent to the railroad tracks appears very disturbed soil due to unauthorized OHV activity. Close examination of aerial images show a well established pathway as well as what may be homeless encampments.
- A vacant parcel with only light vegetation and evidence of unauthorized OHV activity is located about 175 meters southwest of the probe. The OHV activity has de-vegetated and disturbed a significant portion of the northeast part of the parcel.
- A vacant parcel with large vegetation removed (only light vegetation present) is located about 75 meters southeast of the probe.

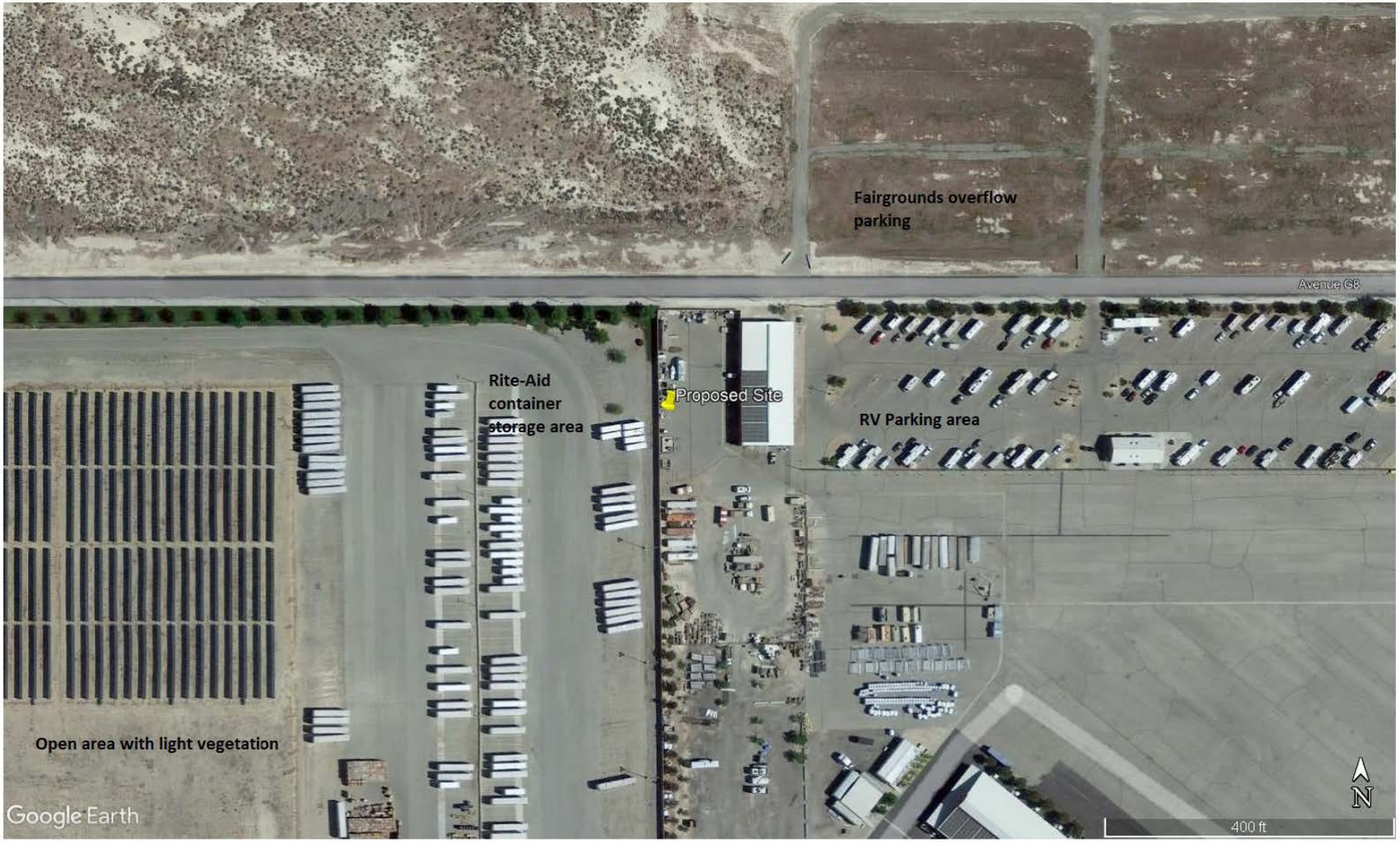
Fairgrounds Site:

- The closest edge of overflow parking for the Fairgrounds is located about 85 meters northeast of the proposed probe. This overflow parking is only utilized once a year during the week when the fair is in operation. During fair operations and immediately afterwards, fair personnel are actively mitigating the potential for windblown dust by use of water trucks, wood chips, and other soil stabilization techniques. The area has been previously graded, but most of the area (except access roads) maintains light vegetation which stabilize the soil surface.
- The closest edge of an open lightly vegetated area adjacent to a solar panel field is located almost 200 meters to the southwest of the proposed probe. Note the area with installed solar panels is also only lightly vegetated, but the surface roughness of the panels will substantially reduce the wind sheer on the soil surface minimizing windblown dust emissions from those areas.

1


Existing Site
<Railroad
Sierra Hwy
Division St
<Strip of de-vegetated and disturbed soil
Industrial storage area
Parcel with light vegetation and some areas of disturbed soil
Lightly vegetated and heavely disturbed area >
Google Earth
300 ft
N

1


Fairgrounds overflow parking
Avenue C8
Rite-Aid container storage area
Proposed Site
RV Parking area
Open area with light vegetation
Google Earth
400 ft
N

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Evaluating Local Source Impacts and Implications to the Spatial Scale of Monitoring Sites-

All of the vehicular and dust sources identified above will likely have some impact on the measurements from both sites. Impacts from local sources can be evaluated based on wind conditions and estimates of emission activity from each local source as well as the distance from the local source to the measurement location.

Vehicular Emissions:

Localized vehicular emissions can impact measurements to ozone, NOx, and particulates.

Emissions from both site parking lots are seldom upwind from either site location and the occurrence is very sporadic, so the impacts at both sites appear to be insignificant.

Division Street Site:

Emissions from the railroad is directly upwind from the Division Street site during the predominate wind direction, but the occurrence of railroad traffic is only a few times a day, so would seem insignificant. Similarly, the industrial storage area to the south would only have sporadic vehicle emissions and is located outside the predominate wind direction, but winds do at times put the storage area upwind of the probe and those winds typically are calm with less dispersion. The Sierra Highway is located upwind of the predominate wind direction, but is located over 100 meters from the probe.

Fairground Site:

The RV parking lot is not upwind (during typical winds) from the proposed Fairground site location and is over 75 meters away. The sporadic industrial vehicle activity moving containers in the Rite-Aid warehouse storage area is located upwind during the predominate wind direction, but the closest these vehicles will be to the proposed site probe is 27 meters or so. Note that the containers are parked on gravel and are accessed by vehicles from the paved roadway, not the gravel area.

EPA provides regulatory guidance on vehicle emissions expressed in distance to roadway and average daily traffic count (ADVT) in 40 CFR 58 Appendix E. For both sites, there are no local vehicular sources that exceed Tables E-1 and E-2 in Appendix E for neighborhood spatial scale. Is should be noted that based on this analysis it appears the existing Division Street site appears improperly classified as middle scale for Ozone and NO2.

Overall, both sites have similar local vehicular emission sources as each other, suggesting a similar local bias to measurements at both locations.

Dust Emissions:

De-vegetated and disturbed soils have been shown to be more emissive under high wind conditions than naturally vegetated undisturbed soils. Both site locations have areas of de-vegetated and varying levels of disturbed soils.

The closest area of disturbed/de-vegetated land is 65 meters for the Division Street site (upwind for predominate wind direction) and 85 meters for the proposed Fairground site (not upwind in the predominate wind direction). The other potential emission areas are quite a distance from the existing and proposed site.

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Unfortunately, EPA does not provide clear regulatory guidance on dust sources, only a statement that "*Particulate matter sites **should** not be located in an unpaved area unless there is vegetative ground cover year round, so that the impact of wind blown dusts will be kept to a minimum*." The proposed site will be located on a paved surface, with paved or heavily graveled surfaces adjacent to the site location.

The overall evaluation of potential local dust sources is that there are no sources closer than 65 meters for the Division Street site and 85 meters for the proposed Fairground site. The lack of nearby emissive surfaces strongly suggest that local dust source impacts are minimal (and probably similar for both sites) and should not influence the spatial scale of these monitors.

Examination of these local sources strongly suggest that both site locations would have similar spatial scales (neighborhood) for all monitored pollutants.

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JUSTIFICATION FOR RELOCATION OF MONITORS:

Some of the monitored parameters qualify for shutdown under 40 CFR 58.14 (c) eliminating the need for parallel monitoring to move the monitoring location. Note that no actual shutdown is being proposed, just using the shutdown criteria as justification for moving the monitoring location.

Nitrogen Dioxide:

As shown in the following tables, the nitrogen dioxide monitor appears to qualify for shutdown under both 40 CFR 58 (c) 1 and 3.

Site	Monitor		Standard	80% of Standard	Design Value 2021	Design Value 2020	Design Value 2019	Design Value 2018	Design Value 2017	Attain for last five years?	Avg Design Value	Std Dev.	90% Upper CI	>10% Prob of exceed 80% of NAAQS?
Lancaster	NO2	1 hour	100	80	41	40	41	42	42	Y	41.2	0.83666	42.09104	N
Lancaster	NO2	Annual	53	42.4	8.26	8.35	8.17	8.66	7.79	Y	8.246	0.31469	8.581145	N

Site	Monitor		Max 2021	Max 2020	Max 2019	Max 2018	Max 2017	Exceed NAAQS for 5 years?
Lancaster	NO2	1 hour	46.1	51.5	49.8	47.6	46.5	N
Lancaster	NO2	Annual	8.26	8.35	8.17	8.66	7.79	N

PM10 and PM2.5:

PM2.5 appears to meet the data requirement for shutdown under 40 CFR 58.14 (c) 1 based on the table below.

Site	Monitor		Standard	80% of Standard	Design Value 2021	Design Value 2020	Design Value 2019	Design Value 2018	Design Value 2017	Attain for last five years?	Avg Design Value	Std Dev.	90% Upper CI	>10% Prob of exceed 80% of NAAQS?
Lancaster	PM2.5	24 hour	35	28	24	23	15	18	18	Y	19.6	3.781534	23.62733	N
Lancaster	PM2.5	Annual	12	9.6	7.8	7.5	6.9	7.4	7.5	Y	7.42	0.327109	7.768371	N

Parallel monitoring for PM parameters was initiated on January 1, 2022 utilizing a Teledyne API T-640X. On 6/30/22 Mojave staff discovered that the T-640X was operating out of specification and performed a significant adjustment to the PMT high voltage (from 1,440 to 1,533 volts). QC data prior to this adjustment was reviewed and no periods were bracketed in time with in-tolerance checks, so unfortunately the data prior to the 6/30 adjustment could not be utilized in the parallel data comparisons. Below is a scattergraph of the 24 hour PM10 and PM2.5 averages from 6/30/22 to 9/16/22 between the two sites. In viewing these plots it is important to consider that the comparison was made with quite different measurement methods, which have been shown to account for some significant differences in collocated measurements. Additionally, particularly for the PM2.5 comparisons, the 24 hour detection limit for both monitors is +/-1 ug/m3. At these low concentrations the method variability (as represented by the detection limit) can account for some of the differences.

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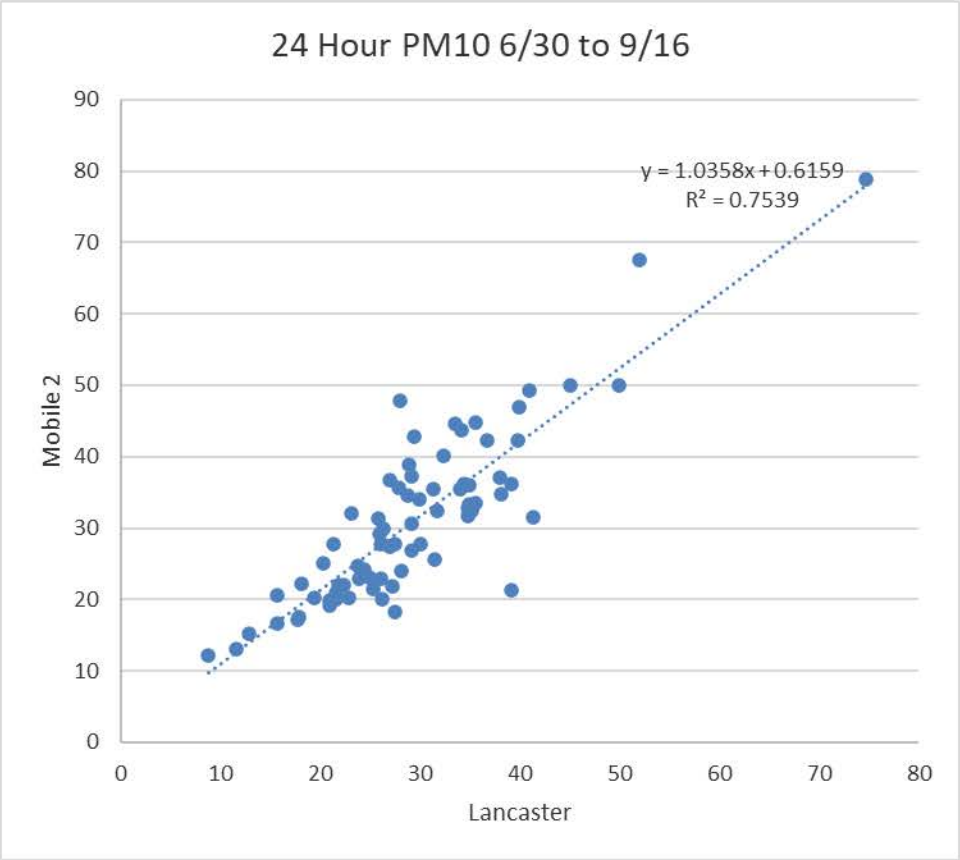
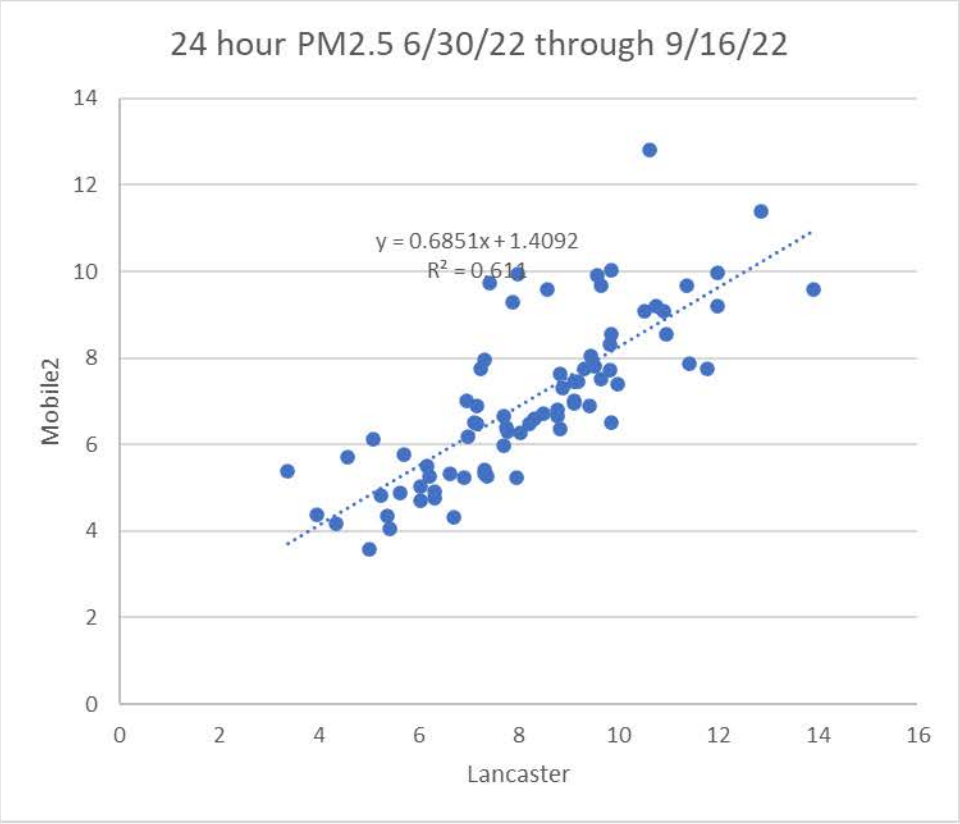
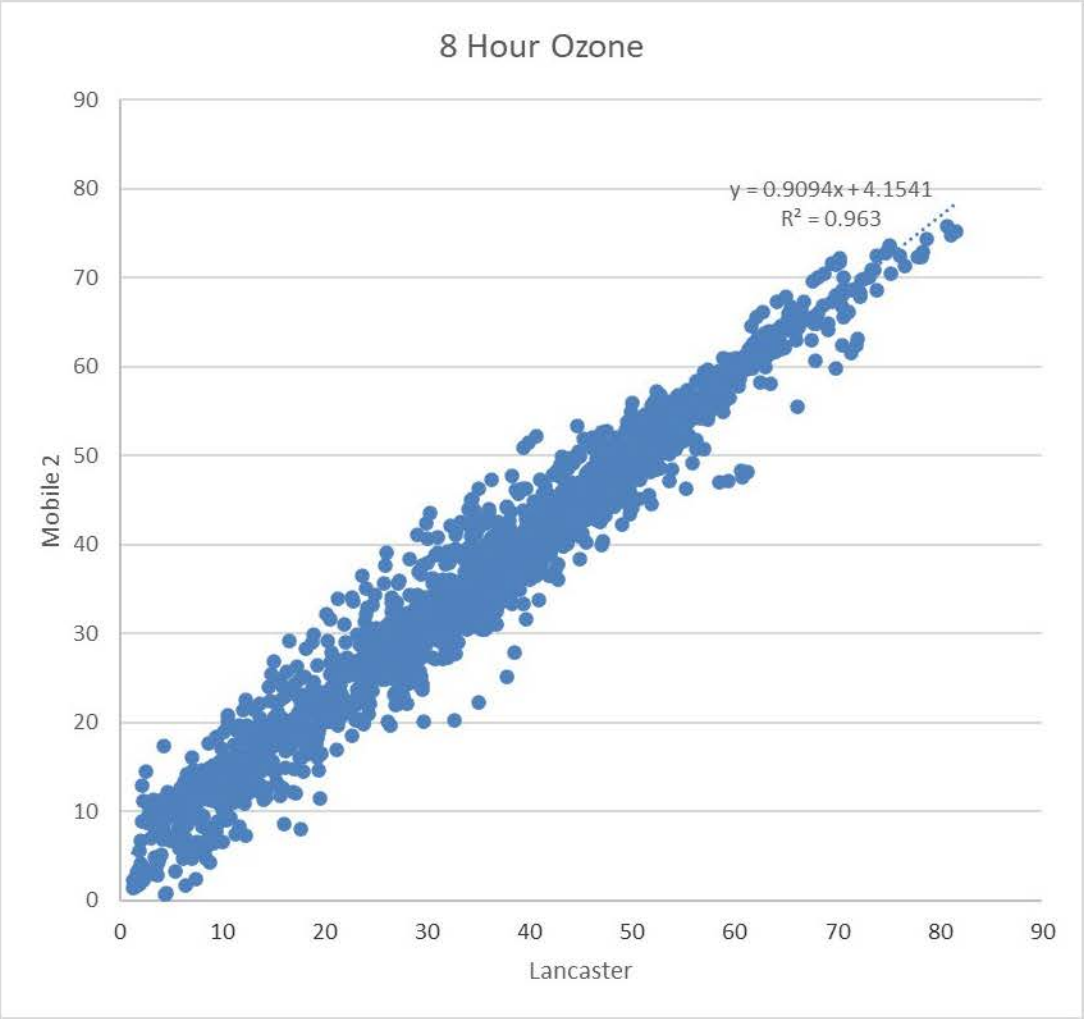

24 Hour PM10 6/30 to 9/16
y = 1.0358x + 0.6159
R² = 0.7539
Mobile 2
Lancaster
0
10
20
30
40
50
60
70
80
90


24 hour PM2.5 6/30/22 through 9/16/22
y = 0.6851x + 1.4092
R² = 0.611
Mobile2
Lancaster
0
2
4
6
8
10
12
14
16

1

Ozone:

Ozone does not qualify for shutdown under 40 CFR 58 (c) 1-5. Therefore, parallel monitoring data was gathered to justify the movement of the ozone monitor. Below is a scattergraph of the 8 hour average ozone concentrations between the two sites, showing generally good agreement between the two locations. The collocation period for ozone measurements was January 1, 2022 through 6/15/2022. The ozone monitor utilized for the parallel monitoring was needed by Mojave staff elsewhere and was removed on 6/15/2022.



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

December 19, 2022

Bret Banks
Executive Director
Antelope Valley Air Quality Management District
2551 West Avenue H
Lancaster, California 93536

Dear Director Banks:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the Antelope Valley Air Quality Management District's (AVAQMD) relocation of the O_3, $PM_{2.5}$, PM_{10}, and NO_2 State/Local Air Monitoring Station (SLAMS) monitors at the Lancaster-Division Street (Air Quality System (AQS) ID: 06-037-9033) site. On November 16, 2022, AVAQMD emailed a letter dated November 14, 2022 and a supporting document to EPA with a request for EPA approval of this network change. In this letter, AVAQMD explained the need to relocate the Lancaster-Division Street monitoring site due to logistics beyond AVAQMD's control (i.e., the lease would not be renewed by the property manager and AVAQMD must vacate the property no later than December 2022). AVAQMD notes that they chose a relocation site that would ensure AVAQMD control and access over the property to avoid future moves (the relocation site is located at AVAQMD's headquarters). Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors. The Lancaster-Division Street O_3, $PM_{2.5}$, PM_{10}, and NO_2 monitors were not eligible for removal under 40 CFR 58.14(c)(1) - (c)(5). These monitor relocations were reviewed under 40 CFR 58.14(c)(6), which describes the relocation requirements if a SLAMS monitor is not eligible for removal under the criteria in 40 CFR 58.14(c)(1) through (c)(5), and states that "[a] SLAMS monitor … may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site."

The original Lancaster-Division Street site was located at 43301 Division St, Lancaster, CA 93535. The relocation site, Lancaster Fairgrounds, is located at 2551 W. Avenue H, Lancaster, CA 93536, approximately eight kilometers northwest of the original site location. As described by AVAQMD, both the original and proposed sites scale of representativeness are defined as neighborhood scale for O_3, $PM_{2.5}$, PM_{10}, and NO_2, meaning pollutant concentrations are expected to be reasonably similar within some extended area of the city that has relatively uniform land use in the 0.5 to 4.0 kilometers spatial range. While the proposed site is further than four kilometers from the original site, both sites are in an area characterized by residential and commercial land use as well as undeveloped land. The sources that influence O_3, $PM_{2.5}$, PM_{10}, and NO_2 concentrations at the Lancaster-Division Street site are anticipated to be similar to the sources that would influence the concentrations at the Lancaster Fairgrounds site.

In addition, AVAQMD conducted a parallel monitoring study for O_3, $PM_{2.5}$, and PM_{10}. The O_3 study period occurred between January 1, 2022, and June 15, 2022, and the $PM_{2.5}$ and PM_{10} study period occurred between January 1, 2022 and September 16, 2022. However, the $PM_{2.5}$ and PM_{10} data collected

between January 1, 2022 and June 30, 2022 were not evaluated due to instrumentation issues, therefore only the data collected between June 30, 2022 and September 16, 2022 were considered. A parallel monitoring study for NO_2 was not conducted. The results of the parallel monitoring were consistent with the expectation of similar concentrations from similar sources. AVAQMD also provided wind roses of data collected between January 1, 2022 and August 2, 2022 at both sites. The wind direction was similar at both sites with a primary wind direction of west to southwest.

Based on the assessment of proximity, scale of representation, anticipated concentrations and parallel monitoring data, EPA has determined that AVAQMD's request meets the requirement that the replacement site is at a nearby location with the same scale of representation and approves AVAQMD's relocation of the Lancaster-Division Street site O_3, $PM_{2.5}$, PM_{10}, and NO_2 SLAMS monitors to the proposed site, Lancaster Fairgrounds. This approval assumes that the new site will meet all 40 CFR part 58 requirements, including the siting requirements specified in Appendix E. Please work with EPA to ensure that the new site meets all relevant requirements. As this is a relocation, the data from the old and new sites will be combined to form one continuous data record for design value calculations. Please note this in the AQS comment field for both the old and the new AQS site. Also, please include your request, this letter, and the relevant monitor and site information in the next California Air Resources Board (CARB) Annual Monitoring Network Plan.

If there are any questions regarding this letter, please feel free to contact me at (415) 947-4134 or Sheila Tsai of my staff at 415-972-3328.

Sincerely,

Gwen Yoshimura
Manager, Air Quality Analysis Office

cc (via email): Joel Craig, Consultant to AVAQMD
Manisha Singh, CARB
Melissa Niederreiter, CARB
Greg Gilani, CARB
Kathleen Gill, CARB
Sylvia Vanderspek, CARB
Jin Xu, CARB
Adolfo Garcia, CARB

REGION 9
SAN FRANCISCO, CA 94105

May 23, 2024

Kathleen Gill
Chief, Air Quality Surveillance Branch
California Air Resources Board
4001 Iowa Avenue
P.O. Box 550099
Riverside, California 92507

Dear Kathleen Gill:

This letter provides U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board (CARB) relocation of the O_3, $PM_{2.5}$, and PM_{10} State/Local Air Monitoring Station (SLAMS) monitors from the Mojave CA-58 site (Air Quality System (AQS) Site ID: 06-029-0019) to the Mojave Pat Avenue site (AQS Site ID: 06-029-0020). On April 8, 2024, CARB sent a letter to the EPA with a request for EPA approval of this network change. In this letter, CARB explained the need to relocate the Mojave CA-58 monitoring site due to logistics beyond CARB's control (i.e., land use changes and challenges securing a long-term lease). Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors. EPA notes that Mojave CA-58 was previously relocated from Mojave Poole, and with the relocation approved on April 11, 2023, data from the two sites were combined in AQS and used for this analysis.

The Mojave CA-58 PM_{10} monitor relocation was reviewed under 40 CFR 58.14(b). Generally, relocations may be appropriate for approval if the new site is at a nearby location with the same scale of representation and if the relocation does not compromise data needed for implementation of the National Ambient Air Quality Standards (NAAQS) or if one of the criteria for the PM_{10} monitor discontinuation under 40 CFR 58.14(c)(1) through (c)(5) are satisfied.

EPA reviewed the PM_{10} data against criteria in 40 CFR 58.14(c)(2). As the site stopped collecting data at the end of February 2023, EPA reviewed the most recently available complete calendar years of data. According to certified data from 2018-2022 in AQS, EPA determined that this monitor meets the requirements for discontinuation under 40 CFR 58.14(c)(2). This monitor was not specifically required by an attainment or maintenance plan and had consistently measured lower concentrations than another monitor for the same pollutant in the same county during the previous five years. PM_{10} data available from calendar year 2023 were consistent with the historical trend and continued to show similar concentrations. Lastly, since both monitors remain in the same planning area, any control

measures scheduled to be implemented or discontinued during the next five years would apply to areas around both monitors compared in analysis above.

The Mojave CA-58 O_3 and $PM_{2.5}$ monitors were not eligible for removal under 40 CFR 58.14(c)(1) - (c)(5). These monitor relocations were reviewed under 40 CFR 58.14(c)(6), which describes the relocation requirements if a SLAMS monitor is not eligible for removal under the criteria in 40 CFR 58.14(c)(1) through (c)(5), and states that "[a] SLAMS monitor … may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site."

The original Mojave CA-58 site is located at 1773 CA-58 Business, Mojave, CA 93501. The relocation site, 3200 Pat Avenue, Mojave 93501, is approximately 2,343 meters northwest of the original site location. Both sites have a neighborhood scale of representation, meaning they are expected to have relatively uniform land use in the 0.5 to 4.0 kilometers spatial range. Both sites are in an area characterized by residential and commercial land use. The original and proposed relocation site are expected to measure similar O_3, $PM_{2.5}$, and PM_{10} concentrations from similar sources due to the consistency in land use and proximity to sources. This relocation will not prevent CARB from meeting 40 CFR part 58, Appendix D requirements.

In addition, CARB provided data for O_3, $PM_{2.5}$, and PM_{10} at Mojave CA-58 from March 2021 through February 2023 and at Mojave Pat Avenue from March 2023 through February 2024. The resulting data supported the expectation of similar concentrations from similar sources for all pollutants. CARB also provided seasonal wind roses for the Mojave area 2020 through 2022.

Based on the assessment of the scale of representation and monitoring data at both locations, EPA has determined that CARB's request meets the requirement that the replacement site is at a nearby location with the same scale of representation and does not compromise data needed for implementation of the NAAQS. EPA thus approves relocation of the Mojave CA-58 O_3, $PM_{2.5}$, and PM_{10} SLAMS monitors to the proposed site, Mojave Pat Avenue. This approval assumes that the new site will meet all 40 CFR part 58 requirements, including the siting requirements specified in Appendix E. Please work with EPA to ensure that the new site meets all relevant requirements. As this is a relocation, the data from the old and new sites will be combined to form one continuous data record for design value calculations. Please note this in the AQS comment field for both the old and the new AQS site. Also, please attach this letter and include the relevant monitor and site information in your next Annual Monitoring Network Plan.

If there are any questions regarding this letter, please feel free to contact me at (415) 972-3134 or Julia Carlstad at (415) 947-4107.

Sincerely,

Dena Vallano, Manager
Monitoring and Analysis Section
Air and Radiation Division

cc (via email): Glen Stephens, Eastern Kern Air Pollution Control District
Gary Ray, Eastern Kern Air Pollution Control District
Bernave Garcia, Eastern Kern Air Pollution Control District
Walter Ham, CARB
Michael Benjamin, CARB
Michael Miguel, CARB
Manisha Singh, CARB
Sylvia Vanderspek, CARB
Jin Xu, CARB
Melissa Niederreiter, CARB
Adolfo Garcia, CARB
Thomas Lovejoy, CARB

Appendix D

Detailed Site Reports –
CARB Sites Outside of CARB ANP

Sacramento Metropolitan AQMD

*CARB operated sites outside of the CARB ANP

Local Site Name	Sacramento-1309 T Street				
AQS ID	06-067-0010				
GPS Coordinates	38.568440°N, 121.4931190°W				
Street Address	1309 T Street, Sacramento, CA 95814				
County	Sacramento				
Distance to roadways (meters)	30 m				
Traffic Count (AADT,year)	T St. east of 11th St.: 3,102 (City of Sacramento, 2009)				
Ground Cover	Rooftop site (residential area is paved)				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento--Arden-Arcade--Roseville, CA				
Pollutant, POC	O3, 1	NO2, 1	PM10, 3	PM2.5, 3	PM2.5, 2
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	Collocate
Parameter Code	42602	44201	81102	88101	88502
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	Public Information
Site type(s)	Highest Exposure	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	Other
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 400	Thermo 42iQ	Met One BAM-1020	Met One BAM-1020	Thermo 2000i
Method code	87	74	122	170	143
FRM/FEM/ARM/Other	FEM	FRM	FEM	FEM	FRM
Collecting Agency	CARB	CARB	CARB	CARB	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	CARB
Reporting Agency	CARB	CARB	CARB	CARB	CARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	12/1/1998	5/15/2013	4/1/2007	12/11/2020	12/11/2020
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	1:12
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	1:12
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	10	10	10	10	10
Distance from supporting structure (meters)	2	2	2	2	2
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	No Obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	No Obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters	>10 meters	>10 meters
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.8	19.8	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	semi-monthly	semi-monthly	N/A
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/14/2023	8/14/2023	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors			02/10/23 08/14/23	02/10/23 08/14/23	02/10/23 08/14/23

San Joaquin Valley APCD

*CARB operated sites outside of the CARB ANP

Local Site Name	Arvin–Di Giorgio				
AQS ID	06-029-5002				
GPS Coordinates	35.2391 N, -118.7886 W				
Street Address	19405 Buena Vista Blvd, Arvin CA 93203				
County	Kern				
Distance to roadways (meters)	10 m (east)				
Traffic Count (AADT,year)	712/2018 (Traffic count for Buena Vista Blvd east of Tejon Hwy., Source: Kern Council of Governments.)				
Ground Cover	Dirt, vegetative				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	UNOFFICIAL PAMS				
Instrument manufacturer and model	Teledyne API T400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	11/16/2009				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan-31-Dec				
Probe height (meters)	4.4				
Distance from supporting structure (meters)	1.8				
Distance from obstructions on roof (meters)	No Obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No Obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.0				
Will there be changes within the next 18 months?	Yes				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/18/23				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Bakersfield - Airport				
AQS ID	06-029-0016				
GPS Coordinates	35.3246 N, -118.9976 W				
Street Address	401 E. Planz Rd., Bakersfield CA 93307				
County					
Distance to roadways (meters)	500 m (west)				
Traffic Count (AADT,year)	17,987 / 2018 (S. Union Ave between E. Planz Rd and E White Lane, Source: Kern Council of Governments)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	PM2.5, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88101				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Thermo 2025i				
Method code	145				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	2/18/2000				
Current sampling frequency	1:3				
Required sampling frequency including exceptional events	0.04375				
Sampling season	1-Jan-31-Dec				
Probe height (meters)	2.2				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No Obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	N/A				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10m				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	Yes				
Is it suitable for comparison against the annual PM2.5 NAAQS?	Yes				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	03/21/23 08/29/23				

Local Site Name	Bakersfield–California				
AQS ID	06-029-0014				
GPS Coordinates	35.35662, -119.06261				
Street Address	5558 California Ave., Bakersfield CA 93309				
County	Kern				
Distance to roadways (meters)	300 m (south)				
Traffic Count (AADT,year)	33,244/2017				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone, 1	NO2, 1			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	42602			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	General/Background	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	Thermo 42 IQ			
Method code	87	74			
FRM/FEM/ARM/Other	FEM	FRM			
Collecting Agency	ARB	ARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	3/1/1994	4/1/1994			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan-31-Dec	1-Jan-31-Dec			
Probe height (meters)	6.8	6.8			
Distance from supporting structure (meters)	3	3			
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	N/A	N/A			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10m	>10m			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.0	8.3			
Will there be changes within the next 18 months?	No	NO			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	N/A			
Frequency of one-point QC check for gaseous instruments	5 Days/Week	5 Days/Week			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/29/2023	8/29/2023			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A			

(Continued)

Local Site Name	Bakersfield–California				
AQS ID	06-029-0014				
GPS Coordinates	35.35662, -119.06261				
Street Address	5558 California Ave., Bakersfield CA 93309				
County	Kern				
Distance to roadways (meters)	300 m (south)				
Traffic Count (AADT,year)	33,244/2017				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	PM10, 7	PM2.5, 1	PM2.5, 2	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	QA-Collocated	N/A	
Parameter Code	81102	88101	88101	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	Thermo 2025i	Thermo 2025i	
Method code	122	731	145	145	
FRM/FEM/ARM/Other	FEM	Non-FEM	FRM	FRM	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	ARB	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	1/27/2021	1/27/2021	1/1/1999	36161	
Current sampling frequency	Continuous	Continuous	1:1	1:12	
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan-31-Dec	1-Jan-31-Dec	1-Jan-31-Dec	1-Jan-31-Dec	
Probe height (meters)	6.3	6.6	6.3	6.3	
Distance from supporting structure (meters)	2.5	2.8	2.5	2.5	
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Height above probe for obstructions not on roof (meters)	N/A	NA	N/A	N/A	
Distance to nearest tree drip line (meters)	> 10m	> 10m	> 10m	> 10m	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	> 2M	> 2M	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A		Monthly	Monthly	
Frequency of flow rate verification for automated PM analyzers	Semi-Monthly	Semi-Monthly	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	03/21/23 08/29/23	03/21/23 08/29/23	03/21/23 08/29/23	03/21/23 08/29/23	

Local Site Name	Edison				
AQS ID	06-029-0007				
GPS Coordinates	35.3456 N, -118.8518 W				
Street Address	Johnson Farm-Shed Rd, Edison CA				
County	Kern				
Distance to roadways (meters)	450 m (south)				
Traffic Count (AADT,year)	2,753/2020 (Traffic count for nearest roads: Edison Hwy. and Comanche Dr.,				
Ground Cover	Dirt, vegetative				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone,1	NO2,1			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	42602			
Basic monitoring objective(s)	NAAQS, Research, Public Info.	NAAQS, Research, Public Info.			
Site type(s)	Highest Concentration, Regional Transport	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Thermo 42iQ			
Method code	87	74			
FRM/FEM/ARM/Other	FEM	FRM			
Collecting Agency	ARB	ARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	1/1/1981	1/1/1980			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	01/01 – 12/31	01/01 – 12/31			
Probe height (meters)	5.4	5.4			
Distance from supporting structure (meters)	1.5	1.5			
Distance from obstructions on roof (meters)	None	None			
Height above probe for obstructions on roof (meters)	None	None			
Distance from obstructions not on roof (meters)	None	None			
Height above probe for obstructions not on roof (meters)	None	None			
Distance to nearest tree drip line (meters)	16.1	16.1			
Distance to furnace or incinerator flue (meters)	None	None			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.4	9.4			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	7.7	7.9			
Frequency of flow rate verification for automated PM analyzers	N/A	N/A			
Frequency of one-point QC check for gaseous instruments	Daily	Daily			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/7/23	12/5/23			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A			

Local Site Name	Fresno – Garland				
AQS ID	06-019-0011				
GPS Coordinates	36.7853 N, -119.7732 W				
Street Address	3727 N. First St., Ste.104, Fresno CA 93726				
County	Fresno				
Distance to roadways (meters)	30 m (south)				
Traffic Count (AADT,year)	7,520/2011 (First Street near Dakota Avenue. Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2013)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Fresno				
Pollutant, POC	Ozone, 1	NO2,3	CO, 3	SO2, 3	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	
Parameter Code	44201	42602	42101	42401	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	NCore	Ncore	Ncore	Ncore	
Instrument manufacturer and model	Teledyne API T400	Thermo 42IQTL	Teledyne API T300	Thermo 43iQTL	
Method code	87	74	593	560	
FRM/FEM/ARM/Other	FEM	FRM	FRM	FEM	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Urban	Urban	Urban	Urban	
Monitoring start date	12/23/2011	2/1/2012	1/18/2012	1/18/2012	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan-31-Dec	1-Jan-31-Dec	1-Jan-31-Dec	1-Jan-31-Dec	
Probe height (meters)	6.8	6.8	6.6	6.6	
Distance from supporting structure (meters)	2.8	2.8	2.8	2.8	
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	N/A	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	Teflon	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	17.2	17.6	13.7	15.2	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	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	
Frequency of one-point QC check for gaseous instruments	5 Times/Week	5 Times/Week	5 Times/Week	5 Times/Week	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	1/31/2023	1/31/2023	4/4/2023	4/4/2023	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	N/A	

(continued)

Local Site Name	Fresno – Garland				
AQS ID	06-019-0011				
GPS Coordinates	36.7853 N, -119.7732 W				
Street Address	3727 N. First St., Ste.104, Fresno CA 93726				
County	Fresno				
Distance to roadways (meters)	30 m (south)				
Traffic Count (AADT,year)	7,520/2011 (First Street near Dakota Avenue. Source: Fresno COG Fresno County Regional Traffic Monitoring Report 2013)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Fresno				
Pollutant, POC	PM10, 3	PM2.5, 2	PM2.5, 3	PM2.5	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	QA Collocated	
Parameter Code	81102	88101	88101	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	NCore	Ncore	Ncore	Ncore	
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020	Thermo 2025i	
Method code	122	170	185	145	
FRM/FEM/ARM/Other	FEM	FEM	FRM	FRM	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	ARB	ARB	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	1/1/2012	1/1/2012	1/1/2012	1/1/2012	
Current sampling frequency	Continuous	Continuous	Continuous	1:3	
Required sampling frequency including exceptional events	N/A	N/A	N/A	0.04375	
Sampling season	1-Jan-31-Dec	1-Jan-31-Dec	1-Jan-31-Dec	1-Jan-31-Dec	
Probe height (meters)	6.3	6.3	6.3	6	
Distance from supporting structure (meters)	2.5	2.5	2.5	2.2	
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	N/A	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	1	1	-	1	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	N/A	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	-	Monthly	
Frequency of flow rate verification for automated PM analyzers	Bi-Monthly	Bi-Monthly	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	01/31/23 08/08/23	01/31/23 08/08/23	01/31/23 08/08/23		

Local Site Name	Modesto –14th St				
AQS ID	06-099-0005				
GPS Coordinates	37.6421 N, -120.9942 W				
Street Address	814 14th Street, Modesto CA 95354				
County	Stanislaus				
Distance to roadways (meters)	1,010 m (southwest)				
Traffic Count (AADT,year)	132,000 (Caltrans Traffic AADT, 2022)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Modesto				
Pollutant, POC	Ozone, 1	Trace CO, 3	PM10, 7	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	primary	
Parameter Code	44201	42101	81102	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 400	Teledyne API 300	Met One BAM-1020	Met One BAM-1020	
Method code	593	67	122	170	
FRM/FEM/ARM/Other	FRM	FEM	FEM	FEM	
Collecting Agency	CARB	CARB	CARB	CARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	CARB	CARB	CARB	CARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	1/1/2013	1/1/1981	12/1/2013	12/7/2020	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	8	8	4.4	4.4	
Distance from supporting structure (meters)	2	2	2	2	
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.3	6.4	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Semi-Monthly	Semi-Monthly	
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	12/1/2023	12/1/2023	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	05/17/23 12/01/23	05/17/23 12/01/23	

Local Site Name	Oildale				
AQS ID	06-029-0232				
GPS Coordinates	35.4380 N, -119.0167 W				
Street Address	3311 Manor St, Oildale CA 93308				
County	Kern				
Distance to roadways (meters)	150 m (northwest)				
Traffic Count (AADT,year)	6,683/2018 (Manor St. between Day Ave and Felton St., Source: Kern Council of Governments.)				
Ground Cover	Dirt, vegetative				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone, 1	PM10, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Highest Concentration	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	None	None			
Instrument manufacturer and model	Teledyne API T400	Met One 1020			
Method code	87	122			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	ARB	ARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Urban	Middle			
Monitoring start date	1/1/1984	6/1/2017			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan-31-Dec	1-Jan-31-Dec			
Probe height (meters)	5.8	6			
Distance from supporting structure (meters)	1.9	2.1			
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	10	N/A			
Height above probe for obstructions not on roof (meters)	5	N/A			
Distance to nearest tree drip line (meters)	10	N/A			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.0	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Bi-Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A	N/A			
Frequency of one-point QC check for gaseous instruments	Daily	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/31/23	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/22/23 08/31/23			

Local Site Name	Shafter				
AQS ID	06-029-6001				
GPS Coordinates	35.5034 N, -119.2726 W				
Street Address	578 Walker St., Shafter, CA 93263				
County	Kern				
Distance to roadways (meters)	10m (southwest)				
Traffic Count (AADT,year)	4,002/2018 (Central Ave and Walker St., Source: Kern Council of Governments.)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield				
Pollutant, POC	Ozone, 1	NO2, 1			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	42602			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	PAMS	PAMS			
Instrument manufacturer and model	Teledyne API T400	Thermo 42IQ			
Method code	87	74			
FRM/FEM/ARM/Other	FEM	FRM			
Collecting Agency	ARB	ARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	7/1/1989	7/1/1989			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan-31-Dec	1-Jan-31-Dec			
Probe height (meters)	7.2	7.2			
Distance from supporting structure (meters)	2.2	2.2			
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	N/A	N/A			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	N/A	N/A			
Distance to furnace or incinerator flue (meters)	2	2			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	16.3	18.1			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	N/A			
Frequency of one-point QC check for gaseous instruments	5 Days/Week	5 Days/Week			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	12/6/2023	12/6/2023			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A			

Local Site Name	Stockton - University Park				
AQS ID	06-077-1003				
GPS Coordinates	37.96158 N, -121.28141 W				
Street Address	702 N Aurora Street, Stockton, CA				
County	San Joaquin				
Distance to roadways (meters)	60 m (north)				
Traffic Count (AADT,year)	3600/2020 (Traffic count estimated by City of Stockton Public Works Traffic Engineering Division)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Stockton-Lodi				
Pollutant, POC	Ozone, 1	Trace CO, 3	NO2, 2	PM10, 5	PM2.5, 3
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	primary
Parameter Code	44201	42101	42602	81102	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 400	Teledyne API 300	Thermo 42iQ	Met One BAM-1020	Met One BAM-1020
Method code	87	593	74	122	170
FRM/FEM/ARM/Other	FRM	FEM	FRM	FEM	FEM
Collecting Agency	CARB	CARB	CARB	CARB	CARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	CARB	CARB	CARB	CARB	CARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	11/5/2021	11/5/2021	11/5/2021	11/5/2021	12/7/2020
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	Continuous
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	5.7	5.7	5.7	5.7	5.7
Distance from supporting structure (meters)	2	2	2.0	2	2
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No obstructions	No Obstructions	No Obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No Obstructions	No Obstructions	No obstructions	No Obstructions	No Obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.6	10.2	15.5	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers, including Pb samplers	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	Semi-Monthly	Semi-Monthly
Frequency of one-point QC check for gaseous instruments	Daily	Daily	Daily	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/23/2023	2/23/2023	2/23/2023	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	02/23/23 09/06/23	02/23/23 09/06/23

Local Site Name	Visalia – West Ashland Avenue				
AQS ID	06-107-2003				
GPS Coordinates	36.308150N, -119.312900W				
Street Address	2005 W. Ashland Ave., suite G, Visalia CA 93277				
County	Tulare				
Distance to roadways (meters)	65 m (west)				
Traffic Count (AADT,year)	26,000				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Visalia–Porterville				
Pollutant, POC	Ozone, 1	NO2, 1	PM10	PM2.5	
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	
Parameter Code	44201	42602	81102	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	General/Background	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	None	None	None	None	
Instrument manufacturer and model	Teledyne API T400	Thermo 42 IQ	Met One 1020	Met One 1020	
Method code	87	74	122	170	
FRM/FEM/ARM/Other	FEM	FRM	FEM	FEM	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	01/13/2022	02/04/2022	02/15/2022	01/13/2022	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan-31-Dec	1-Jan-31-Dec	1-Jan-31-Dec	1-Jan-31-Dec	
Probe height (meters)	11.3	11.3	6.3	6.5	
Distance from supporting structure (meters)	2.1	2.1	2.3	2.1	
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions	No Obstructions	No Obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	25	25	20	20	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.8	14.7	N/A	NA	
Will there be changes within the next 18 months?	NO	NO	NO	NO	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Bi-Monthly	Bi-Monthly	
Frequency of one-point QC check for gaseous instruments	5 Days/Week	5 Days/Week	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/31/23	12/12/23	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	05/16/23 12/12/23	05/16/23 12/12/23	

San Luis Obispo APCD

*CARB operated sites outside of the CARB ANP

Local Site Name	Paso Robles				
AQS ID	06-079-0005				
GPS Coordinates	35.61467, -120.65691				
Street Address	235 Santa Fe Ave, Paso Robles				
County	San Luis Obispo				
Distance to roadways (meters)	27 to Santa Fe Ave.; 110 to Sherwood Rd.; 180 to Creston Rd.; 2700 to US 101				
Traffic Count (AADT,year)	Santa Fe Ave.: 75 (estimated); Sherwood Rd.: 10,027 (2017); Creston Rd: 17,347 (2017); US101: 70,500 (2017)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	San Luis Obispo – Paso Robles				
Pollutant, POC	Ozone, 1	PM10, 2			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	General/Background	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API T400	Met One BAM 1020			
Method code	87	122			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	ARB	ARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	9/1/1991	6/1/2013			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan-31-Dec	1-Jan-31-Dec			
Probe height (meters)	6.2	5.2			
Distance from supporting structure (meters)	2.9	3			
Distance from obstructions on roof (meters)	No Obstructions	No Obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	N/A	N/A			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	30	N/A			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.1	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	Daily	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/11/23	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/11/23 11/02/23			

Appendix E

Summary of Public Comments
and CARB Responses

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