Appendices to the 2025 Annual Network Plan

List of Appendices

Appendix A

Detailed Site Reports

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)	13.0				
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	2/21/2024				
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)	6.1	7.9	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	3/5/2024	3/5/2024	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	03/05/24 09/11/24	03/05/24 09/11/24	

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	Public Information
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	CSN Supplemental
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)	13.7	19.5	14.5	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	No
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	8/13/2024	8/13/2024	8/13/2024	02/05/24 08/13/24	02/05/24 08/13/24

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	05/06/24 10/15/24				

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)	Highest Concentration	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)	11.0	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	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	8/29/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/14/24 08/29/24			

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)	10.6	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	8/21/2024	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/21/24 08/21/24	02/21/24 08/21/24		

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	Public Information		
Site type(s)	General Background	High Concentration; 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	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	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	4/25/2024	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/25/24 10/24/24	04/25/24 10/24/24		

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	03/06/24 09/10/24				

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	03/06/24 09/18/24	03/06/24 09/18/24			

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	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)	10.6	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	03/07/24 09/10/24	03/07/24 09/10/24		

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)	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	4/19/2024				
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)	9.0				
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	6/11/2024				
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)	19 to US-50				
Traffic Count (AADT,year)	49,500				
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)	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)	14.8				
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	4/22/2024				
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	04/26/24 10/14/24				

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)	8.3				
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	5/6/2024				
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	Collocate
Parameter Code	42602	44201	81102	88502	88502
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)	19.1	13.3	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	No	No
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	8/16/2024	8/16/2024	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	02/09/24 08/16/24	02/09/24 08/16/24	02/09/24 08/16/24

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	2/20/2024	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/20/24 08/23/24	02/20/24 08/23/24		

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	03/13/24 09/17/24	03/13/24 09/17/24			

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)	14.5	14.8	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	3/19/2024	3/19/2024	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	03/19/24 09/17/24	03/19/24 09/17/24	

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)	8.3	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	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	12/10/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/13/24 12/10/24			

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)	7.0	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	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	3/13/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/13/24 09/17/24			

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	NO2, 1	Ozone, 1	SO2, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary		
Parameter Code	42602	44201	42401		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Highest Concentration	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Thermo 42iQ	Teledyne T400	Thermo 43iQTL		
Method code	74	87	560		
FRM/FEM/ARM/Other	FRM	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	3/1/1994	4/1/1994	3/1/2013		
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)	4.6	4.6	4.6		
Distance from supporting structure (meters)	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)	N/A	N/A	N/A		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
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	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	Teflon		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.8	8.6	11.5		
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	N/A		
Frequency of one-point QC check for gaseous instruments	Precision S-Th*	Precision S-Th*	Precision S-Th*		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/12/2024	3/12/2024	3/12/2024		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	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.

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	Supplementary	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	CSN supplemental	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	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	CARB	N/A		
Reporting Agency	CARB	CARB	CARB		
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	4.6	4.8		
Distance from supporting structure (meters)	2.1	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)	N/A	N/A	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	Semi-Monthly	N/A		
Frequency of flow rate verification for automated PM analyzers	Semi-Monthly	Semi-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	03/12/24 09/16/24	03/12/24 09/16/24	03/12/24 09/16/24		

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	5/17/2024	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	05/17/24 11/27/24	05/17/24 11/27/24		

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

*The Lake County Air Quality Management District is a non-real time data stream that will be updated monthly.

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)	10.6				
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	10/17/2024				
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	04/11/24 10/16/24	04/11/24 10/16/24			

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)	7.9				
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	10/16/2024				
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	05/21/24 11/19/24				

Local Site Name	Ukiah - Municipal Airport				
AQS ID	06-045-0011				
GPS Coordinates	39.1252758, -123.2024482				
Street Address	1475 S State Street, 95482				
County	Mendocino				
Distance to roadways (meters)	643 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 T400				
Method code	087				
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	10/04/2024				
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)	9.1				
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	2/15/2024				
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	05/21/24 11/19/24				

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	05/21/24 11/19/24				

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)	14.0	14.3	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	3/21/2024	3/21/2024	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	03/21/24 09/11/24		

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)	Highest Concentration	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	3/7/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/07/24 09/11/24			

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)	7.7				
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	11/14/2024				
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	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)	3				
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	03/20/24 09/11/24				

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)	*				
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	*				
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)	9.7	9.6	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	9/17/2024	9/17/2024	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	04/09/24 09/17/24		

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	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)	6.9	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)	16.5	17.0	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	3/6/2024	3/6/2024	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	03/06/24 09/11/24	03/06/24 09/11/24	03/06/24 09/11/24

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)	5.4				
Distance from supporting structure (meters)	2.1				
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)	14.0				
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	11/13/2024				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Monterey Bay ARD

Local Site Name	Carmel Valley				
AQS ID	06-053-0002				
GPS Coordinates	36.48187, -121.73333				
Street Address	35 Ford Rd., Carmel Valley, CA 93924				
County	Monterey				
Distance to roadways (meters)	25				
Traffic Count (AADT,year)	15333 ADT (2020) (TAMC-Peak)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	MSA: Salinas, CA				
Pollutant, POC	O3, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Highest Concentration			
Monitor type(s)	SLAMS	SPM			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	TEI 49C	MET ONE BAM-1020			
Method code	047	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	MBARD	MBARD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	MBARD	MBARD			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	10/12/1982	1/1/2012			
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)	5.9	5			
Distance from supporting structure (meters)	3	2			
Distance from obstructions on roof (meters)	N/A	N/A			
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)	6.1 *	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)	9.0	N/A			
Will there be changes within the next 18 months?	Yes	Yes			
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	Weekly			
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	8/29/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/06/2024 08/29/2024			

* EPA waiver granted in 2012.

Local Site Name	Hollister				
AQS ID	06-069-0002				
GPS Coordinates	36.843425, -121.3621				
Street Address	1979 Fairview Rd., Hollister, CA 95023				
County	San Benito				
Distance to roadways (meters)	100				
Traffic Count (AADT,year)	(Nearby Sunnyslope Rd.) 5666 ADT (2017)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	MSA: San Jose – Sunnyvale – Santa Clara, CA				
Pollutant, POC	O3, 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		
Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	TEI 49iQ	MET ONE BAM-1020	MET ONE BAM-1020		
Method code	047	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	MBARD	MBARD	MBARD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	MBARD	MBARD	MBARD		
Spatial scale	Neighborhood	Neighborhood	Urban		
Monitoring start date	1/1/1980	2/1/2011	1/1/2009		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31		
Probe height (meters)	4.2	5.1	4.9		
Distance from supporting structure (meters)	1.4	2.1	1.9		
Distance from obstructions on roof (meters)	N/A	N/A	N/A		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A	N/A		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	N/A	N/A	N/A		
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)	6.2	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	Weekly	Weekly		
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	8/30/2024	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/05/2024 08/30/2024	02/05/2024 08/30/2024		

Local Site Name	King City 2				
AQS ID	06-053-0008				
GPS Coordinates	36.209286, -121.126371				
Street Address	415 Pearl St., King City, CA 93930				
County	Monterey				
Distance to roadways (meters)	50				
Traffic Count (AADT,year)	27642 ADT (2020) (CalTrans-Hwy101)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	MSA: Salinas, CA				
Pollutant, POC	O3, 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		
Site type(s)	Highest Concentration	Highest Concentration	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SPM		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	TEI 49C	MET ONE BAM-1020	MET ONE BAM-1020		
Method code	047	122	170		
FRM/FEM/ARM/Other	FEM	FEM	FEM		
Collecting Agency	MBARD	MBARD	MBARD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	MBARD	MBARD	MBARD		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	6/1/2007	2/1/2011	1/1/2012		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	01/01-12/31	01/01-12/31	01/01-12/31		
Probe height (meters)	4.3	4.9	4.7		
Distance from supporting structure (meters)	1.5	2.3	2.1		
Distance from obstructions on roof (meters)	N/A	N/A	N/A		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A	N/A		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	N/A	N/A	N/A		
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)	2.5	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	Weekly	Weekly		
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	8/29/2024	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/06/2024 08/29/2024	02/06/2024 08/29/2024		

Local Site Name	Pinnacles NM				
AQS ID	06-069-0003				
GPS Coordinates	36.485278, -121.155556				
Street Address	Pinnacles National Monument, 5000 Hwy 146, Paicines, CA 95043				
County	San Benito				
Distance to roadways (meters)	75				
Traffic Count (AADT,year)	760 ADT (2019) (CalTrans./CA)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	CBSA: San Jose – Sunnyvale – Santa Clara, CA				
Pollutant, POC	O3, 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)	non-EPA Federal				
Network affiliation(s)	CASTNET				
Instrument manufacturer and model	Thermo 49i				
Method code	47				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	NPS				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	NPS				
Spatial scale	Regional				
Monitoring start date	11/7/1986				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	01/01-12/31				
Probe height (meters)	10				
Distance from supporting structure (meters)	N/A				
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				
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)	8.4				
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				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/26/2024				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Salinas 3				
AQS ID	06-053-1003				
GPS Coordinates	36.694261, -121.623271				
Street Address	867 East Laurel Dr., Salinas, CA 93905				
County	Monterey (TAMC)				
Distance to roadways (meters)	500				
Traffic Count (AADT,year)	22395 ADT (2020) (TAMC-Peak)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	MSA: Salinas, CA				
Pollutant, POC	CO, 1	NO2, 1	O3, 1	PM2.5, 3	PM2.5, 2
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary	Primary	QA-Audit
Parameter Code	42101	42602	44201	88101	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	TEI 48	TECO 42i-TL	TEI 49iQ	MET ONE BAM-1020	R&P FRM-2000
Method code	054	074	047	170	143
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	FRM
Collecting Agency	MBARD	MBARD	MBARD	MBARD	MBARD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	Bay Area AQMD
Reporting Agency	MBARD	MBARD	MBARD	MBARD	Bay Area AQMD
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	12/31/1999	12/31/1999	12/31/1999	1/1/2009	11/1/2008
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	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	6	6	6	6	6.2
Distance from supporting structure (meters)	6	6	6	2.1	2.3
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
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)	N/A	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	N/A
Distance to nearest tree drip line (meters)	N/A	N/A	N/A	N/A	N/A
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	1.8	1.8
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360 Degrees	360 Degrees	360 Degrees	360 Degrees	360 Degrees
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)	4.1	4.6	3.7	N/A	N/A
Will there be changes within the next 18 months?	Yes	Yes	Yes	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	N/A	Weekly	N/A
Frequency of one-point QC check for gaseous instruments	Weekly	Weekly	Daily	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	8/27/2024	8/27/2024	8/27/2024	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	02/06/2024 08/27/2024	02/06/2024 08/27/2024

Local Site Name	San Juan Bautista				
AQS ID	06-069-0004				
GPS Coordinates	36.84188, -121.533444				
Street Address	100 Nylund Drive, San Juan Bautista, CA. 95045				
County	San Benito				
Distance to roadways (meters)	75m to Route 156				
Traffic Count (AADT,year)	61800 ADT (2020) (The Alameda & 156)				
Ground Cover	Grass				
Representative statistical area name (i.e. MSA, CBSA, other)	MSA: San Jose – Sunnyvale – Santa Clara, CA				
Pollutant, POC	PM10, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SPM				
Network affiliation(s)	N/A				
Instrument manufacturer and model	MET ONE BAM-1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	MBARD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	MBARD				
Spatial scale	Neighborhood				
Monitoring start date	4/1/2021				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	01/01-12/31				
Probe height (meters)	4.8				
Distance from supporting structure (meters)	2.5				
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				
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	Weekly				
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	02/05/2024 08/30/2024				

Local Site Name	San Lorenzo Valley				
AQS ID	06-087-1005				
GPS Coordinates	37.060732, -122.083478				
Street Address	7179 Hacienda Way, Felton, CA 95018				
County	Santa Cruz				
Distance to roadways (meters)	320				
Traffic Count (AADT,year)	21727 ADT (2019) (Santa Cruz County)				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	MSA: Santa Cruz – Watsonville, CA				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88101				
Basic monitoring objective(s)	NAAQS Comparison				
Site type(s)	Highest Concentration				
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	MBARD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	MBARD				
Spatial scale	Neighborhood				
Monitoring start date	10/23/2014				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	01/01-12/31				
Probe height (meters)	4.3				
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				
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	N/A				
Frequency of flow rate verification for automated PM analyzers	Weekly				
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	02/07/2024 08/28/2024				

Local Site Name	Santa Cruz				
	06-087-0007				
GPS Coordinates	36.98332, -121.98822				
Street Address	960 Bostwick Lane, Santa Cruz, CA 95062				
County	Santa Cruz				
Distance to roadways (meters)	120m				
Traffic Count (AADT,year)	10,268 ADT (4/2017) (Santa Cruz County)				
Ground Cover	Gravel, Grass				
Representative statistical area name (i.e. MSA, CBSA, other)	MSA: Santa Cruz – Watsonville, CA				
Pollutant, POC	O3, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	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	TEI 49C	MET ONE BAM-1020			
Method code	047	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	MBARD	MBARD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	MBARD	MBARD			
Spatial scale	Neighborhood	Urban			
Monitoring start date	9/1/1996	1/1/2009			
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)	4.8	4.6			
Distance from supporting structure (meters)	2	2			
Distance from obstructions on roof (meters)	N/A	N/A			
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)	10.7m	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)	6.3	N/A			
Will there be changes within the next 18 months?	Yes	Yes			
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	Weekly			
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	8/28/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/07/2024 08/28/2024			

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	N/A				
Parameter Code	88502				
Basic monitoring objective(s)	Public Information				
Site type(s)	Population Exposure				
Monitor type(s)	non-EPA Federal				
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	02/13/24 09/05/24				

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)	10.9	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	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	7/30/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/15/24 11/07/24			

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	02/13/24 09/05/24				

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)	2.4				
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	02/13/24 09/05/24				

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 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	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	4/17/24 10/18/24				

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	05/22/24 11/26/24				

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	05/22/24 11/26/24				

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	05/22/24 11/26/24				

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)	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	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	8/27/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/07/24 08/27/24			

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)	14.8	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	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	8/28/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/07/24 08/28/24			

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)	12.6	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	8/27/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/14/24 08/27/24			

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)	12.9	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	8/28/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	03/21/24 08/28/24			

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	731	
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)	20.0	15.0	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	No	
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	5/2/2024	5/2/2024	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	05/02/24 10/17/24	05/02/24 10/17/24	

Shasta County AQMD

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	2/20/2024				
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)	9.3	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	2/22/2024	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	02/22/24 08/19/24	02/22/24 08/19/24	02/22/24 08/19/24	

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 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	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)	8.3				
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		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	2/22/2024				
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)	6.0	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	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	2/23/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/23/24 08/20/24			

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 BAM1020	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	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)	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)	13.6	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	Weekly	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/21/2024	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	02/21/24 08/19/24	02/21/24 08/19/24		

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)	7.4				
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				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/7/2024				
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)	13.8				
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	2/22/2024				
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)	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	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)	17.0	15.3	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	11/13/2024	11/13/2024	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	04/16/24 11/13/24	04/16/24 11/13/24	

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)	15.4	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	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	11/6/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/17/24 11/06/24			

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)	14.9	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	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	11/5/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/17/24 11/05/24			

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)	N/A	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	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)	16.9	15.3	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	11/7/2024	11/7/2024	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	04/16/24 11/07/24	04/16/24 11/07/24	04/16/24 11/07/24

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)	15.4	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	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	11/12/2024	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	04/16/24 11/12/24			

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	05/09/24 10/16/24				

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)	8.9				
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	5/9/2024				
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	05/08/24 10/16/24				

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, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Supplementary		
Parameter Code	44201	81102	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	Teledyne API T400	GMW Model 1200	Met One BAM 1020		
Method code	87	63	170		
FRM/FEM/ARM/Other	FEM	FRM	FEM		
Collecting Agency	Yolo-Solano AQMD	Yolo-Solano AQMD	Yolo-Solano AQMD		
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	05/27/1998	10/26/1998	12/12/2022		
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)	3.6	2.2	4.8		
Distance from supporting structure (meters)	1	>2	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)	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)	8.5	N/A	N/A		
Will there be changes within the next 18 months?	No	No	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	Monthly	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	Weekly	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/8/2024	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	05/08/24 10/16/24	05/08/24 10/16/24		

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)	10.4	10.2	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	8/6/2024	8/6/2024	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	02/09/24 08/06/24		

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.

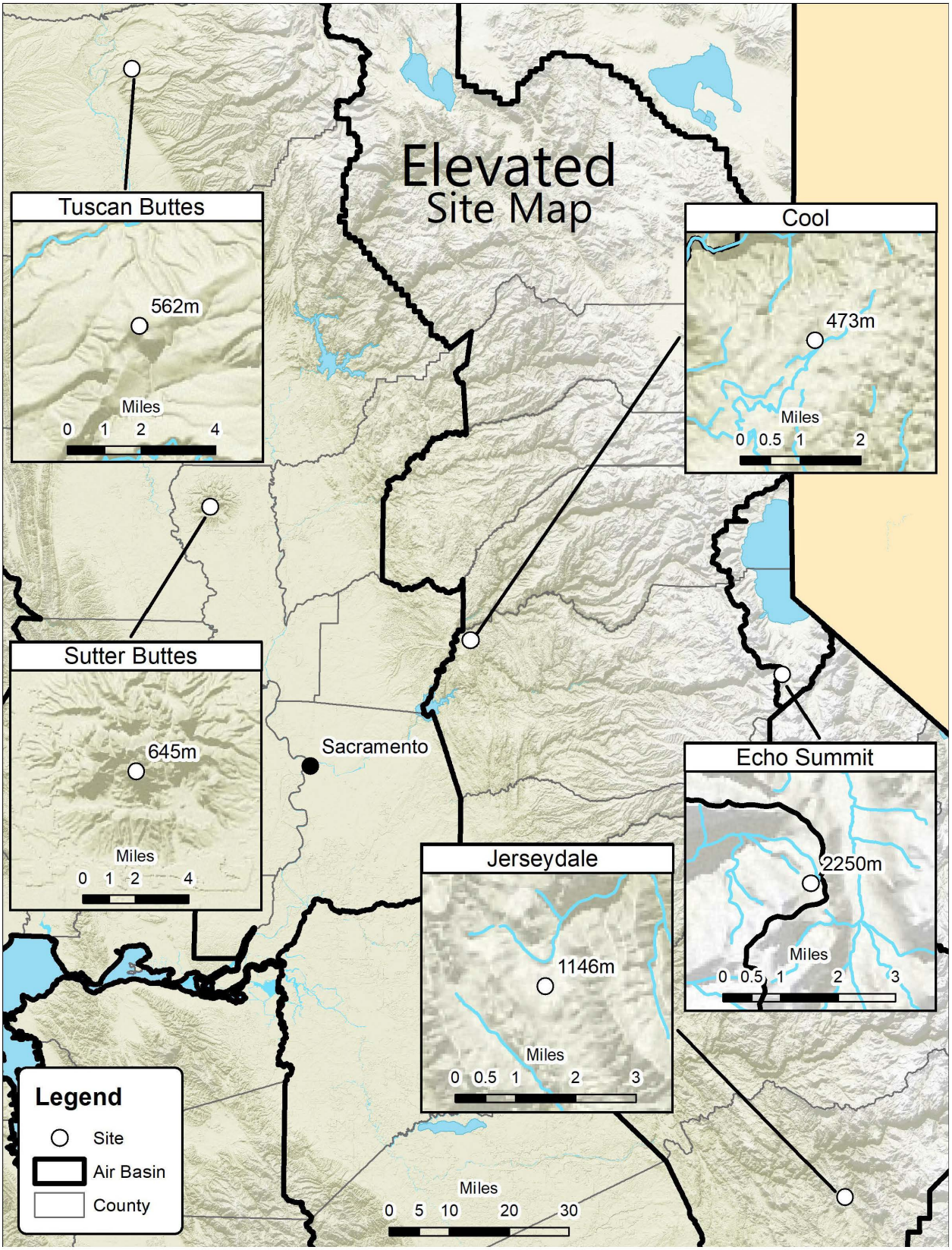
CARB staff has updated several tables and graphs which demonstrated in the past that an April through October monitoring season is adequate for the seasonal ozone monitors. The following analyses provide the justification needed for the U.S. EPA to continue to grant a waiver for the seasonal monitoring sites, in accordance with 40 CFR Part 58.12 (a)(3). The 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 2024 Design Value (ppm)[1]
Echo Summit[2]	060170012	El Dorado	2000	April-October	0.066
Cool	060170020	El Dorado	1996	April-October	0.072
Jerseydale	060430006	Mariposa	1995	April-October	0.068
Sutter Buttes	061010004	Sutter	1993	April-October	0.068
Tuscan Butte	061030004	Tehama	1995	April-October	0.069

[1] The federal 8-hour design value is based on the three-year average of the annual 4th high. Ozone data obtained on April 25, 2025, from CARB's AQMIS database: *https://www.arb.ca.gov/aqmis2/aqmis2.php*
[2] Echo Summit site did not operate in April from 2010 through 2024, and September and October of 2021.

FIGURE 1
CARB SEASONAL OZONE MONITORING SITES



Ozone concentration data used in the analyses were retrieved from CARB's Air Quality and Meteorological Information System (AQMIS) database in April 2025. Average of the monthly maximum 8-hour ozone concentrations for each seasonal site covering a 5-year period from 2020 to 2024 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. 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 15 percent, which is 2 times higher than those between the months of April to May (7.4 percent). In addition, on average, the concentrations dropped 10 percent from September to October, and 26 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, 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 indicate that those are the key monitoring months. A few of the fourth-highest concentrations across all of the seasonal sites occurred in May (Tuscan Butte, 2021; Echo Summit, 2023) or October (Tuscan Butte, 2022–2023).

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 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 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

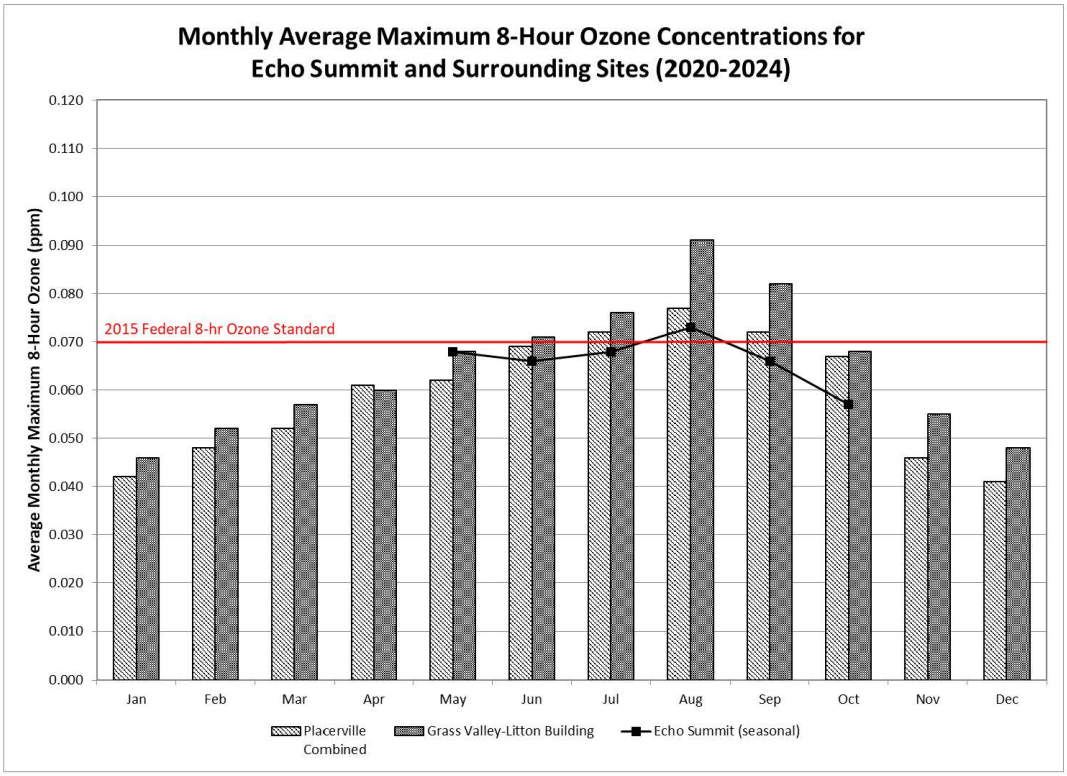


FIGURE 3

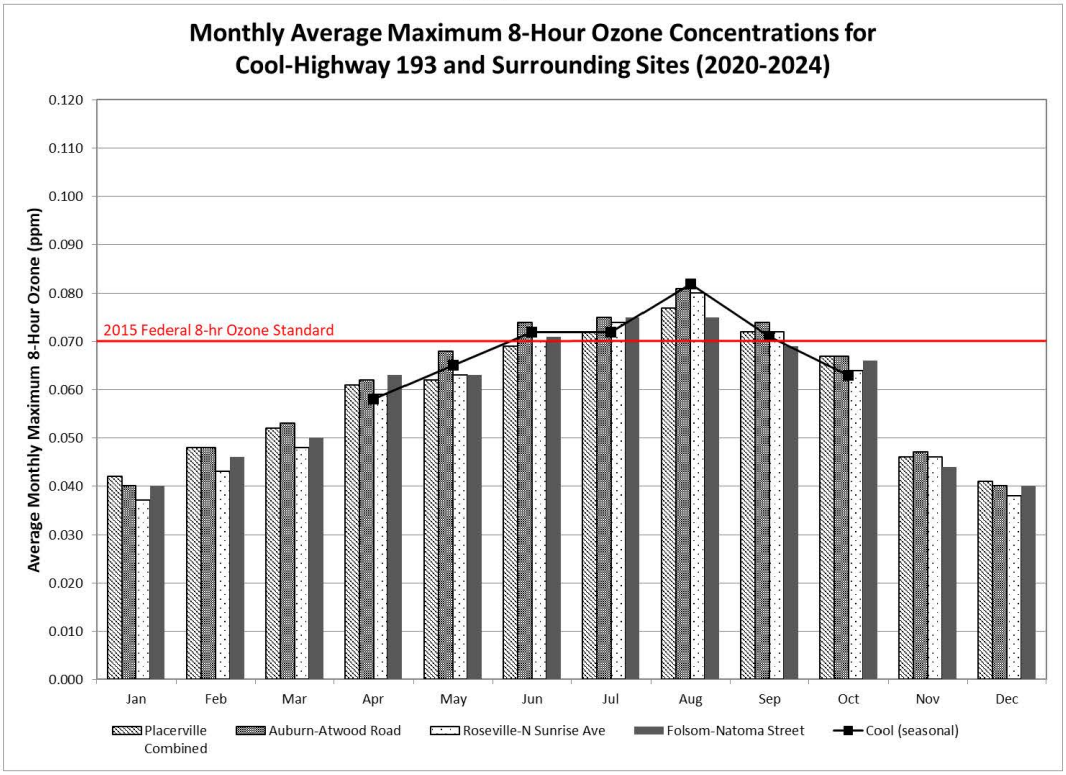


FIGURE 4

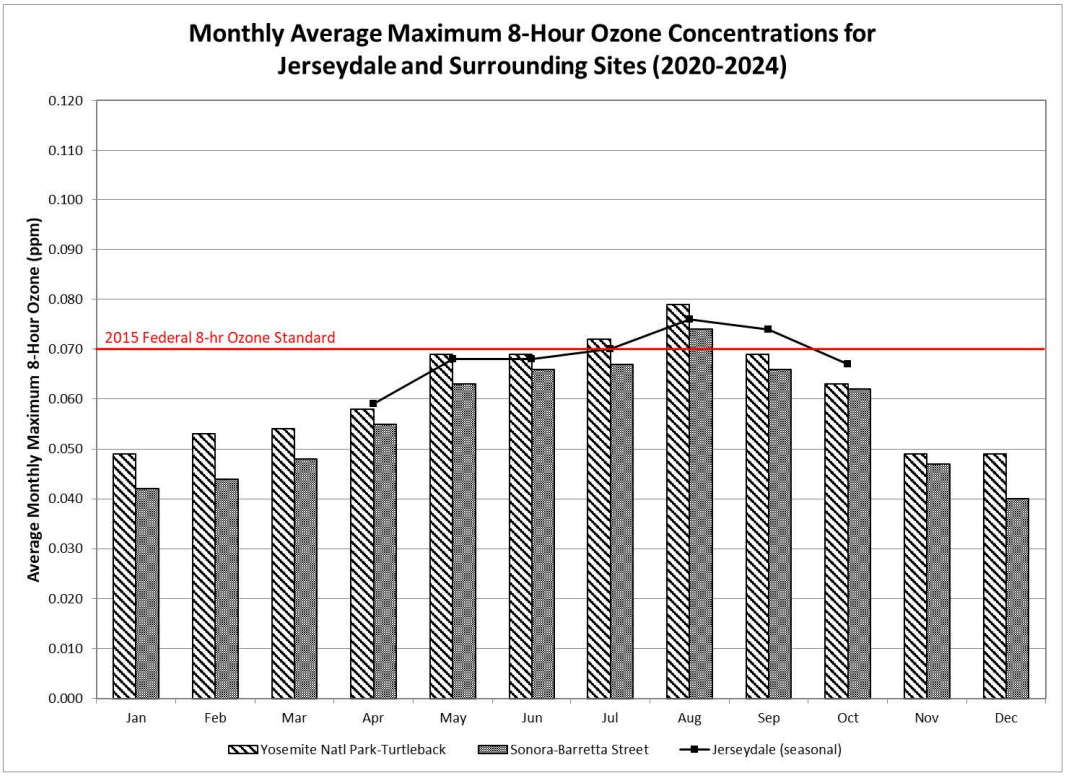
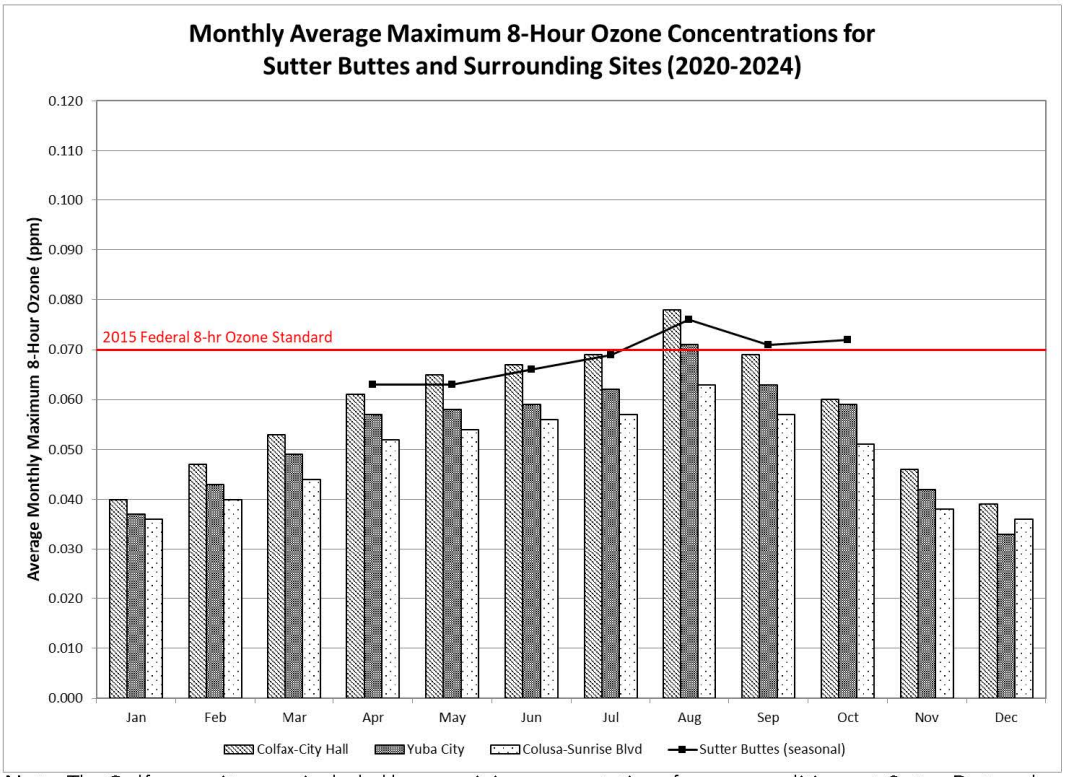


FIGURE 5



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

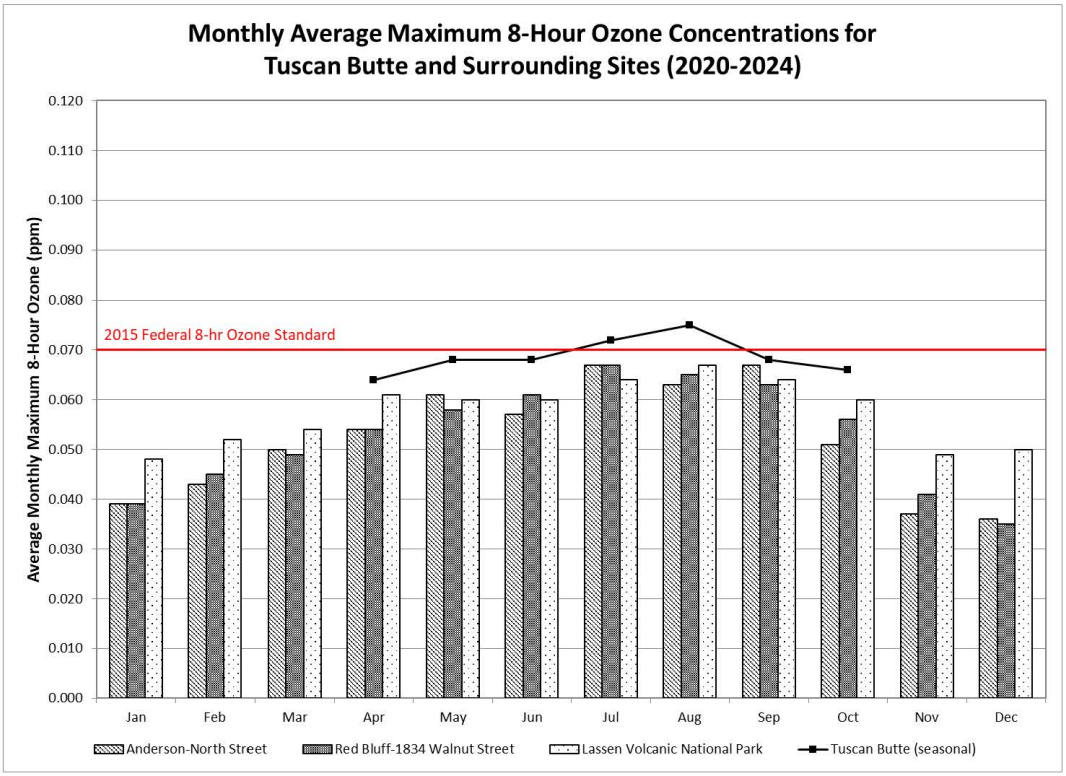

Monthly Average Maximum 8-Hour Ozone Concentrations for Tuscan Butte and Surrounding Sites (2020-2024)
Average Monthly Maximum 8-Hour Ozone (ppm)
0.120
0.110
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
2015 Federal 8-hr Ozone Standard
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
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 '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
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

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 '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	---	0.066	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	---	0.071	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	---	---	---	0.049	0.034
DEC '22	---	0.042	0.042	0.035	---	---	0.043	0.049	---	---	0.039	0.035	0.044	---	---	---	0.047	0.025
JAN '23	---	0.042	0.039	0.040	---	---	0.043	0.049	---	0.047	0.041	0.040	0.043	---	---	---	0.050	0.038
FEB '23	0.042	0.050	0.043	0.042	---	---	0.049	0.050	---	0.050	0.044	0.044	0.046	---	---	---	0.052	0.041
MAR '23	0.050	0.044	0.046	0.047	---	---	0.047	0.055	---	0.056	0.048	0.050	0.049	---	---	---	0.054	0.046
APR '23	0.061	0.057	0.065	0.064	0.060	---	0.071	0.069	---	0.061	0.067	0.061	0.067	0.055	0.066	0.071	0.057	0.061
MAY '23	0.063	0.056	0.064	0.059	0.066	---	0.067	---	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	---	0.053	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	---	0.061	0.064	---	0.072	0.083	0.074	0.072	0.075	0.069	0.062
AUG '23	0.064	0.066	0.075	---	0.074	0.076	0.069	---	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	0.061	---	0.062	0.061	0.062	---	0.057	0.055	0.064	0.058	0.065	0.059	0.061	0.061	0.062	0.057
OCT '23	---	0.057	0.057	---	0.065	0.057	0.060	---	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	---	---	---	---	---	---	0.054	0.048	0.040	0.056	0.054	---	---	0.054	0.051
DEC '23	---	0.034	0.036	---	---	---	0.037	---	---	0.048	0.040	0.033	0.037	0.038	---	---	0.049	0.036

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 '24	---	0.036	0.039	---	---	---	0.038	---	---	0.050	0.046	0.037	0.041	0.047	---	---	0.052	0.040
FEB '24	---	0.036	0.042	---	---	---	0.039	---	---	0.051	0.046	0.041	0.042	0.041	---	---	0.054	0.042
MAR '24	---	0.048	0.052	---	---	---	0.040	---	---	0.053	0.051	0.039	0.048	0.047	---	---	0.051	0.048
APR '24	---	0.067	0.059	---	0.063	---	0.052	---	0.055	0.065	0.064	0.049	0.064	0.053	0.069	0.065	0.063	0.059
MAY '24	---	0.068	0.057	0.058	0.060	0.070	0.048	---	0.056	0.061	0.057	0.043	0.063	0.060	0.060	0.064	0.061	0.056
JUN '24	---	0.082	0.069	0.057	0.074	0.075	0.066	---	0.067	0.070	0.070	0.054	0.078	0.071	0.072	0.072	0.080	0.059
JUL '24	---	0.079	0.067	0.062	0.072	0.069	0.067	---	0.062	---	0.074	0.053	0.078	0.075	0.075	0.068	0.079	0.064
AUG '24	---	0.076	0.067	0.060	0.069	0.066	0.061	0.072	0.059		0.067	0.053	0.078	0.070	0.070	0.068	0.068	0.065
SEP '24	---	0.070	0.065	0.062	0.065	0.064	0.056	0.066	0.071	0.055	0.065	0.053	0.075	0.068	0.066	0.061	0.062	0.061
OCT '24	---	0.071	0.056	0.051	0.061	0.057	---	0.063	0.072	---	0.062	0.045	0.059	0.061	0.066	0.059	0.058	0.059
NOV '24	---	0.056	0.053	0.046	---	---	0.039	0.058	---	---	0.051	0.037	0.050	0.051	---	---	0.051	0.045
DEC '24	---	0.041	0.040	0.042	---	---	0.041	0.049	---	0.051	0.038	0.030	0.039	0.042	---	---	0.051	0.039

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 was shut down on 7/22/2019 for renovations and operation resumed on 12/10/2020; Anderson-North Street monitoring site closed on 10/4/2023.
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)

	2020 4th Highest	Date	2021 4th Highest	Date	2022 4th Highest	Date	2023 4th Highest	Date	2024 4th Highest	Date
Anderson-North Street	0.066	9/15/2020	0.063	8/25/2021	0.066	7/25/2022	0.064	8/10/2023	–	–
Auburn-Atwood Road	0.083	9/1/2020	0.085	9/24/2021	0.075	7/23/2022	0.064	6/30/2023	0.079	7/23/2024
Colfax-City Hall	0.080	8/23/2020	0.076	8/24/2021	0.070	7/29/2022	0.067	7/11/2023	0.067	8/29/2024
Colusa-Sunrise Blvd	0.052	9/5/2020	0.061	8/30/2021	0.057	8/18/2022	0.059	5/18/2023	0.059	7/4/2024
Cool	0.078	8/23/2020	0.080	7/23/2021	0.074	7/25/2022	0.072	7/11/2023	0.072	7/4/2024
Echo Summit	0.073	9/15/2020	0.081	8/22/2021	0.064	7/14/2022	0.065	5/18/2023	0.069	7/11/2024
Folsom-Natoma Street	–	–	0.085	9/24/2021	0.070	9/6/2022	0.071	4/27/2023	0.065	7/11/2024
Grass Valley-Litton Building	0.080	8/29/2020	0.090	9/10/2021	0.074	8/30/2022	0.063	4/29/2023	0.07	8/29/2024
Jerseydale	0.091	8/20/2020	0.081	6/17/2021	0.079	9/8/2022	0.060	8/24/2023	0.065	9/21/2024
Lassen Volcanic Natl Park	0.069	9/14/2020	0.075	8/23/2021	0.061	6/22/2022	0.061	7/12/2023	0.061	5/17/2024
Placerville	0.086	8/22/2020	0.075	9/24/2021	0.066	9/2/2022	0.067	4/27/2023	0.067	8/29/2024
Red Bluff-Walnut Street	0.061	9/6/2020	0.075	7/22/2021	0.066	6/22/2022	0.063	5/18/2023	0.053	8/2/2024
Roseville-N Sunrise Ave	0.070	8/23/2020	0.075	9/3/2021	0.070	7/23/2022	0.077	8/31/2023	0.077	6/22/2024
Sonora-Barretta Street	0.080	8/24/2020	0.068	8/25/2021	0.061	8/16/2022	0.067	8/24/2023	0.071	7/12/2024
Sutter Buttes	0.083	9/13/2020	0.077	9/4/2021	0.069	7/24/2022	0.067	7/2/2023	0.07	8/2/2024
Tuscan Butte	0.074	8/20/2020	0.077	5/13/2021	0.070	10/21/2022	0.069	10/20/2023	0.068	6/22/2024
Yosemite Natl Park-Turtleback	0.084	8/20/2020	0.080	8/24/2021	0.069	7/25/2022	0.068	7/16/2023	0.074	6/22/2024
Yuba City-Almond Street	0.066	9/5/2020	0.072	9/13/2021	0.058	6/23/2022	0.061	7/21/2023	0.063	8/3/2024

Notes:
1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Folsom-Natoma Street monitoring site was shut down on 7/22/2019 for renovations and operation resumed on 12/10/2020; Anderson–North Street monitoring site closed on 10/4/2023.
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. 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 '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																		
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																		

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 '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																		
JAN '23																		
FEB '23																		
MAR '23																		
APR '23							1									1		
MAY '23													1					
JUN '23					1		1						1					
JUL '23	1				3		3					1	5	1	2	2		
AUG '23			1		1	1					1		1	1			1	
SEP '23																		
OCT '23																		
NOV '23																		
DEC '23																		

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 '24																		
FEB '24																		
MAR '24																		
APR '24																		
MAY '24																		
JUN '24		6			3	2							4	1	2	1	2	
JUL '24		9			3						2		5	3	1		2	
AUG '24		8						1					3					
SEP '24									1				2					
OCT '24		1							1									
NOV '24																		
DEC '24																		

Notes:
1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Folsom-Natoma Street monitoring site was shut down on 7/22/2019 for renovations and operation resumed on 12/10/2020; Anderson–North Street monitoring site closed on 10/4/2023.
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. 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 '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																		
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																		

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 '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	5	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																		
JAN '23																		
FEB '23																		
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	6	1	3	6	9	10	6	12	12	6	2
JUN '23	3	1	5	3	13	13	8			1	10	2	14	7	9	15	8	1
JUL '23	9	12	18	6	19	12	19		8	6	7	10	22	17	20	18	19	10
AUG '23	15	6	24		23	6	16		5	6	17	14	20	15	18	23	18	6
SEP '23	2	1	10		11	4	6		2	2	12	1	9	6	9	9	7	2
OCT '23		1	2		2	1	2			1	4		4	2	5	4	2	2
NOV '23													1					
DEC '23																		

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 '24																		
FEB '24																		
MAR '24																		
APR '24		5	1		3				1	1	3		4		3	2	6	1
MAY '24		11	3	3	7	13			1	5	6		9	3	6	11	8	2
JUN '24		18	14	4	17	10	5		5	4	14		16	15	15	13	14	7
JUL '24		29	22	10	22	21	10		10	7	17		24	23	22	24	26	10
AUG '24		22	15	7	17	7	3	19	6		13		20	11	17	14	10	11
SEP '24		17	13	2	10	11	1	13	18	2	11		10	12	12	8	19	6
OCT '24		8	2		3	3		4	12	1	2		4	4	11	7	6	2
NOV '24																		
DEC '24																		

Notes:

1. Surrounding monitors used for comparison with more than one seasonal site are only listed once.
2. Folsom-Natoma Street monitoring site was shut down on 7/22/2019 for renovations and operation resumed on 12/10/2020; Anderson–North Street monitoring site closed on 10/4/2023.
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. 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

February 6, 2025

Re: 2019 Lead Monitoring Waiver

Cheree Peterson
Acting Regional Administrator
U.S. EPA, Region 9
5 Hawthorne Street,
San Francisco, CA 94105

Dear Ms. Peterson,

The Mojave Desert Air Quality Management District (District), in accordance with 40 CFR Part 58(4.5)(a)(II), is submitting a lead (Pb) monitoring waiver (Calendar Year 2019) for the Marine Corps Air Ground Combat Center, Twentynine Palms, CA (MCAGCC, Facility ID 591). In preparation of this waiver, the District consulted with USEPA Region 9 staff who directed the District to pursue the waiver via modeling. Modeling has been appropriately performed and demonstrates that despite the facility exceeding the 0.50 ton per year (tpy) threshold in calendar year 2019, the facility will not contribute to a maximum Pb concentration in ambient air in excess of 50 percent of the NAAQS.

To complete the waiver request, the District is taking the following final actions;

1. Deliver 2019 lead modeling waiver to CARB and USEPA;
2. Ask that CARB include copy of the lead modeling waiver in the Annual Network Plan and the 2025 Network Assessment.
3. Renew the waiver every 5 years as part of the Network Assessment, if necessary.

Should you have any questions regarding this submission please contact me at (760) 245-1661, extension 1846, or by email at: canderson@mdaqmd.ca.gov.

Sincerely,

Christian Anderson
Planning/Air Monitoring Supervisor

Email cc: Sylvia Vanderspek, EPA R9; Sylvia.Vanderspek@arb.ca.gov
Melanie Levesque, CARB; melanie.levesque@arb.ca.gov
Qazzaz, Bilal, EPA R9; qazzaz.bilal@epa.gov
Carlstad, Julia, EPA R9; Carlstad.Julia@epa.gov
Mike Ellitt, MCAGCC; Plessie.ellitt@usmc.mil

2019 LEAD MODELING WAIVER

for

MARINE CORPS AIR GROUND COMBAT CENTER, TWENTYNINE PALMS, CA

February 4, 2025

Prepared for

Naval Facilities Engineering Systems Command

Naval Facilities Engineering Systems Command Southwest
San Diego, California

Prepared Under

Contract N62470-24-D-0001
Task Order N6247324F4929
DCN: MULTIMAC-4010-4929-0002

Prepared by

Multi-MACJV

Multi-Mac Joint Venture
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San Diego, CA 92123-5310
(858) 278-3600

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TABLES

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FIGURES

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ACRONYMS AND ABBREVIATIONS

ASOS	Automated Surface Observation Station
CARB	California Air Resources Board
CEIR	Comprehensive Emissions Inventory Report
CFR	Code of Federal Regulations
CY	calendar year
DODIC	Department of Defense Identification Code
EPA	U.S. Environmental Protection Agency
g/s	grams per second
HARP	Hotspots and Analysis Reporting Program
ICAO	International Civil Aviation Organization
ICE	internal combustion engine
lbs	pounds
MAGTFTC	Marine Air Ground Task Force Training Command
MCAGCC	Marine Corps Air Ground Combat Center
MDAQMD	Mojave Desert Air Quality Management District
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NCDC	National Climatic Data Center
NLCD	National Land Cover Database
NAVFAC SW	Naval Facilities Engineering Systems Command Southwest
OBODM	Open Burn/Open Detonation Dispersion Model
Pb	lead
SCRAM	Support Center for Regulatory Atmospheric Modeling
SERDP	Strategic Environmental Research and Development
TA	training area
tpy	tons per year
USGS	United States Geological Survey
WGS84	World Geodetic System 1984

1 PROJECT DESCRIPTION

In March 2023, the Mojave Desert Air Quality Management District (MDAQMD), reached out to Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center (MAGTFTC MCAGCC) Twentynine Palms (hereinafter referred to as "Facility") regarding calendar year (CY) 2019 lead (Pb) emissions, primarily attributed to live fire explosives (i.e., munitions) used during range training operations. The inquiry was a result of Pb emissions greater than 0.5 tons per year (tpy), which were reported as 0.78 tpy in the Comprehensive Emissions Inventory Report (CEIR) for CY 2019. At the time, MDAQMD requested that a description of the quantification methodology, including determination of the emission factor be provided.

In response to the request, the Facility conducted an in-depth review on the emissions data from CY 2019, as well as prior and subsequent years. The significant increase in Pb compound emissions reported in CY 2019 was attributed to an increase in use of three munitions for rockets with corresponding Department of Defense Identification Codes (DODICs) of H464, HA12, and J271. These three DODICs have Pb compound emissions greater than or roughly equal to the quantity of Pb compound emissions from all munitions reported in the CY 2016, CY 2017, CY 2018, and CY 2020 emissions inventories. While munition usage fluctuates depending on the training exercises being performed, the high usage of rockets (and corresponding Pb emissions) was an anomaly in CY 2019.

Table 1-1. CY 2016 Through CY 2020 Pb Munition Comparison

CEIR Year	Total Pb Emissions from Munitions (lbs)	Pb Emissions from H464, HA12, and J271 (lbs)	Rounds Fired from H464, HA12, and J271
2016	562.4	129.7	1,178
2017/2018	792	24.6	229
2019	1427.6	759.6	6,023
2020	635.2	276.2	2,462

lbs - pounds

The data in Table 1 was submitted to MDAQMD. MDAQMD communicated the data would be used to complete a Pb monitoring waiver on 3 April 2023. The information to support the waiver was sent to U.S. Environmental Protection Agency (EPA) by MDAQMD on 11 April 2023. EPA requested additional information on the Pb emissions for CY 2021 and CY 2022, which were provided. On 16 June 2023, the EPA Region IX consulted with their headquarters and determined that the prudent course of action is for the MDAQMD to pursue a waiver, via modeling, for Pb monitoring concerning the Facility source, as it exceeded the 0.5 tpy threshold for non-airport Pb sources in CY 2019 with Pb emissions reaching 0.78 tpy. EPA noted that "as described in § 4.5(ii) of Appendix D to 40 Code of Federal Regulations (CFR) 58: '*The Regional Administrator may waive the requirement in paragraph 4.5(a) for monitoring near lead sources if the State or, where appropriate, local agency can demonstrate the Pb source will not contribute to a maximum Pb concentration in ambient air in excess of fifty percent of the NAAQS (based on historical monitoring data, modeling, or other means). The waiver must be renewed once every 5 years as part of the network assessment required under Section 58.10(d).*'" EPA requested that the waiver be submitted by 1 July 2024, and that MDAQMD collaborate with the Facility and the California Air Resources Board (CARB) to complete the effort.

This modeling waiver was prepared in response to the request from EPA. To complete the effort, Environmental Affairs at the Facility utilized an existing task order with Naval Facilities Engineering Systems Command Southwest (NAVFAC SW) in which the Multi-MAC Joint Venture was contracted to provide technical support and expertise to Environmental Affairs' staff at MAGTFTC MCAGCC Twentynine Palms, California. Specifically, the work to complete this modeling waiver was performed under NAVFAC SW Contract N62470-19-D-4010, Task Order N6247321F4548, Work Element 8.

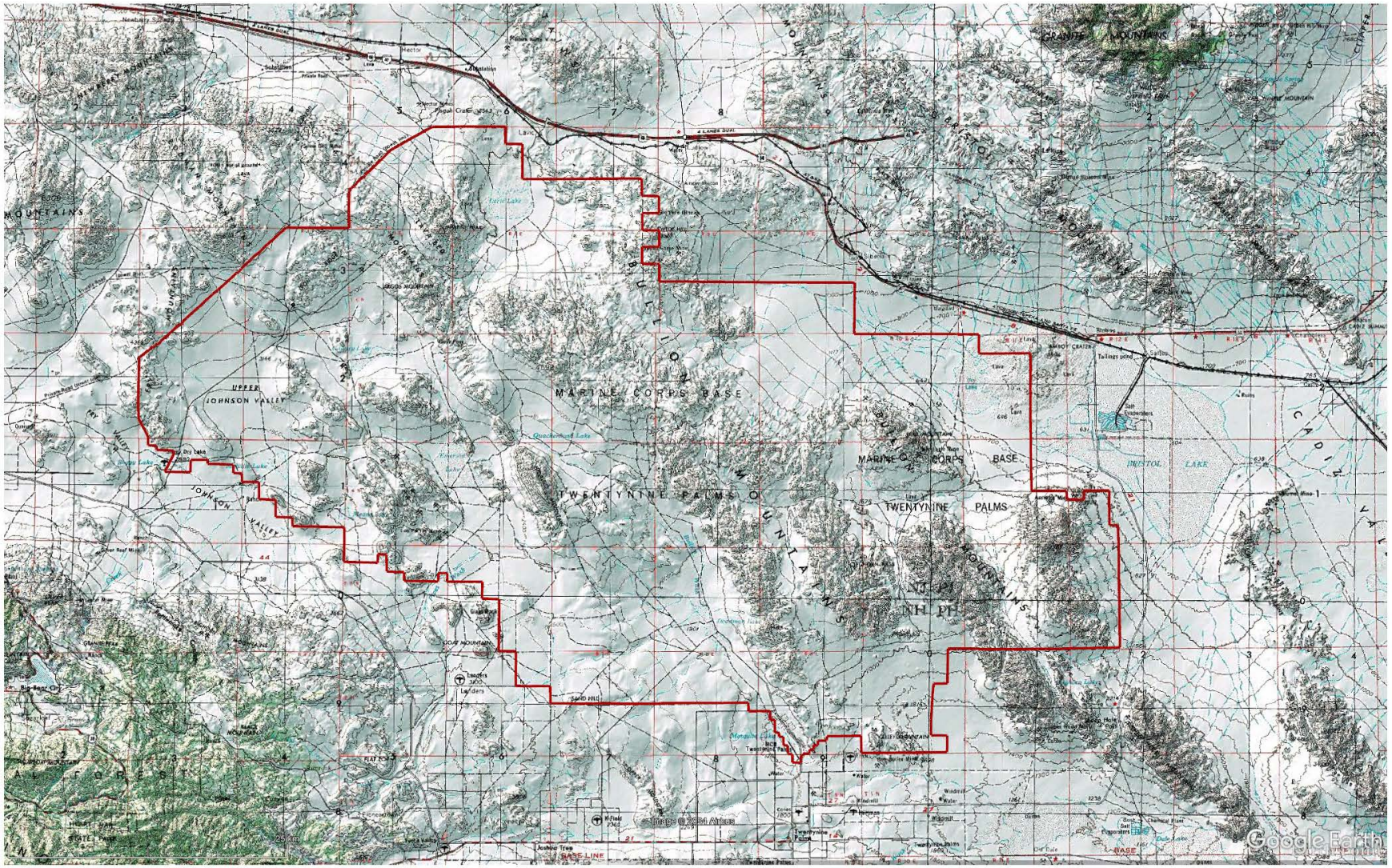
1.1 FACILITY DESCRIPTION

The Facility is located approximately 140 miles east of Los Angeles in the Mojave Desert. The mission of MAGTFTC MCAGCC Twentynine Palms is to promote readiness of operating forces and provide facilities, services, and support response to the needs of tenant commands, Marines, Sailors, and their families. As part of this readiness mission, live-fire combined arms training is conducted. Criteria pollutants, greenhouse gases, and hazardous air pollutants emissions are generated from these activities by sources that include boilers, coating operations, explosives, gas turbines, internal combustion engines (ICEs), fuel storage tanks, fugitive dust, aircraft, munitions, and tactical support equipment. Figure 1-1 displays the entire Facility boundary.

The arid area mainly receives less than 10 inches of rainfall a year, with an annual average temperature of 68 degrees Fahrenheit. The elevations range from 300 to 1,100 meters east to west with the Bullion Mountains bordering the eastern side, Lava Bed Mountains in the north, and Johnson Valley in the west. Figure 1-2 shows the United States Geological Survey (USGS) Topographic Map for the Facility.

Figure 1-1. Facility Boundary

Figure 1-2. USGS Topographic Map



2 SOURCE CHARACTERIZATION

The sources modeled are those that resulted in Pb emissions as shown in the MDAQMD-approved CY 2019 CEIR. There were 90 sources emitting Pb per CY 2019 CEIR. The majority were combustion sources such as ICEs and boilers; however, most of the Pb emissions (93%) were from the munition expenditures in the training ranges at the Facility. The next largest source of Pb emissions was from F-24 fuel (formerly JP8) combustion in tactical vehicles and tactical support equipment. Table 2-1 lists all the sources and their corresponding Pb emissions from CY 2019. Table 2-2 breaks down the "Live Fire, Explosives" emissions by range. The largest munition types were generally used in the large training areas (TA), such as Quackenbush and Noble Pass, which accounted for 57% of the total Pb emissions from the Facility in CY 2019. Figure 2-1 shows the range boundary locations. Figure 2-2 shows the location of point sources, in an area known as Mainside at the Facility. Figure 2-3 shows the location of the volume sources at the Facility, where the munitions are used in the ranges.

Table 2-1. CY 2019 Pb Emitting Sources

MDAQMD Permit to Operate (PTO)	HARP Device	Description	Pb (tpy)	% of Total Pb
Exempt56	90056	Live Fire, Explosives	7.14E-01	92.94%
Exempt59	90059	Tactical Vehicles, JP8	5.32E-02	6.92%
Exempt30	90030	Tactical Support Equipment, JP8	7.52E-04	0.10%
B011149	41149	Non-emergency, ICE, Diesel	1.01E-04	0.01%
Exempt65	90065	Welding and Soldering	2.25E-05	0.003%
E011215	411215	Emergency, ICE, Diesel	1.77E-05	0.002%
E011951	411951	Emergency, ICE, Diesel	1.59E-05	0.002%
Exempt99	89999	Non-permitted ICEs, < 50 bhp, Diesel	1.54E-05	0.002%
Exempt26	90026	Natural Gas Combustion, Space Heating, Nonresidential	1.13E-05	0.001%
Exempt00	90000	Non-permitted ICEs, < 50 bhp, Diesel	1.09E-05	0.001%
B011150	41150	Non-emergency, ICE, Diesel	1.02E-05	0.001%
E007880	47880	Emergency, ICE, Diesel	7.39E-06	0.001%
E007882	47882	Emergency, ICE, Diesel	7.19E-06	0.001%
E011168	411168	Emergency, ICE, Diesel	5.85E-06	0.001%
B011171	211171	Boiler #1 (Cogen Plant 2)	5.58E-06	0.0007%
B011172	211172	Boiler #2 (Cogen Plant 2)	5.58E-06	0.0007%
B013500	413500	Non-emergency, Portable ICE, Diesel	5.29E-06	0.0007%
Exempt97	89997	Non-permitted ICEs, < 50 bhp, Diesel	4.51E-06	0.0006%
E011973	411973	Emergency, ICE, Diesel	3.92E-06	0.0005%
B012211	412211	Emergency, ICE, Diesel	3.86E-06	0.0005%
E012426	412426	Emergency, ICE, Diesel	3.65E-06	0.0005%
B010497	10497	Non-emergency, Portable ICE, Diesel	3.64E-06	0.0005%

Table 2-1. CY 2019 Pb Emitting Sources

MDAQMD Permit to Operate (PTO)	HARP Device	Description	Pb (tpy)	% of Total Pb
E008455	48455	Emergency, ICE, Diesel	3.58E-06	0.0005%
B013076	413076	Non-emergency, Portable ICE, Diesel	3.56E-06	0.0005%
E012427	412427	Emergency, ICE, Diesel	3.43E-06	0.0004%
E009418	49418	Emergency, ICE, Diesel	3.29E-06	0.0004%
E012425	412425	Emergency, ICE, Diesel	2.89E-06	0.0004%
E010069	40069	Emergency, ICE, Diesel	2.49E-06	0.0003%
E008747	48747	Emergency, ICE, Diesel	2.47E-06	0.0003%
E008306	48306	Emergency, ICE, Diesel	2.45E-06	0.0003%
E007881	47881	Emergency, ICE, Diesel	2.44E-06	0.0003%
B013074	413074	Non-emergency, Portable ICE, Diesel	2.39E-06	0.0003%
B012346	412346	Non-emergency, Portable ICE, Diesel	2.35E-06	0.0003%
B013077	413077	Non-emergency, Portable ICE, Diesel	2.35E-06	0.0003%
B000955	20955	Boiler #2 HTHW (Central Heating Plant)	2.32E-06	0.0003%
B011795	211795	Boiler #3 HTHW (Central Heating Plant)	2.32E-06	0.0003%
M011794	211794	Boiler #1 HTHW (Central Heating Plant)	2.32E-06	0.0003%
E012074	412074	Emergency, ICE, Diesel	2.11E-06	0.0003%
E011292	41292	Emergency, ICE, Diesel	2.02E-06	0.0003%
B012706	412706	Non-emergency, Portable ICE, Diesel	2.00E-06	0.0003%
B013075	413075	Non-emergency, Portable ICE, Diesel	1.97E-06	0.0003%
E009374	49374	Emergency, ICE, Diesel	1.91E-06	0.0002%
E011145	41145	Emergency, ICE, Diesel	1.73E-06	0.0002%
E008366	48366	Emergency, ICE, Diesel	1.66E-06	0.0002%
E008302	48302	Emergency, ICE, Diesel	1.61E-06	0.0002%
B012215	412215	Non-emergency, Portable ICE, Diesel	1.61E-06	0.0002%
E008865	48865	Emergency, ICE, Diesel	1.21E-06	0.0002%
E004791	44791	Emergency, ICE, Diesel	1.20E-06	0.0002%
B013503	413503	Non-emergency, Portable ICE, Diesel	1.14E-06	0.0001%
E007902	47902	Emergency, ICE, Diesel	9.78E-07	0.0001%
Exempt2	90002	Non-permitted ICEs, < 50 bhp, Diesel	9.39E-07	0.0001%
E011214	411214	Emergency Generator (Base Telephone/Data)	9.38E-07	0.0001%
B003238	23238	Boiler (Naval Hospital)	8.92E-07	0.0001%
M003239	23239	Boiler (Naval Hospital)	8.92E-07	0.0001%
B009055	49055	Power Test Dynamometer	8.09E-07	0.0001%
E010769	10769	Emergency, ICE, Diesel	8.03E-07	0.0001%
E009928	49928	Emergency, ICE, Diesel	7.83E-07	0.0001%

Table 2-1. CY 2019 Pb Emitting Sources

MDAQMD Permit to Operate (PTO)	HARP Device	Description	Pb (tpy)	% of Total Pb
E012623	412623	Emergency, ICE, Diesel	7.11E-07	0.00009%
E009830	49830	Emergency, ICE, Diesel	6.75E-07	0.00009%
B012495	412495	Non-emergency ICE, Terex Rock Crushing	6.43E-07	0.00008%
E010772	10772	Emergency, ICE, Diesel	5.76E-07	0.00008%
E011427	411427	Emergency, ICE, Diesel	5.48E-07	0.00007%
E008864	48864	Emergency, ICE, Diesel	5.24E-07	0.00007%
B012442	412442	Non-emergency ICE, METSO Rock Crushing	4.94E-07	0.00006%
E009229	49229	Emergency, ICE, Diesel	4.91E-07	0.00006%
E009197	49197	Emergency, ICE, Diesel	4.76E-07	0.00006%
E012424	412424	Emergency, ICE, Diesel	4.45E-07	0.00006%
Exempt5	90005	Non-permitted Boilers, <2 MMBTU/hr, Natural Gas	4.05E-07	0.00005%
E010770	10770	Emergency, ICE, Diesel	4.02E-07	0.00005%
E008364	48364	Emergency, ICE, Diesel	3.98E-07	0.00005%
E012073	412073	Emergency, ICE, Diesel	3.77E-07	0.00005%
E008363	48363	Emergency, ICE, Diesel	3.67E-07	0.00005%
E010771	10771	Emergency, ICE, Diesel	3.40E-07	0.00004%
E008301	48301	Emergency, ICE, Diesel	3.29E-07	0.00004%
E011446	41446	Emergency, ICE, Diesel	2.80E-07	0.00004%
E009228	49228	Emergency, ICE, Diesel	2.02E-07	0.00003%
Exempt98	89998	Non-permitted ICEs, < 50 bhp, Diesel	1.82E-07	0.00002%
E008303	48303	Emergency, ICE, Diesel	1.44E-07	0.00002%
E008304	48304	Emergency, ICE, Diesel	1.44E-07	0.00002%
E008721	48721	Emergency, ICE, Diesel	1.25E-07	0.00002%
Exempt6	90006	Non-permitted Boilers, <2 MMBTU/hr, Propane	1.23E-07	0.00002%
B010993	210993	Boiler - Training Tank/pool	1.19E-07	0.00002%
B010994	210994	Boiler - Training Tank/pool	1.19E-07	0.00002%
B010995	210995	Boiler - Training Tank/pool	1.19E-07	0.00002%
E010773	10773	Emergency, ICE, Diesel	1.05E-07	0.00001%
B010498	20498	Non-emergency, Portable ICE, Diesel	5.52E-08	0.00001%
B009746	29746	Boiler	2.93E-08	0.000004%
B012318	412318	Furnace, Aluminum Sweat, Propane	8.98E-09	0.000001%
B013450	413450	Fire Fighting Training, Propane - Burn Car	2.29E-09	0.0000003%
E009230	49230	Emergency, ICE, Diesel	1.22E-09	0.0000002%

HARP – Hotspots and Analysis Reporting Program
tpy – tons per year

Table 2-2. CY 2019 "Live Fire, Explosives" Pb Emissions By Range

Range	Pb (tpy)	% of Total Pb
TA-QUACKENBUSH	3.32E-01	43.25%
TA-NOBLE PASS	1.11E-01	14.46%
TA-LAVIC LAKE	4.37E-02	5.69%
TA-GAYS PASS	2.89E-02	3.76%
TA-DELTA	2.62E-02	3.41%
TA-BLACKTOP	2.07E-02	2.70%
TA-PROSPECT	1.97E-02	2.57%
TA-LEAD MOUNTAIN	1.29E-02	1.68%
TA-MORGANS WELL	1.28E-02	1.66%
R-500	1.27E-02	1.66%
R-400	9.41E-03	1.23%
R-410A	9.30E-03	1.21%
TA-AMERICA MINE	8.76E-03	1.14%
R-110	8.05E-03	1.05%
R-106A	6.36E-03	0.83%
TA-LAVA	4.62E-03	0.60%
R-210 (LIVEMOUT)	4.57E-03	0.59%
R-MTU RANGE 1	4.51E-03	0.59%
R-113	3.70E-03	0.48%
R-109	3.26E-03	0.42%
R-106	3.05E-03	0.40%
TA-MAUMEE MINE	2.50E-03	0.33%
R-114	2.45E-03	0.32%
R-MTU RANGE 2	2.18E-03	0.28%
TA-RAINBOW CANYON	2.12E-03	0.28%
R-MTU RANGE 1A	2.01E-03	0.26%
R-051	1.69E-03	0.22%
R-230 (LIVEMOUT)	1.14E-03	0.15%
R-MTU RANGE 3A	9.25E-04	0.12%
R-410	8.70E-04	0.11%
R-101	7.62E-04	0.10%
R-108	5.98E-04	0.08%
TA-EMERSON LAKE	5.98E-04	0.08%

Table 2-2. CY 2019 "Live Fire, Explosives" Pb Emissions By Range

Range	Pb (tpy)	% of Total Pb
R-105A	5.44E-04	0.07%
R-112	5.44E-04	0.07%

tpy – tons per year

Figure 2-1. Range Boundary Locations

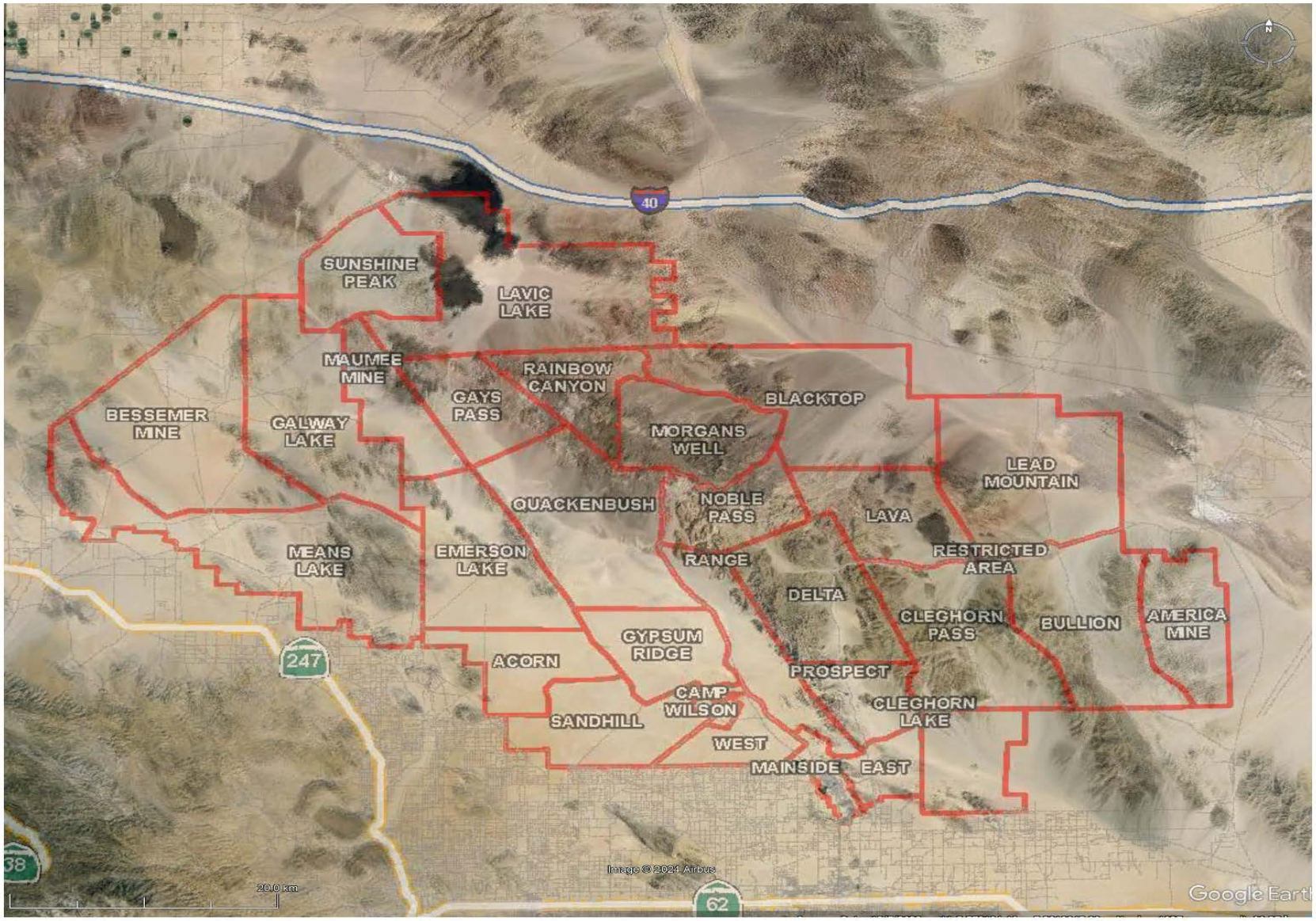
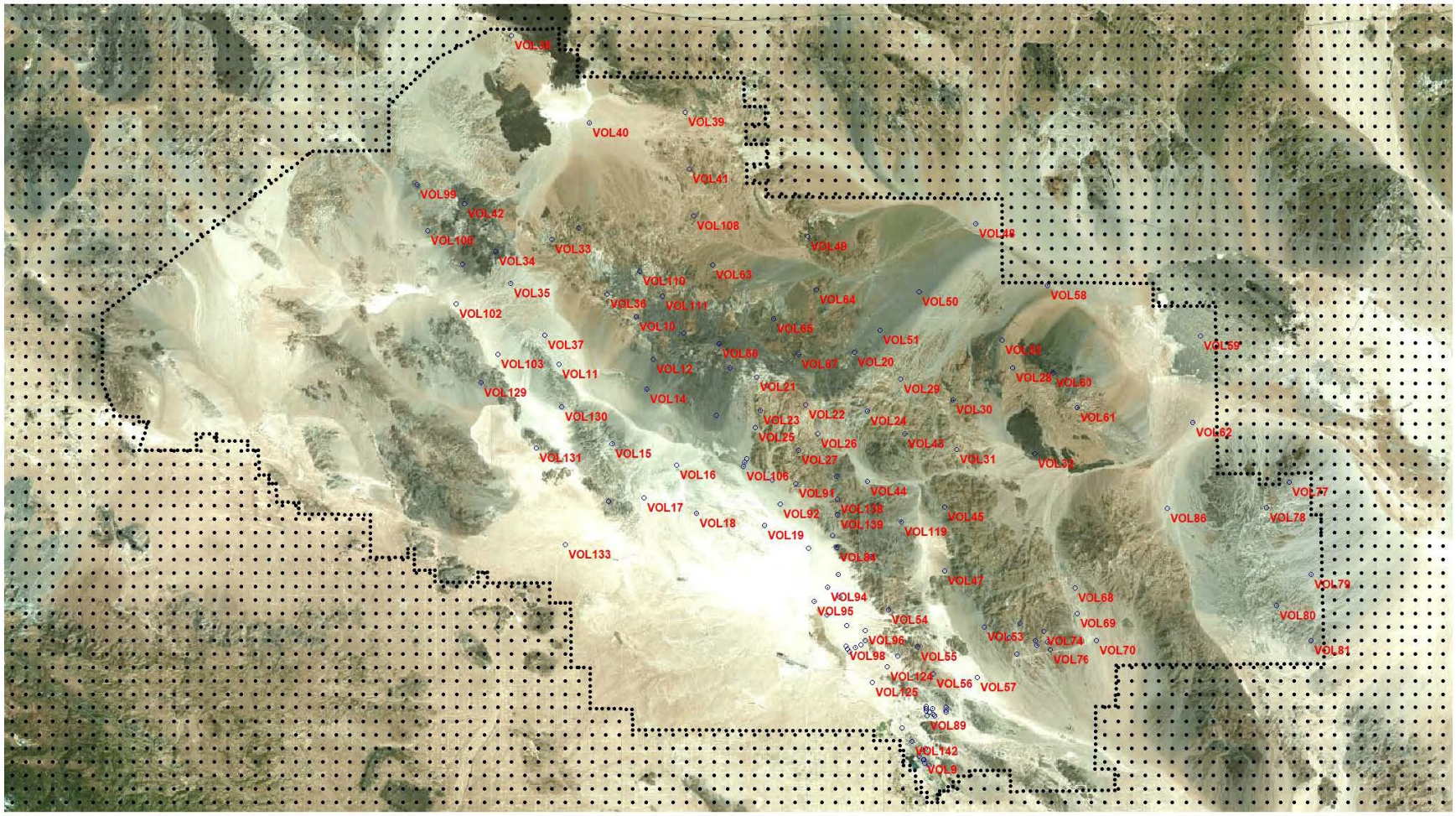


Figure 2-2. Point Source Locations

Figure 2-3. Volume Source Locations



3 METEOROLOGICAL INPUT DATA

The AERMOD surface (*.SFC) and profile data (*.PFL) files were obtained from CARB. The surface and profile data files were developed using AERMET (version 19191) with surface meteorological data, upper air meteorological data, and land use data. The meteorological data files are adjusted u-star (ADJ_U*) for surface friction velocity in the presence of low wind speeds. The raw hourly surface meteorological data is from NOAA's National Climatic Data Center (NCDC) for the years 2010-2021 with the most recent and complete five years of meteorological data processed. The raw meteorological data were recorded from meteorological instruments at airports using Automated Surface Observation Station (ASOS) systems. The meteorological preprocessor AERMINUTE was used to process ASOS 1-minute wind data. A minimum wind speed threshold of 0.5 m/s was used in consistency with EPA guidance. Wind speeds below this threshold were treated as calm. Raw upper air data was obtained from NOAA's Earth System Research Laboratory for the years 2010-2021. For surface stations in the MDAQMD, the most representative upper air station was used in AERMOD.

Considerations for choosing the appropriate meteorological station included the following:

- Proximity, Temperature, Terrain Features, Wind Rose Plot, and Precipitation
- AERSURFACE Land Use and Surface Characteristics (Albedo, Bowen, and Surface Roughness)
- Rural Dispersion Coefficients.

Table 3-1. CARB Meteorological Stations

Station Name	ICAO	Air District	Latitude	Longitude	Elevation (m)	Years Processed
Blythe Airport	KBLH	MDAQMD	33.618	-114.709	120.4	2015, 2016, 2017, 2019, 2020
Barstow-Daggett Airport	KDAG	MDAQMD	34.854	-116.787	584.3	2015, 2016, 2018, 2019, 2020
Needles Airport	KEED	MDAQMD	34.768	-114.618	271.3	2015, 2017, 2018, 2019, 2020

Source: https://ww2.arb.ca.gov/resources/documents/harp-aermod-meteorological-files
ICAO – International Civil Aviation Organization
m - meters

AERSURFACE (version 20060) was evaluated applying the following parameters:

- 2016 USGS National Land Cover Database (NLCD)
- Surface Roughness at airport stations (1km radius) with twelve 30-degree radial land-use sectors
- Airport Site Sector Surface Characteristics
- Bowen Ratio and Albedo (10km X 10km domain)
- Climate Parameter (Arid Region - less than 10 inches of annual rainfall).

To determine surface moisture conditions, precipitation data from the National Weather Service latest 30-year period (1991-2020), Climate Normals for Barstow-Daggett Airport (a.k.a. KDAG) was used to ascertain if each of the five years of meteorological data should be considered "Average", "Wet", or "Dry". Annual precipitation below the 30th percentile was considered as "Dry", above the 70th percentile "Wet", and between the 30th and 70th percentiles "Average" as listed in Table 3-2. Most of the years (3 of 5) are considered "Average" as summarized in Table 3-3.

Table 3-2. KDAG Airport 30-Year Precipitation (1991-2020)

Parameter	Annual Precipitation (inches)
Minimum	1.39
30th Percentile	2.82
Average	3.77
70th Percentile	6.97
Maximum	11.78

Table 3-3. KDAG Airport Annual Precipitation

Year	Annual Precipitation (inches)	AERSURFACE Condition
2015	2.97	Average
2016	2.79	Dry
2018	1.75	Dry
2019	6.04	Average
2020	3.36	Average

Table 3-4 lists the meteorological station characteristics, including airport station, wind rose plots, wind speed and directions for the meteorological years processed.

Table 3-4. Meteorological Stations Characteristics

Station Name	Distance and Direction from Site	Land Cover View	Land Cover Class Composition	Wind Rose Plot	Characteristics
Barstow-Daggett Airport	20 Miles Northwest	Figure 3-3	Table 3-7	Figure 3-6	Closest to site with similar terrain and elevation. Westerly Winds. Greater than 90% Rural.
Blythe Airport	80 Miles Southeast	Figure 3-4	Table 3-8	Figure 3-7	Furthest from site and lower elevation. Predominantly Southern Winds. Greater than 90% Rural.
Needles Airport	70 Miles Northeast	Figure 3-5	Table 3-9	Figure 3-8	Far from site and lower elevation. Southwesterly and Northwesterly Winds. Greater than 90% Rural.

The meteorological data from the Barstow-Daggett Airport Station is the most representative for the Facility location, considering distance, surface characteristics, elevation, and surrounding terrain. The Blythe and Needles Airport Stations are both further from the Facility and lower in elevation, while the Wind Rose Plots display different wind direction patterns in comparison to the nearer Barstow-Daggett Airport.

To demonstrate land use at the site and selection of Rural Dispersion Coefficients (Guideline on Air Quality Models, Section 7.2.1.1), two separate AERSURFACE evaluations were used. One on the Mainside southern property boundary, which is a moderately developed area, and another centered within the site property boundary to represent the overall dominantly undeveloped area. The Surface Roughness distance extends to a three-kilometer radius, and the bowen ratio and albedo covers a 10 kilometer by 10 kilometer domain. Aside from 10% of the area being urban on the Mainside, the site is predominantly classified as rural. Refer to Figures 3-1 and 3-2 and Tables 3-5 and 3-6.

Figure 3-1. MCAGCC Twentynine Palms Mainside Land Cover View

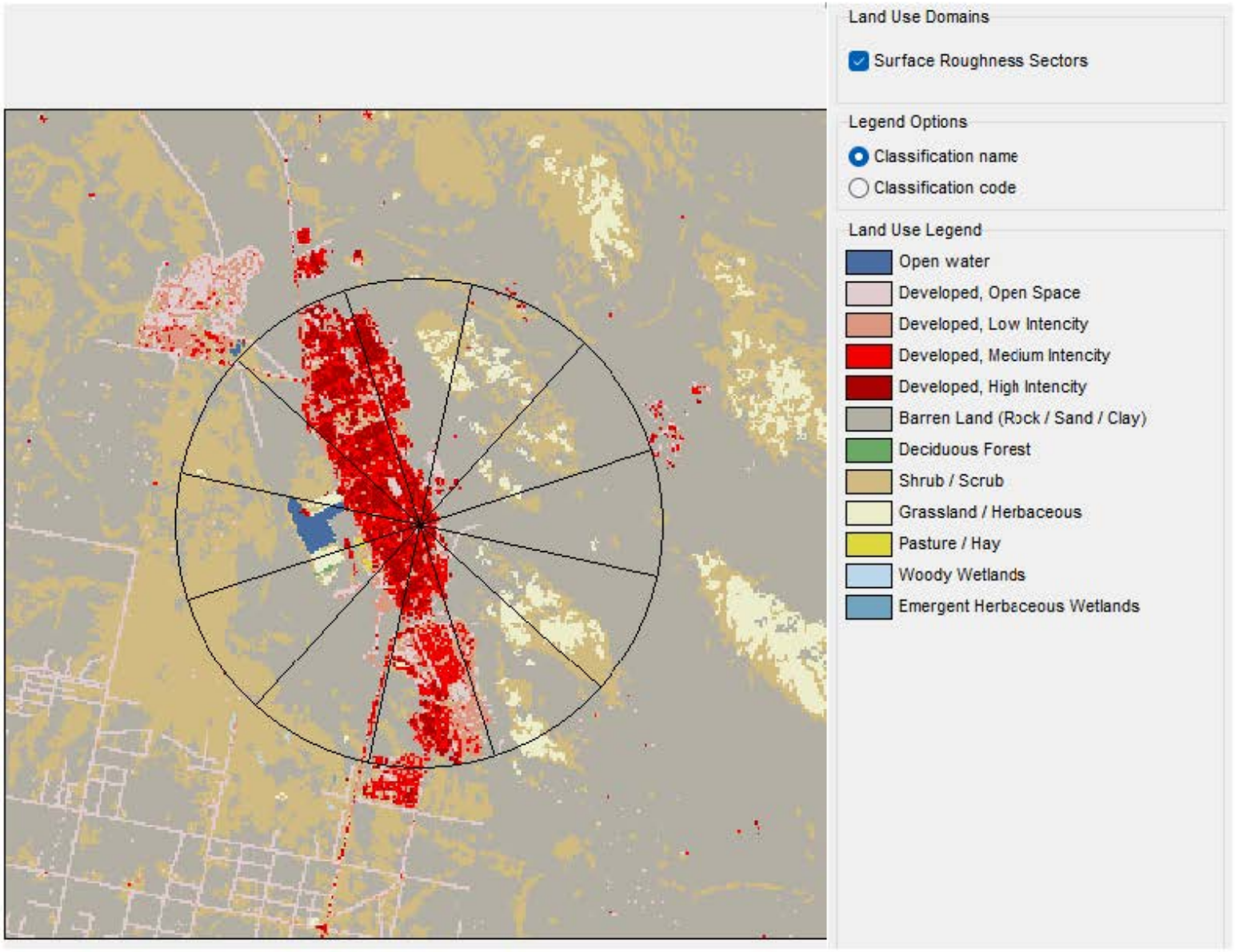


Table 3-5. MCAGCC Twentynine Palms Mainside Land Cover Classification Composition

Land Class Code	Type	Classification Description	Percent
11	Rural	Open Water	0.2
21	Urban	Developed, Open Space	3.8
22	Urban	Developed, Low Intensity	2
23	Urban	Developed, Medium Intensity	2.5
24	Urban	Developed, High Intensity	1.6
31	Rural	Barren Land (Rock/Sand/Clay)	63.2
41	Rural	Deciduous Forest	0.01
52	Rural	Shrub/Scrub	23.4
71	Rural	Grasslands/Herbaceous	3.3
81	Rural	Pasture/Hay	0.02
90	Rural	Woody Wetlands	0.03
95	Rural	Emergent Herbaceous Wetland	0.002
		Urban	9.9
		Rural	90.1

Figure 3-2. MCAGCC Twentynine Palms Land Cover View

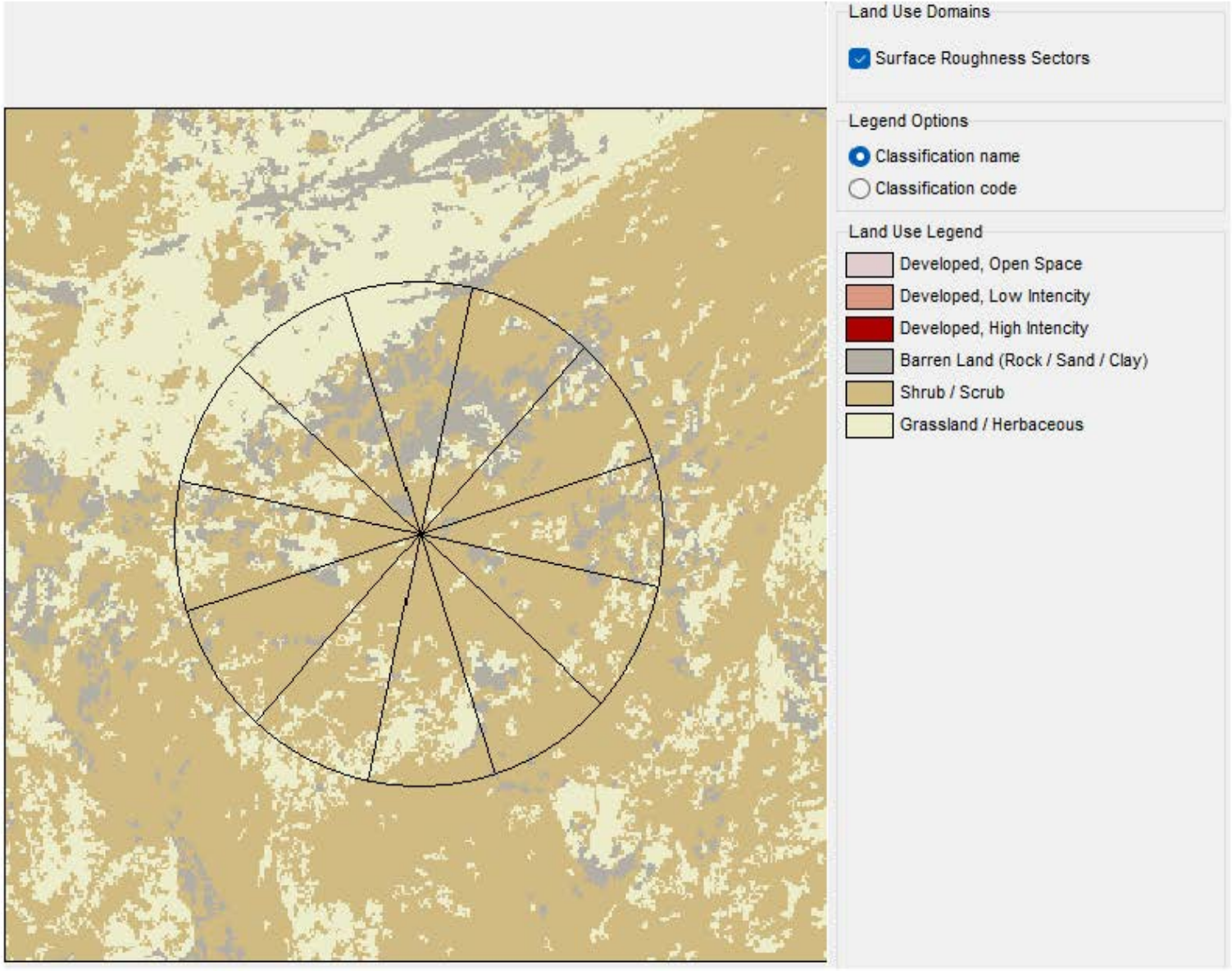


Table 3.6. MCAGCC Twentynine Palms Land Cover Classification Composition

Land Class Code	Type	Classification Description	Percent
31	Rural	Barren Land (Rock/Sand/Clay)	9.8
52	Rural	Shrub/Scrub	61.3
71	Rural	Grasslands/Herbaceous	28.8
		Rural	100

Figure 3-3. Barstow-Daggett Airport Land Cover View

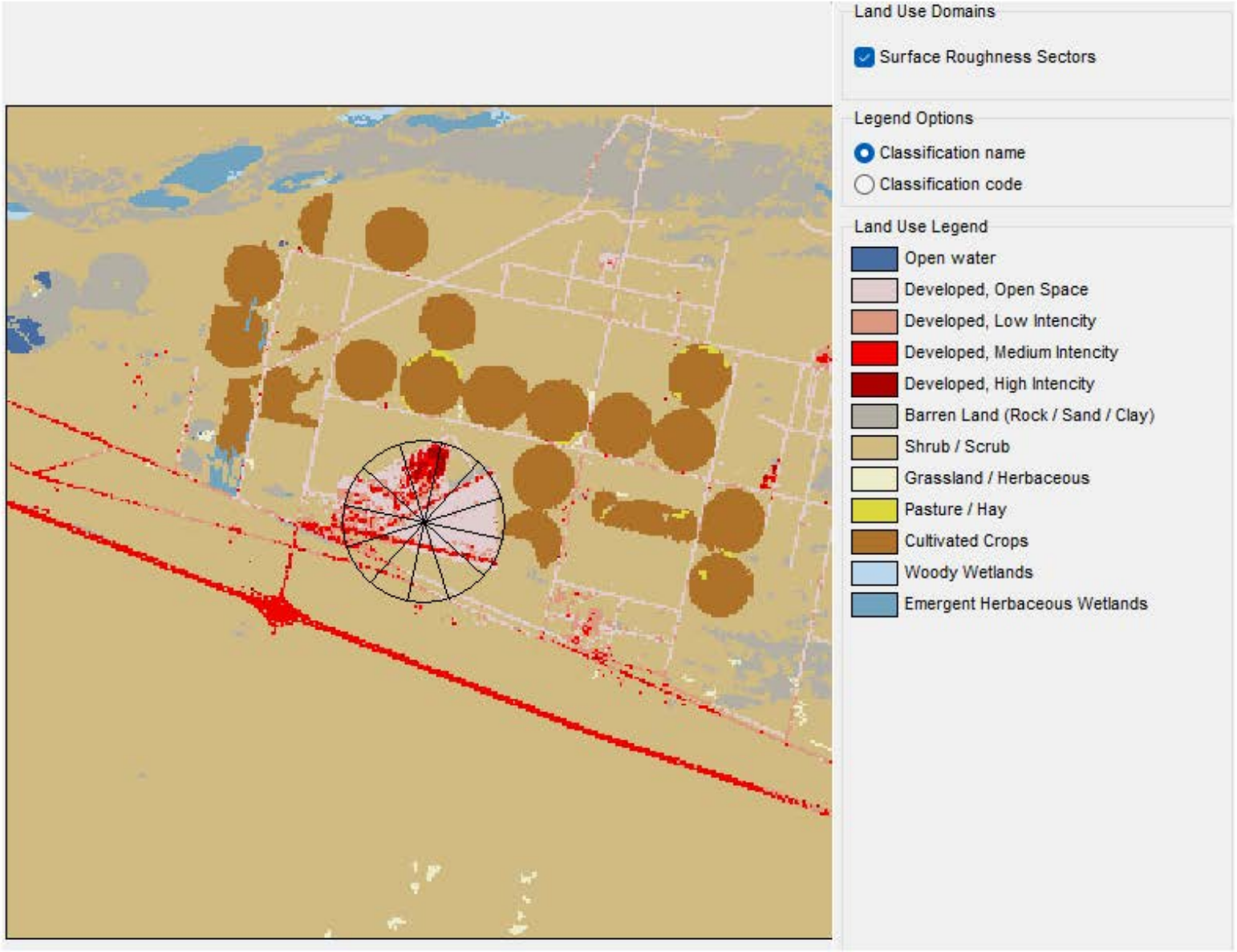


Table 3-7. Barstow-Daggett Airport Land Cover Classification Composition

Land Class Code	Type	Classification Description	Percent
11	Rural	Open Water	0.2
21	Urban	Developed, Open Space	3.4
22	Urban	Developed, Low Intensity	1.5
23	Urban	Developed, Medium Intensity	1.6
24	Urban	Developed, High Intensity	0.1
31	Rural	Barren Land (Rock/Sand/Clay)	8
52	Rural	Shrub/Scrub	75.7
71	Rural	Grasslands/Herbaceous	0.2
81	Rural	Pasture/Hay	0.1
82	Rural	Cultivated Crops	8
90	Rural	Woody Wetlands	0.2
95	Rural	Emergent Herbaceous Wetland	1
		Urban	6.6
		Rural	93.4

Figure 3-4. Blythe Airport Land Cover View

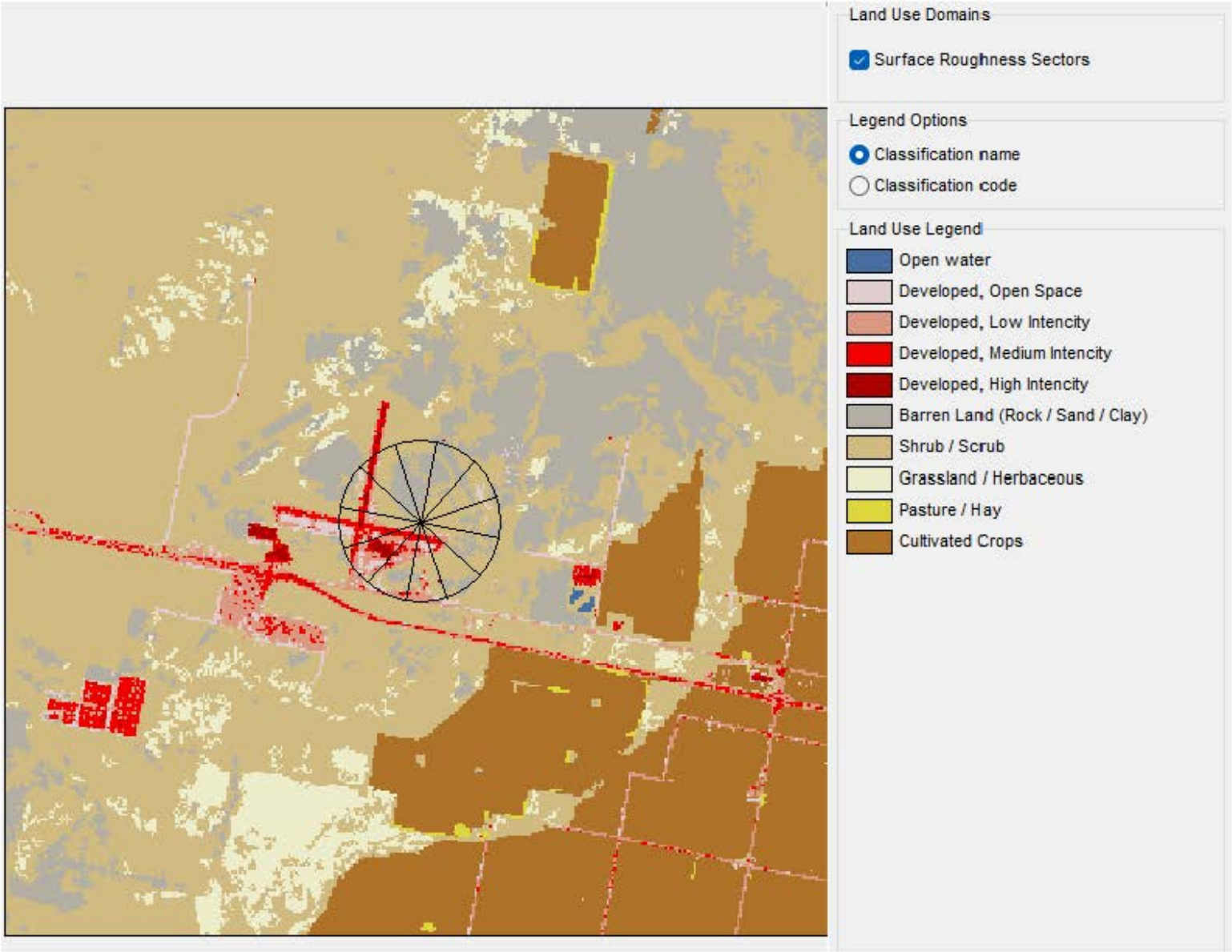


Table 3-8. Blythe Airport Land Cover Classification Composition

Land Class Code	Type	Classification Description	Percent
11	Rural	Open Water	0.04
21	Urban	Developed, Open Space	1.1
22	Urban	Developed, Low Intensity	2.2
23	Urban	Developed, Medium Intensity	1.3
24	Urban	Developed, High Intensity	0.3
31	Rural	Barren Land (Rock/Sand/Clay)	14.8
52	Rural	Shrub/Scrub	53.1
71	Rural	Grasslands/Herbaceous	5.9
81	Rural	Pasture/Hay	0.3
82	Rural	Cultivated Crops	20.9
		Urban	4.9
		Rural	95.1

Figure 3-5. Needles Airport Land Cover View

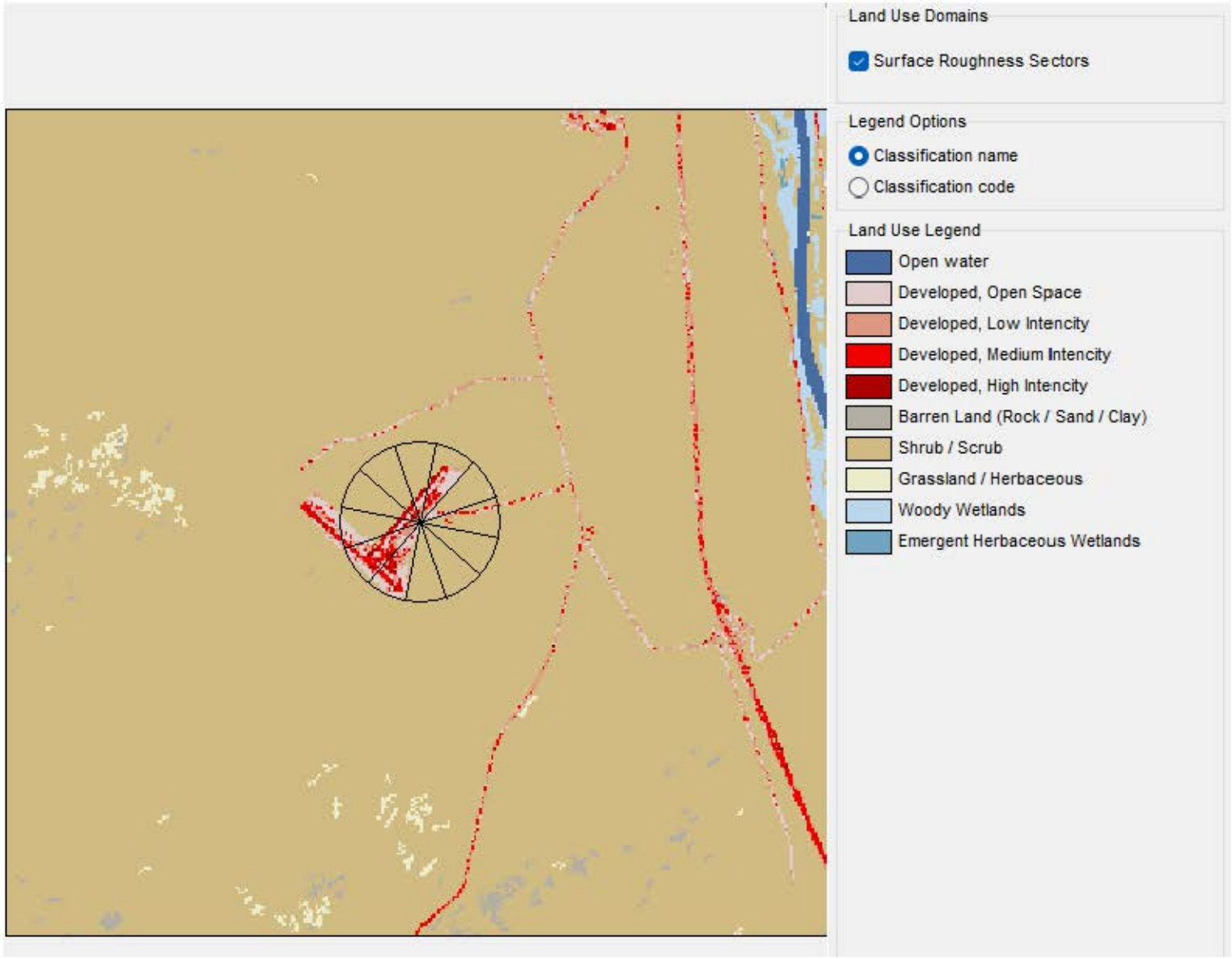


Table 3-9. Needles Airport Land Cover Classification Composition

Land Class Code	Type	Classification Description	Percent
11	Rural	Open Water	0.6
21	Urban	Developed, Open Space	0.9
22	Urban	Developed, Low Intensity	1.2
23	Urban	Developed, Medium Intensity	0.7
24	Urban	Developed, High Intensity	0.1
31	Rural	Barren Land (Rock/Sand/Clay)	0.6
52	Rural	Shrub/Scrub	94.3
71	Rural	Grasslands/Herbaceous	0.7
90	Rural	Woody Wetlands	0.9
		Urban	2.9
		Rural	97.1

Figure 3-6. Barstow-Daggett Airport Wind Rose Plot

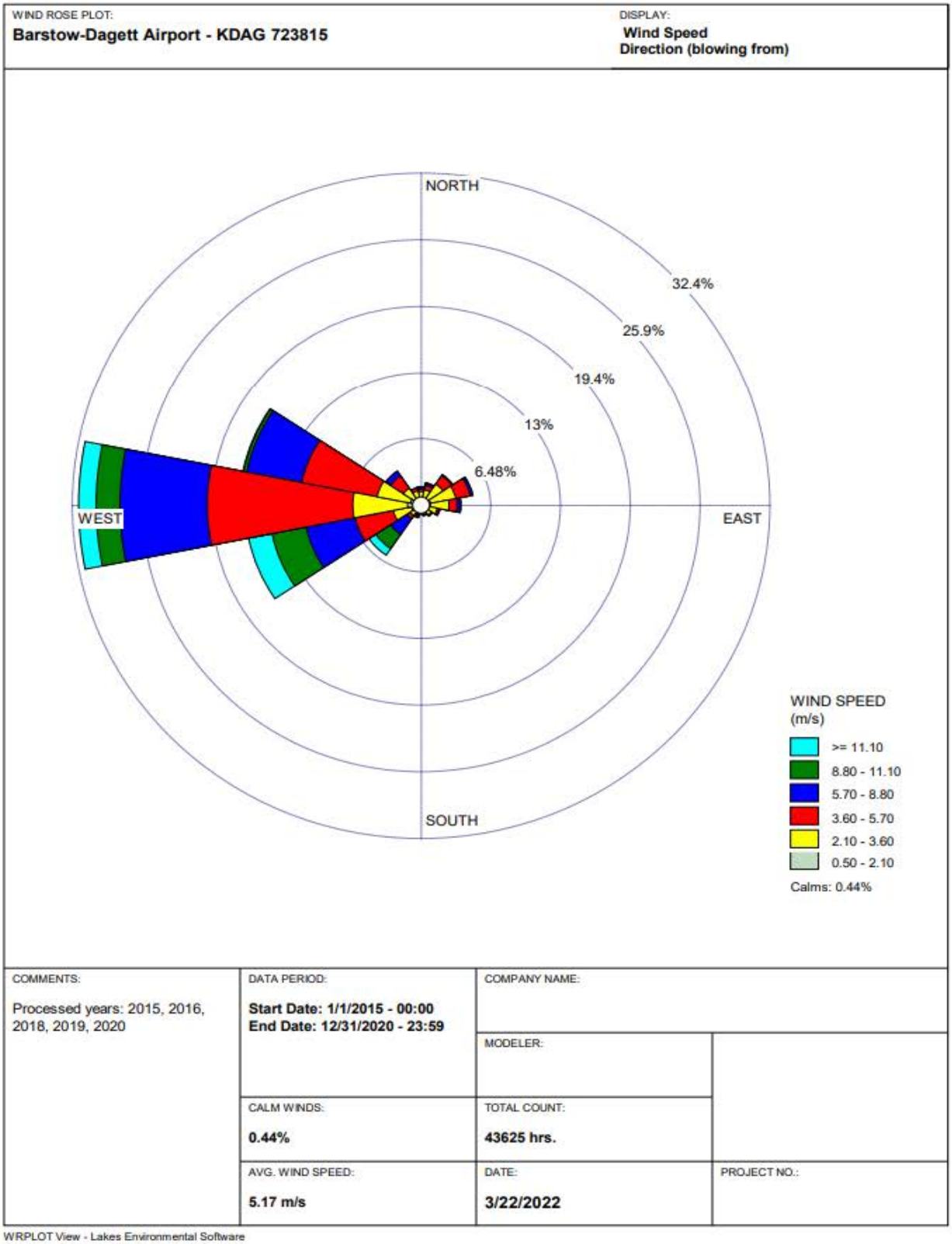


Figure 3-7. Blythe Airport Wind Rose Plot

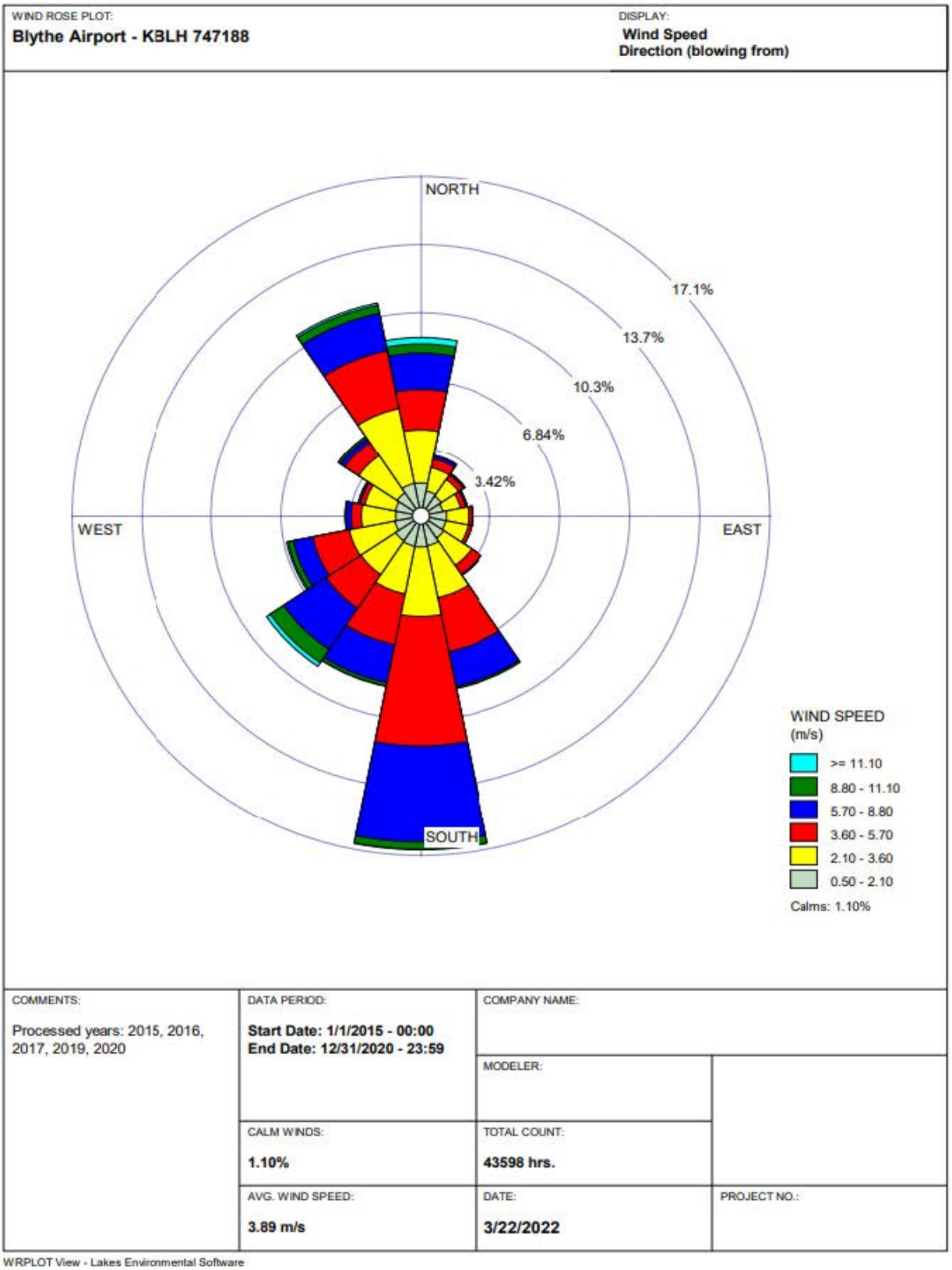
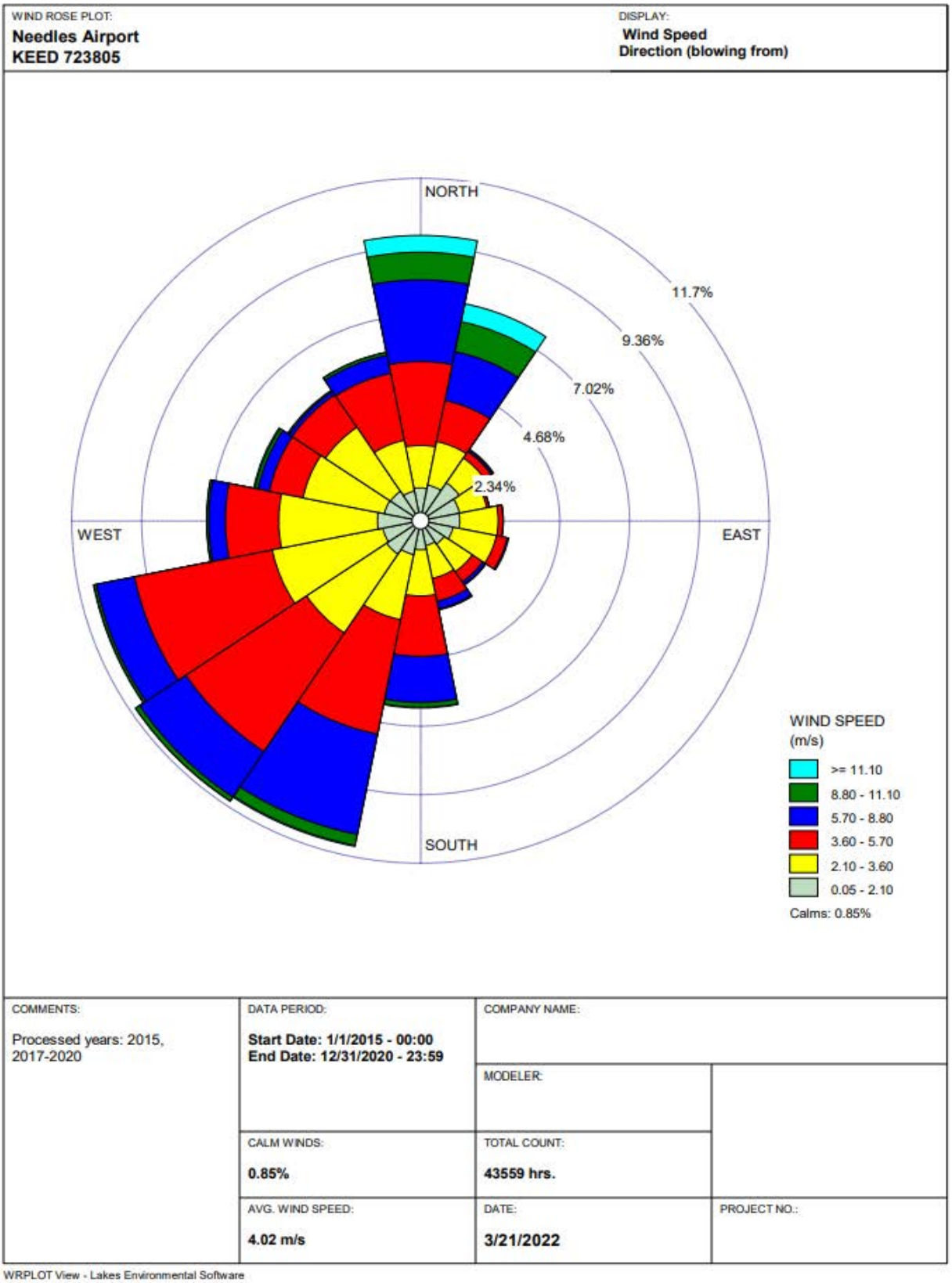


Figure 3-8. Needles Airport Wind Rose Plot



4 AIR QUALITY MODEL SELECTION

The EPA's preferred air quality dispersion model, AERMOD (Appendix A to Appendix W to CFR Part 51) was used to estimate off-property ground-level Pb air concentrations. AERMOD is a steady-state plume model that simulates the dispersion of pollutants in the atmosphere based on meteorological data, the emissions release type, and terrain features.

The AERMOD Regulatory Default options selected include:

- Sequential meteorological data processed with regulatory options in AERMET.
- Use of terrain elevation data from preferred data sources processed through AERMAP.
- Stack-tip downwash for point sources.
- No pollutant half-life or decay options.

The EPA's Support Center for Regulatory Atmospheric Modeling (SCRAM) site lists the Open Burn/Open Detonation Dispersion Model (OBODM) as an alternative to the preferred and recommended models listed in the Guidelines in Appendix W. The OBODM is an older model in comparison to AERMOD, with the most recent User Guide from 1998 by the Strategic Environmental Research and Development (SERDP) Program Office (Report Number DPG-TR-96-008b)[1]. The OBODM uses plume/cloud rise dispersion and deposition algorithms applied from historic models for instantaneous and quasi-continuous sources to predict the downwind transport and dispersion of pollutants released by Open Burn/Open Detonation sources.

There are several limitations to the OBODM for this evaluation. A specified explosive type must be entered. The model is limited to 50 sources, a maximum of 100 X coordinates and 100 Y coordinates, and 100 discrete receptors. For complex terrain, the base elevations above mean sea level (MSL) for the source and receptors must be entered. The OBODM transitional plume/cloud rise algorithms are not used in complex terrain and the final plume/cloud rise apply at all downwind distances. For meteorological data, older ISCST2/3 preprocessed files of up to one year for a single run may be used, otherwise, inputs are based on Pasquill stability categories at 10 meters for wind speed and direction above the surface.

The practical application of the modelling for this evaluation is more suited by AERMOD, considering the number of sources and receptors, distance and downwind dispersion in complex terrain, and the availability of more recent atmospheric station AERMET meteorological data.

4.1 TERRAIN ELEVATION PROCESSING

Complex terrain was processed using AERMAP with United States Geological Survey National Elevation Dataset data with a resolution of 1/3 arc second (10 meters).

4.2 SOURCE RELEASE TYPES

The Pb emissions released from exhaust stacks (point sources) and fugitive releases (volume sources) were modelled with AERMOD (version 23132).

[1] https://apps.dtic.mil/sti/tr/pdf/ADA345376.pdf

- Point Sources (stack height and inside diameter, stack gas exit velocity, release temperature).
- Volume Sources (emissions containing an initial vertical extent plume rise).

The live fire explosive detonations occur throughout the year. Although they are characterized as instantaneous releases, the annual emissions are modelled at a constant rate (g/s) over each day of the month with the daily average aggregated for the monthly averaging period, considering variations in meteorological conditions over time.

The live fire explosives contribute 93% of the total Pb emissions. The explosive plumes are typically 6 to 9 meters for the initial dimensions per video training observation, "Marines Conduct Company Live-Fire Training at Twentynine Palms," (https://www.youtube.com/watch?v=b3IgE8wn0Kg) during event minutes 1:57, 2:30, 3:28, 3:55, and 4:55. Considering the range of explosive dimensions, two separate modeling evaluations were conducted at both 6 and 9 meters. Since the detonations may be upwards of 9 meters in size, the 6 meter volume source modelling may be considered more conservative as a supplemental evaluation to present an alternative maximum impact concentration. The volume surface-based source dimensions followed the EPA AERMOD User's Guide (EPA-454/B-23-008, October 2023, Table 3-3. Summary of Suggested Procedures for Estimating Initial Lateral Dimensions σ_{yo} and Initial Vertical Dimensions σ_{zo} for Volume and Line Sources.)

Table 4-1. Volume Source Dimensions

Source	Release Height (m)	Initial Horizontal Dimension (m)	Initial Vertical Dimension (m)
Live Fire Explosives (6 Meters)	6 / 2 = 3	6 / 4.3 = 1.39	6 / 2.15 = 2.79
Live Fire Explosives (9 Meters)	9 / 2 = 4.5	9 / 4.3 = 2.09	9 / 2.15 = 4.19

The total Pb emissions listed for each of the Ranges (Page 2-4, CY 2019 "Live Fire, Explosives" Pb Emissions By Range, Table 2-2) are broken up into several smaller volume sources within each Range Boundary (Page 2-6, Figure 2-1), like Quackenbush, which is more than 65 square miles, to best account for the large area where munitions can be used and large variation in topography and elevation. The VOL10-VOL139 listed in Table 4-2 below are separate explosives sources for all Ranges with the total emissions rate for each Range being divided by the number of sources within each Range Boundary. For example, the Range Quackenbush, with total Pb emissions of 3.32E-01 tpy, is divided into ten volume sources (VOL_QB_01 - VOL_QB_10) and a modelled emissions rate for each source of 9.56E-04 g/s. The proposed sources are provided in the included electronic files.

Table 4-2. Modelled Sources and Emissions Rates

Type	ID	Description	Pb (tpy)	Pb (lbs/yr)	Pb (lbs/hr)	Emissions Rate (g/s)
POINT	STCK16	B000955	2.32E-06	4.64E-03	5.30E-07	6.68E-08
POINT	S026	B003238	8.92E-07	1.78E-03	2.04E-07	2.57E-08
POINT	STCK24	B009055	8.09E-07	1.62E-03	1.85E-07	2.33E-08
POINT	S040	B009746	2.93E-08	5.86E-05	6.69E-09	8.44E-10
POINT	STCK32	B010497, #1	1.82E-06	3.64E-03	4.16E-07	5.24E-08

Table 4-2. Modelled Sources and Emissions Rates

Type	ID	Description	Pb (tpy)	Pb (lbs/yr)	Pb (lbs/hr)	Emissions Rate (g/s)
POINT	STCK40	B010497, #2	1.82E-06	3.64E-03	4.16E-07	5.24E-08
POINT	STCK33	B010498	5.52E-08	1.10E-04	1.26E-08	1.59E-09
VOLUME	VOL3	B010993	1.19E-07	2.38E-04	2.72E-08	3.43E-09
VOLUME	VOL4	B010994	1.19E-07	2.38E-04	2.72E-08	3.43E-09
VOLUME	VOL5	B010995	1.19E-07	2.38E-04	2.72E-08	3.43E-09
POINT	STCK26	B011149	1.01E-04	2.02E-01	2.31E-05	2.91E-06
POINT	S063	B011150	1.02E-05	2.04E-02	2.33E-06	2.94E-07
POINT	STCK19	B011171	5.58E-06	1.12E-02	1.27E-06	1.61E-07
POINT	STCK20	B011172	5.58E-06	1.12E-02	1.27E-06	1.61E-07
POINT	S038	B011795	2.32E-06	4.64E-03	5.30E-07	6.68E-08
POINT	STCK5	B012211	3.86E-06	7.72E-03	8.81E-07	1.11E-07
POINT	STCK11	B012215	1.61E-06	3.22E-03	3.68E-07	4.64E-08
POINT	S052	B012318	8.98E-09	1.80E-05	2.05E-09	2.59E-10
POINT	S053	B012346	2.35E-06	4.70E-03	5.37E-07	6.77E-08
POINT	S082	B012442	4.94E-07	9.88E-04	1.13E-07	1.42E-08
POINT	S083	B012495	6.43E-07	1.29E-03	1.47E-07	1.85E-08
POINT	S065	B012706	2.00E-06	4.00E-03	4.57E-07	5.76E-08
POINT	STCK2	B013074	2.39E-06	4.78E-03	5.46E-07	6.88E-08
POINT	STCK9	B013075	1.97E-06	3.94E-03	4.50E-07	5.67E-08
POINT	STCK4	B013076	3.56E-06	7.12E-03	8.13E-07	1.03E-07
POINT	STCK10	B013077	2.35E-06	4.70E-03	5.37E-07	6.77E-08
VOLUME	VOL140	B013450	2.29E-09	4.58E-06	5.23E-10	6.59E-11
POINT	STCK39	B013500, #2	5.29E-06	1.06E-02	1.21E-06	1.52E-07
POINT	STCK38	B013503, #1	1.14E-06	2.28E-03	2.60E-07	3.28E-08
POINT	S014	E004791	1.20E-06	2.40E-03	2.74E-07	3.46E-08
POINT	STCK41	E007880	7.39E-06	1.48E-02	1.69E-06	2.13E-07
POINT	S044	E007881	2.44E-06	4.88E-03	5.57E-07	7.03E-08
POINT	S045	E007882	7.19E-06	1.44E-02	1.64E-06	2.07E-07
POINT	S050	E007902	9.78E-07	1.96E-03	2.23E-07	2.82E-08
POINT	STCK7	E008301	3.29E-07	6.58E-04	7.51E-08	9.47E-09
POINT	S033	E008302	1.61E-06	3.22E-03	3.68E-07	4.64E-08
POINT	S019	E008303	1.44E-07	2.88E-04	3.29E-08	4.15E-09
POINT	S024	E008304	1.44E-07	2.88E-04	3.29E-08	4.15E-09
POINT	S042	E008306	2.45E-06	4.90E-03	5.59E-07	7.05E-08
POINT	STCK1	E008363	3.67E-07	7.34E-04	8.38E-08	1.06E-08
POINT	STCK3	E008364	3.98E-07	7.96E-04	9.09E-08	1.15E-08
POINT	STCK6	E008366	1.66E-06	3.32E-03	3.79E-07	4.78E-08
VOLUME	VOL2	E008455	3.58E-06	7.16E-03	8.17E-07	1.03E-07
POINT	S032	E008721	1.25E-07	2.50E-04	2.85E-08	3.60E-09
POINT	S036	E008747	2.47E-06	4.94E-03	5.64E-07	7.11E-08
POINT	S004	E008864	5.24E-07	1.05E-03	1.20E-07	1.51E-08
POINT	S034	E008865	1.21E-06	2.42E-03	2.76E-07	3.48E-08
POINT	S006	E009197	4.76E-07	9.52E-04	1.09E-07	1.37E-08
POINT	S010	E009228	2.02E-07	4.04E-04	4.61E-08	5.82E-09
POINT	S011	E009229	4.91E-07	9.82E-04	1.12E-07	1.41E-08

Table 4-2. Modelled Sources and Emissions Rates

Type	ID	Description	Pb (tpy)	Pb (lbs/yr)	Pb (lbs/hr)	Emissions Rate (g/s)
POINT	STCK45	E009230	1.22E-09	2.44E-06	2.79E-10	3.51E-11
POINT	S013	E009374	1.91E-06	3.82E-03	4.36E-07	5.50E-08
POINT	S022	E009418	3.29E-06	6.58E-03	7.51E-07	9.47E-08
POINT	S056	E009830	6.75E-07	1.35E-03	1.54E-07	1.94E-08
POINT	STCK31	E009928	7.83E-07	1.57E-03	1.79E-07	2.25E-08
POINT	STCK42	E010069	2.49E-06	4.98E-03	5.68E-07	7.17E-08
POINT	S047	E010769	8.03E-07	1.61E-03	1.83E-07	2.31E-08
POINT	S017	E010770	4.02E-07	8.04E-04	9.18E-08	1.16E-08
POINT	S035	E010771	3.40E-07	6.80E-04	7.76E-08	9.79E-09
POINT	S016	E010772	5.76E-07	1.15E-03	1.32E-07	1.66E-08
POINT	S009	E010773	1.05E-07	2.10E-04	2.40E-08	3.02E-09
POINT	STCK14	E011145	1.73E-06	3.46E-03	3.95E-07	4.98E-08
POINT	STCK29	E011168	5.85E-06	1.17E-02	1.34E-06	1.68E-07
POINT	STCK27	E011214	9.38E-07	1.88E-03	2.14E-07	2.70E-08
POINT	STCK28	E011215	1.77E-05	3.54E-02	4.04E-06	5.10E-07
POINT	S005	E011292	2.02E-06	4.04E-03	4.61E-07	5.82E-08
POINT	STCK30	E011427	5.48E-07	1.10E-03	1.25E-07	1.58E-08
POINT	S020	E011446	2.80E-07	5.60E-04	6.39E-08	8.06E-09
POINT	STCK15	E011951	1.59E-05	3.18E-02	3.63E-06	4.58E-07
POINT	STCK12	E011973	3.92E-06	7.84E-03	8.95E-07	1.13E-07
POINT	STCK8	E012073	3.77E-07	7.54E-04	8.61E-08	1.09E-08
POINT	S037	E012074	2.11E-06	4.22E-03	4.82E-07	6.08E-08
POINT	STCK34	E012424	4.45E-07	8.90E-04	1.02E-07	1.28E-08
POINT	S028	E012425	2.89E-06	5.78E-03	6.60E-07	8.32E-08
POINT	S029	E012426	3.65E-06	7.30E-03	8.33E-07	1.05E-07
POINT	S030	E012427	3.43E-06	6.86E-03	7.83E-07	9.88E-08
POINT	STCK43	E012623	7.11E-07	1.42E-03	1.62E-07	2.05E-08
POINT	STCK35	Exempt00	1.09E-05	2.18E-02	2.49E-06	3.14E-07
POINT	STCK36	Exempt2	9.39E-07	1.88E-03	2.14E-07	2.70E-08
VOLUME	VOL6	Exempt26	1.13E-05	2.26E-02	2.58E-06	3.25E-07
POINT	STCK44	Exempt30 - Tactical Support Equipment, JP8	7.52E-04	1.50E+00	1.72E-04	2.17E-05
VOLUME	VOL141	Exempt5 - 1.0% of usage	4.05E-09	8.10E-06	9.25E-10	1.17E-10
VOLUME	VOL7	Exempt5 - 28.2% of usage	1.14E-07	2.28E-04	2.61E-08	3.29E-09
VOLUME	VOL142	Exempt5 - 70.7% of usage	2.86E-07	5.73E-04	6.54E-08	8.24E-09
VOLUME	VOL143	Exempt59 - Tactical Vehicles, JP8	5.32E-02	1.06E+02	1.21E-02	1.53E-03
VOLUME	VOL8	Exempt6	1.23E-07	2.46E-04	2.81E-08	3.54E-09
VOLUME	VOL9	Exempt65	2.25E-05	4.50E-02	5.14E-06	6.48E-07
POINT	STCK37	Exempt97	4.51E-06	9.02E-03	1.03E-06	1.30E-07
POINT	S046	Exempt98	1.82E-07	3.64E-04	4.16E-08	5.24E-09
POINT	S049	Exempt99	1.54E-05	3.08E-02	3.52E-06	4.43E-07
POINT	S027	M003239	8.92E-07	1.78E-03	2.04E-07	2.57E-08
POINT	STCK17	M011794	2.32E-06	4.64E-03	5.30E-07	6.68E-08
VOLUME	VOL77	VOL_AM_01	1.75E-03	3.50E+00	4.00E-04	5.04E-05

Table 4-2. Modelled Sources and Emissions Rates

Type	ID	Description	Pb (tpy)	Pb (lbs/yr)	Pb (lbs/hr)	Emissions Rate (g/s)
VOLUME	VOL78	VOL_AM_02	1.75E-03	3.50E+00	4.00E-04	5.04E-05
VOLUME	VOL79	VOL_AM_03	1.75E-03	3.50E+00	4.00E-04	5.04E-05
VOLUME	VOL80	VOL_AM_04	1.75E-03	3.50E+00	4.00E-04	5.04E-05
VOLUME	VOL81	VOL_AM_05	1.75E-03	3.50E+00	4.00E-04	5.04E-05
VOLUME	VOL48	VOL_BL_01	4.14E-03	8.28E+00	9.45E-04	1.19E-04
VOLUME	VOL49	VOL_BL_02	4.14E-03	8.28E+00	9.45E-04	1.19E-04
VOLUME	VOL50	VOL_BL_03	4.14E-03	8.28E+00	9.45E-04	1.19E-04
VOLUME	VOL51	VOL_BL_04	4.14E-03	8.28E+00	9.45E-04	1.19E-04
VOLUME	VOL52	VOL_BL_05	4.14E-03	8.28E+00	9.45E-04	1.19E-04
VOLUME	VOL43	VOL_DE_01	5.24E-03	1.05E+01	1.20E-03	1.51E-04
VOLUME	VOL44	VOL_DE_02	5.24E-03	1.05E+01	1.20E-03	1.51E-04
VOLUME	VOL45	VOL_DE_03	5.24E-03	1.05E+01	1.20E-03	1.51E-04
VOLUME	VOL46	VOL_DE_04	5.24E-03	1.05E+01	1.20E-03	1.51E-04
VOLUME	VOL47	VOL_DE_05	5.24E-03	1.05E+01	1.20E-03	1.51E-04
VOLUME	VOL129	VOL_EL_01	1.20E-04	2.39E-01	2.73E-05	3.44E-06
VOLUME	VOL130	VOL_EL_02	1.20E-04	2.39E-01	2.73E-05	3.44E-06
VOLUME	VOL131	VOL_EL_03	1.20E-04	2.39E-01	2.73E-05	3.44E-06
VOLUME	VOL132	VOL_EL_04	1.20E-04	2.39E-01	2.73E-05	3.44E-06
VOLUME	VOL133	VOL_EL_05	1.20E-04	2.39E-01	2.73E-05	3.44E-06
VOLUME	VOL33	VOL_GP_01	5.78E-03	1.16E+01	1.32E-03	1.66E-04
VOLUME	VOL34	VOL_GP_02	5.78E-03	1.16E+01	1.32E-03	1.66E-04
VOLUME	VOL35	VOL_GP_03	5.78E-03	1.16E+01	1.32E-03	1.66E-04
VOLUME	VOL36	VOL_GP_04	5.78E-03	1.16E+01	1.32E-03	1.66E-04
VOLUME	VOL37	VOL_GP_05	5.78E-03	1.16E+01	1.32E-03	1.66E-04
VOLUME	VOL28	VOL_LA_01	9.24E-04	1.85E+00	2.11E-04	2.66E-05
VOLUME	VOL29	VOL_LA_02	9.24E-04	1.85E+00	2.11E-04	2.66E-05
VOLUME	VOL30	VOL_LA_03	9.24E-04	1.85E+00	2.11E-04	2.66E-05
VOLUME	VOL31	VOL_LA_04	9.24E-04	1.85E+00	2.11E-04	2.66E-05
VOLUME	VOL32	VOL_LA_05	9.24E-04	1.85E+00	2.11E-04	2.66E-05
VOLUME	VOL38	VOL_LL_01	8.74E-03	1.75E+01	2.00E-03	2.52E-04
VOLUME	VOL39	VOL_LL_02	8.74E-03	1.75E+01	2.00E-03	2.52E-04
VOLUME	VOL40	VOL_LL_03	8.74E-03	1.75E+01	2.00E-03	2.52E-04
VOLUME	VOL41	VOL_LL_04	8.74E-03	1.75E+01	2.00E-03	2.52E-04
VOLUME	VOL42	VOL_LL_05	8.74E-03	1.75E+01	2.00E-03	2.52E-04
VOLUME	VOL58	VOL_LM_01	2.58E-03	5.16E+00	5.89E-04	7.43E-05
VOLUME	VOL59	VOL_LM_02	2.58E-03	5.16E+00	5.89E-04	7.43E-05
VOLUME	VOL60	VOL_LM_03	2.58E-03	5.16E+00	5.89E-04	7.43E-05
VOLUME	VOL61	VOL_LM_04	2.58E-03	5.16E+00	5.89E-04	7.43E-05
VOLUME	VOL62	VOL_LM_05	2.58E-03	5.16E+00	5.89E-04	7.43E-05
VOLUME	VOL99	VOL_MM_01	2.50E-03	5.00E+00	5.71E-04	7.20E-05
VOLUME	VOL100	VOL_MM_02	5.00E-04	1.00E+00	1.14E-04	1.44E-05
VOLUME	VOL101	VOL_MM_03	5.00E-04	1.00E+00	1.14E-04	1.44E-05
VOLUME	VOL102	VOL_MM_04	5.00E-04	1.00E+00	1.14E-04	1.44E-05
VOLUME	VOL103	VOL_MM_05	5.00E-04	1.00E+00	1.14E-04	1.44E-05
VOLUME	VOL113	VOL_MTU_R1A_01	6.70E-04	1.34E+00	1.53E-04	1.93E-05

Table 4-2. Modelled Sources and Emissions Rates

Type	ID	Description	Pb (tpy)	Pb (lbs/yr)	Pb (lbs/hr)	Emissions Rate (g/s)
VOLUME	VOL114	VOL_MTU_R1A_02	6.70E-04	1.34E+00	1.53E-04	1.93E-05
VOLUME	VOL115	VOL_MTU_R1A_03	6.70E-04	1.34E+00	1.53E-04	1.93E-05
VOLUME	VOL63	VOL_MW_01	2.56E-03	5.12E+00	5.84E-04	7.37E-05
VOLUME	VOL64	VOL_MW_02	2.56E-03	5.12E+00	5.84E-04	7.37E-05
VOLUME	VOL65	VOL_MW_03	2.56E-03	5.12E+00	5.84E-04	7.37E-05
VOLUME	VOL66	VOL_MW_04	2.56E-03	5.12E+00	5.84E-04	7.37E-05
VOLUME	VOL67	VOL_MW_05	2.56E-03	5.12E+00	5.84E-04	7.37E-05
VOLUME	VOL20	VOL_NP_01	1.39E-02	2.78E+01	3.17E-03	3.99E-04
VOLUME	VOL21	VOL_NP_02	1.39E-02	2.78E+01	3.17E-03	3.99E-04
VOLUME	VOL22	VOL_NP_03	1.39E-02	2.78E+01	3.17E-03	3.99E-04
VOLUME	VOL23	VOL_NP_04	1.39E-02	2.78E+01	3.17E-03	3.99E-04
VOLUME	VOL24	VOL_NP_05	1.39E-02	2.78E+01	3.17E-03	3.99E-04
VOLUME	VOL25	VOL_NP_06	1.39E-02	2.78E+01	3.17E-03	3.99E-04
VOLUME	VOL26	VOL_NP_07	1.39E-02	2.78E+01	3.17E-03	3.99E-04
VOLUME	VOL27	VOL_NP_08	1.39E-02	2.78E+01	3.17E-03	3.99E-04
VOLUME	VOL54	VOL_PR_01	3.94E-03	7.88E+00	9.00E-04	1.13E-04
VOLUME	VOL53	VOL_PR_02	3.94E-03	7.88E+00	9.00E-04	1.13E-04
VOLUME	VOL55	VOL_PR_03	3.94E-03	7.88E+00	9.00E-04	1.13E-04
VOLUME	VOL56	VOL_PR_04	3.94E-03	7.88E+00	9.00E-04	1.13E-04
VOLUME	VOL57	VOL_PR_05	3.94E-03	7.88E+00	9.00E-04	1.13E-04
VOLUME	VOL10	VOL_QB_01	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL11	VOL_QB_02	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL12	VOL_QB_03	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL13	VOL_QB_04	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL14	VOL_QB_05	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL15	VOL_QB_06	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL16	VOL_QB_07	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL17	VOL_QB_08	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL18	VOL_QB_09	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL19	VOL_QB_10	3.32E-02	6.64E+01	7.58E-03	9.56E-04
VOLUME	VOL116	VOL_R-051_01	5.63E-04	1.13E+00	1.29E-04	1.62E-05
VOLUME	VOL117	VOL_R-051_02	5.63E-04	1.13E+00	1.29E-04	1.62E-05
VOLUME	VOL118	VOL_R-051_03	5.63E-04	1.13E+00	1.29E-04	1.62E-05
VOLUME	VOL123	VOL_R-101_01	2.54E-04	5.08E-01	5.80E-05	7.31E-06
VOLUME	VOL124	VOL_R-101_02	2.54E-04	5.08E-01	5.80E-05	7.31E-06
VOLUME	VOL125	VOL_R-101_03	2.54E-04	5.08E-01	5.80E-05	7.31E-06
VOLUME	VOL134	VOL_R-105A_01	1.81E-04	3.63E-01	4.14E-05	5.22E-06
VOLUME	VOL135	VOL_R-105A_02	1.81E-04	3.63E-01	4.14E-05	5.22E-06
VOLUME	VOL136	VOL_R-105A_03	1.81E-04	3.63E-01	4.14E-05	5.22E-06
VOLUME	VOL96	VOL_R-106_01	1.02E-03	2.03E+00	2.32E-04	2.93E-05
VOLUME	VOL97	VOL_R-106_02	1.02E-03	2.03E+00	2.32E-04	2.93E-05
VOLUME	VOL98	VOL_R-106_03	1.02E-03	2.03E+00	2.32E-04	2.93E-05
VOLUME	VOL85	VOL_R-106A_01	6.36E-03	1.27E+01	1.45E-03	1.83E-04
VOLUME	VOL126	VOL_R-108_01	1.99E-04	3.99E-01	4.55E-05	5.74E-06
VOLUME	VOL127	VOL_R-108_02	1.99E-04	3.99E-01	4.55E-05	5.74E-06

Table 4-2. Modelled Sources and Emissions Rates

Type	ID	Description	Pb (tpy)	Pb (lbs/yr)	Pb (lbs/hr)	Emissions Rate (g/s)
VOLUME	VOL128	VOL_R-108_03	1.99E-04	3.99E-01	4.55E-05	5.74E-06
VOLUME	VOL93	VOL_R-109_01	1.09E-03	2.17E+00	2.48E-04	3.13E-05
VOLUME	VOL94	VOL_R-109_02	1.09E-03	2.17E+00	2.48E-04	3.13E-05
VOLUME	VOL95	VOL_R-109_03	1.09E-03	2.17E+00	2.48E-04	3.13E-05
VOLUME	VOL82	VOL_R-110_01	2.68E-03	5.37E+00	6.13E-04	7.73E-05
VOLUME	VOL83	VOL_R-110_02	2.68E-03	5.37E+00	6.13E-04	7.73E-05
VOLUME	VOL84	VOL_R-110_03	2.68E-03	5.37E+00	6.13E-04	7.73E-05
VOLUME	VOL137	VOL_R-112_01	1.81E-04	3.63E-01	4.14E-05	5.22E-06
VOLUME	VOL138	VOL_R-112_02	1.81E-04	3.63E-01	4.14E-05	5.22E-06
VOLUME	VOL139	VOL_R-112_03	1.81E-04	3.63E-01	4.14E-05	5.22E-06
VOLUME	VOL90	VOL_R-113_01	1.23E-03	2.47E+00	2.82E-04	3.55E-05
VOLUME	VOL91	VOL_R-113_02	1.23E-03	2.47E+00	2.82E-04	3.55E-05
VOLUME	VOL92	VOL_R-113_03	1.23E-03	2.47E+00	2.82E-04	3.55E-05
VOLUME	VOL104	VOL_R-114_01	8.17E-04	1.63E+00	1.86E-04	2.35E-05
VOLUME	VOL105	VOL_R-114_02	8.17E-04	1.63E+00	1.86E-04	2.35E-05
VOLUME	VOL106	VOL_R-114_03	8.17E-04	1.63E+00	1.86E-04	2.35E-05
VOLUME	VOL86	VOL_R-210_01	4.57E-03	9.14E+00	1.04E-03	1.32E-04
VOLUME	VOL119	VOL_R-230_01	1.14E-03	2.28E+00	2.60E-04	3.28E-05
VOLUME	VOL71	VOL_R-400_01	3.14E-03	6.27E+00	7.16E-04	9.03E-05
VOLUME	VOL72	VOL_R-400_02	3.14E-03	6.27E+00	7.16E-04	9.03E-05
VOLUME	VOL73	VOL_R-400_03	3.14E-03	6.27E+00	7.16E-04	9.03E-05
VOLUME	VOL121	VOL_R-410_01	4.35E-04	8.70E-01	9.93E-05	1.25E-05
VOLUME	VOL122	VOL_R-410_02	4.35E-04	8.70E-01	9.93E-05	1.25E-05
VOLUME	VOL74	VOL_R-410A_01	3.10E-03	6.20E+00	7.08E-04	8.93E-05
VOLUME	VOL75	VOL_R-410A_02	3.10E-03	6.20E+00	7.08E-04	8.93E-05
VOLUME	VOL76	VOL_R-410A_03	3.10E-03	6.20E+00	7.08E-04	8.93E-05
VOLUME	VOL68	VOL_R-500_01	4.23E-03	8.47E+00	9.67E-04	1.22E-04
VOLUME	VOL69	VOL_R-500_02	4.23E-03	8.47E+00	9.67E-04	1.22E-04
VOLUME	VOL70	VOL_R-500_03	4.23E-03	8.47E+00	9.67E-04	1.22E-04
VOLUME	VOL108	VOL_RC_01	4.24E-04	8.48E-01	9.68E-05	1.22E-05
VOLUME	VOL109	VOL_RC_02	4.24E-04	8.48E-01	9.68E-05	1.22E-05
VOLUME	VOL110	VOL_RC_03	4.24E-04	8.48E-01	9.68E-05	1.22E-05
VOLUME	VOL111	VOL_RC_04	4.24E-04	8.48E-01	9.68E-05	1.22E-05
VOLUME	VOL112	VOL_RC_05	4.24E-04	8.48E-01	9.68E-05	1.22E-05
VOLUME	VOL87	VOL_R-MTU_R1_01	1.50E-03	3.01E+00	3.43E-04	4.33E-05
VOLUME	VOL88	VOL_R-MTU_R1_02	1.50E-03	3.01E+00	3.43E-04	4.33E-05
VOLUME	VOL89	VOL_R-MTU_R1_03	1.50E-03	3.01E+00	3.43E-04	4.33E-05
VOLUME	VOL107	VOL_R-MTU_R2_01	2.18E-03	4.36E+00	4.98E-04	6.28E-05
VOLUME	VOL120	VOL_R-MTU_R3A_01	9.25E-04	1.85E+00	2.11E-04	2.66E-05

4.3 BUILDING DOWNWASH

The Building Profile Input Program was used to provide building downwash input to AERMOD following the EPA "Guideline For Determination Of Good Engineering Practice Stack Height (Technical Support Document For The Stack Height Regulations" (06/01/1985, EPA-450/4-80-023R).

4.4 UNIVERSAL TRANSVERSE MERCATOR (UTM) COORDINATE SYSTEM

The Datum World Geodetic System 1984 (WGS84), UTM Zone 11.

4.5 RECEPTOR ARRAY

A Cartesian Grid was sufficiently dense in resolution to identify the maximum off-property impacts including the fence line. Due to the large perimeter, which is approximately 200 miles, an initial coarse grid spacing of 500 meters was used along the fence line and 1000-meter spacing for the site domain. After the initial modeling run, a refined grid was evaluated, consisting of 100-meter spacing along the fence line and 500-meter spacing outside of the site boundary from where the primary emission sources are located including those nearer to the fence line. A supplemental evaluation, conservatively assuming all explosive detonations were within 6 meters for the initial volume source dimensions, applied a fence line grid of 100-meter resolution out to a distance of 500 meters.

- Coarse Grid (Detonations 9 Meters) – 500 meter fence line spacing and 1000 meter spacing for the site domain.
- Fine Grid (Detonations 9 Meters) – 100 meter fence line spacing and 500 meter spacing beyond the site boundary where the sources are located including those closer to the fence line and where the highest concentrations were identified as noted in EPA's comments [Tsui, W.G.(2024) E-mail to Jorge Rodriguez, 01 May].
- Fine Grid (Detonations 6 Meters) – 100 meter fence line grid resolution out to a distance of 500 meters.

4.6 MONITORING SITE BACKGROUND CONCENTRATION

Ambient background Pb concentrations (ug/m3) at local conditions (local temperature and pressure, LC) were obtained from the EPA Air Quality System (AQS). The nearest locations, summarized in Table 4-3, are San Bernardino and Rubidoux, approximately 55 and 65 miles southwest of the Facility, respectively. The Daily Mean Pb Concentrations listed as "0" (3.3% of San Bernardino and 2.0% of the Rubidoux site total population of concentration samples collected from 2015-2020) were removed from the calculated monthly average. The maximum 3-Month Moving Average equal to 0.011 ug/m3, within the 5 years of monitoring data, occurred at the San Bernardino site in November 2019. Refer to Table 4-4 and 4-5 for a summary of Pb monitoring site background concentrations from San Bernardino and Rubidoux, respectively.

Table 4-3. EPA AQS Pb Concentration (ug/m3) Monitoring Stations

Station Name	Site ID	County	Latitude	Longitude	Data Frequency

San Bernardino [1]	60719004	San Bernardino	34.106678	-117.274063	Daily Mean (6 Day Intervals)
Rubidoux [2]	60658001	Riverside	33.99958	-117.41601	Daily Mean (6 Day Intervals)

Source: https://www.epa.gov/outdoor-air-quality-data
[1] Area Wide Site
[2] National Core (NCore) Site
Note: AQS Data Sites Urban Influence

Figure 4-1. EPA AQS Monitoring Site Locations

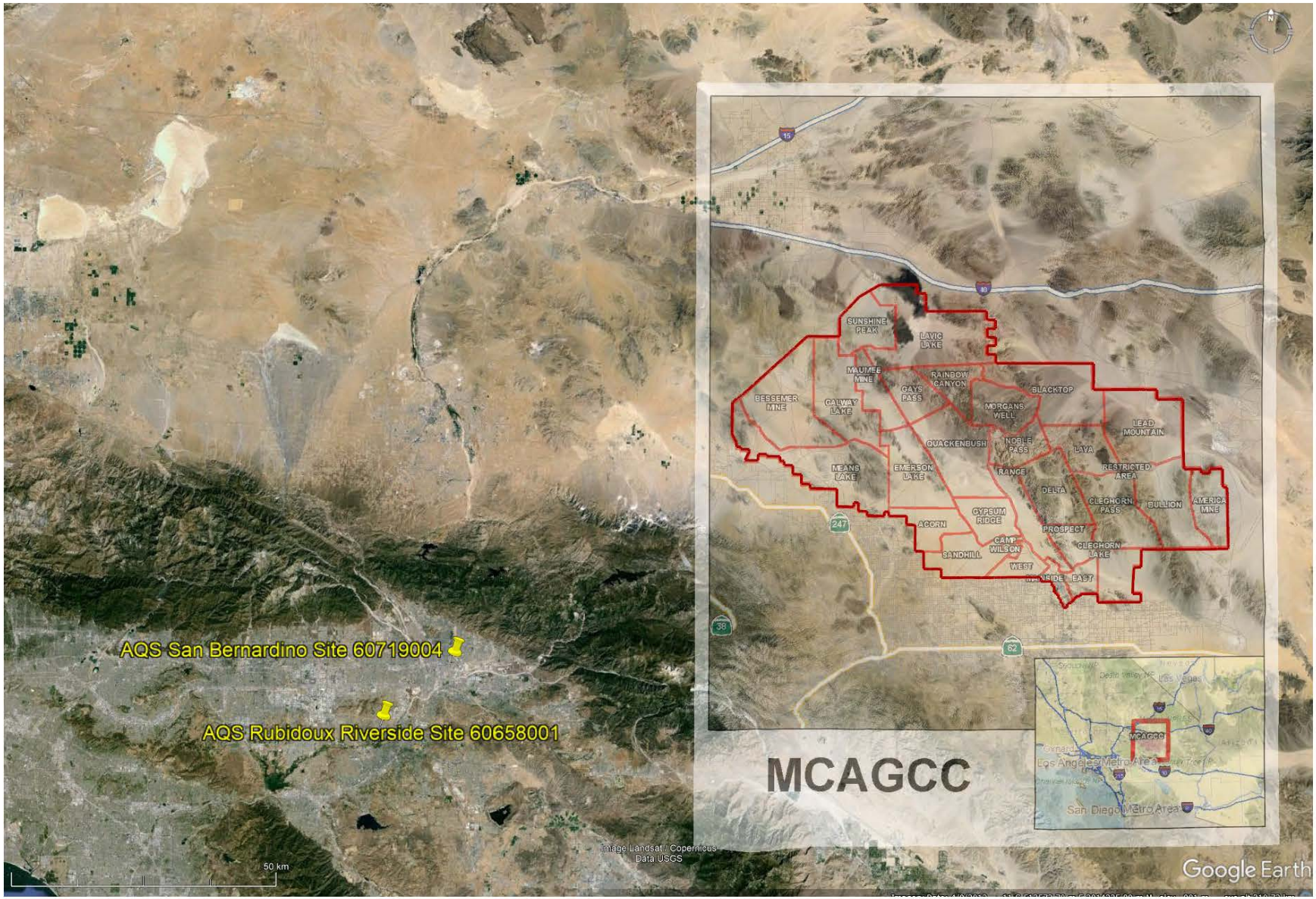


Table 4-4. Pb Monitoring Site Background Concentrations (ug/m3) San Bernardino

San Bernardino	2015		2016		2017		2018		2019		2020	
Month	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average
January	0.002		0.008		0.005		0.006		0.004		0.008	
February	0.007		0.008		0.003		0.007		0.004		0.006	
March	0.006	0.005	0.005	0.007	0.006	0.005	0.004	0.006	0.003	0.003	0.003	0.005
April	0.005	0.006	0.006	0.006	0.008	0.006	0.006	0.006	0.008	0.005	No Data	
May	0.005	0.005	0.005	0.005	0.006	0.007	0.004	0.005	0.003	0.005	No Data	
June	0.009	0.006	0.008	0.006	0.007	0.007	0.005	0.005	0.005	0.006	No Data	
July	0.005	0.006	0.010	0.008	0.007	0.007	0.008	0.006	0.005	0.005	0.005	
August	0.007	0.007	0.007	0.008	0.010	0.008	0.008	0.007	0.006	0.006	0.010	
September	0.008	0.007	0.010	0.009	0.005	0.007	0.007	0.007	0.009	0.007	0.009	0.008
October	0.006	0.007	0.007	0.008	0.008	0.008	0.006	0.007	0.013	0.009	0.009	0.009
November	0.007	0.007	0.007	0.008	0.008	0.007	0.007	0.007	0.009	**0.011**	0.009	0.009
December	0.012	0.008	0.005	0.006	0.010	0.009	0.006	0.006	0.005	0.009	0.007	0.008
	Maximum Pb (ug/m3)	0.008		0.009		0.009		0.007		**0.011**		0.009

Table 4-5. Pb Monitoring Site Background Concentrations (ug/m3) Rubidoux

Rubidoux	2015		2016		2017		2018		2019		2020	
Month	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average	Monthly Average	3-Month Moving Average
January	0.006		0.003		0.004		0.006		0.005		0.006	
February	0.004		0.003		0.003		0.005		0.006		0.005	
March	0.004	0.005	0.004	0.004	0.005	0.004	0.004	0.005	0.002	0.004	0.002	0.004
April	0.005	0.004	0.005	0.004	0.005	0.004	0.005	0.005	0.003	0.004	No Data	
May	0.002	0.003	0.004	0.005	0.005	0.005	0.003	0.004	0.003	0.003	No Data	
June	0.006	0.004	0.005	0.005	0.004	0.005	0.005	0.004	0.005	0.004	No Data	
July	0.005	0.004	0.006	0.005	0.004	0.004	0.005	0.004	0.004	0.004	0.004	
August	0.005	0.005	0.005	0.006	0.007	0.005	0.005	0.005	0.006	0.005	0.005	
September	0.008	0.006	0.006	0.006	0.004	0.005	0.006	0.005	0.006	0.005	0.008	0.006
October	0.005	0.006	0.007	0.006	0.008	0.006	0.006	0.006	0.008	0.007	0.008	0.007
November	0.008	0.007	0.007	0.006	0.007	0.007	0.009	0.007	0.006	0.006	0.016	0.010
December	0.005	0.006	0.005	0.006	0.008	0.008	0.007	0.007	0.005	0.006	0.008	0.010
	Maximum Pb (ug/m3)	0.007		0.006		0.008		0.007		0.007		0.010

4.7 SOURCE MODELLED CONCENTRATIONS

The source modelled overall 3-Month Maximum Averaged Concentration Design Value (Table 4-6) was generated using the AERMOD monthly averaging period and then each meteorological year (2015, 2016, 2018, 2019, 2020) post-processed with the EPA LEADPOST (version 13262) utility. Figure 4-2 is the Site Domain Coarse Grid and Figures 4-3 through 4-6 display the source modelled maximum Pb concentrations.

Table 4-6. LEADPOST 3-Month Maximum Averaged Concentration (ug/m3)

Modelling Evaluation	Maximum Location UTM Coordinates		Year	Month	3-Month Maximum Pb Concentration (ug/m3)
9 Meter Detonation Sources	596180 E	3823320 N	2015	March	0.00161
6 Meter Detonation Sources	596180 E	3823320 N	2015	March	0.00175

Figure 4-2. Site Domain Coarse Grid

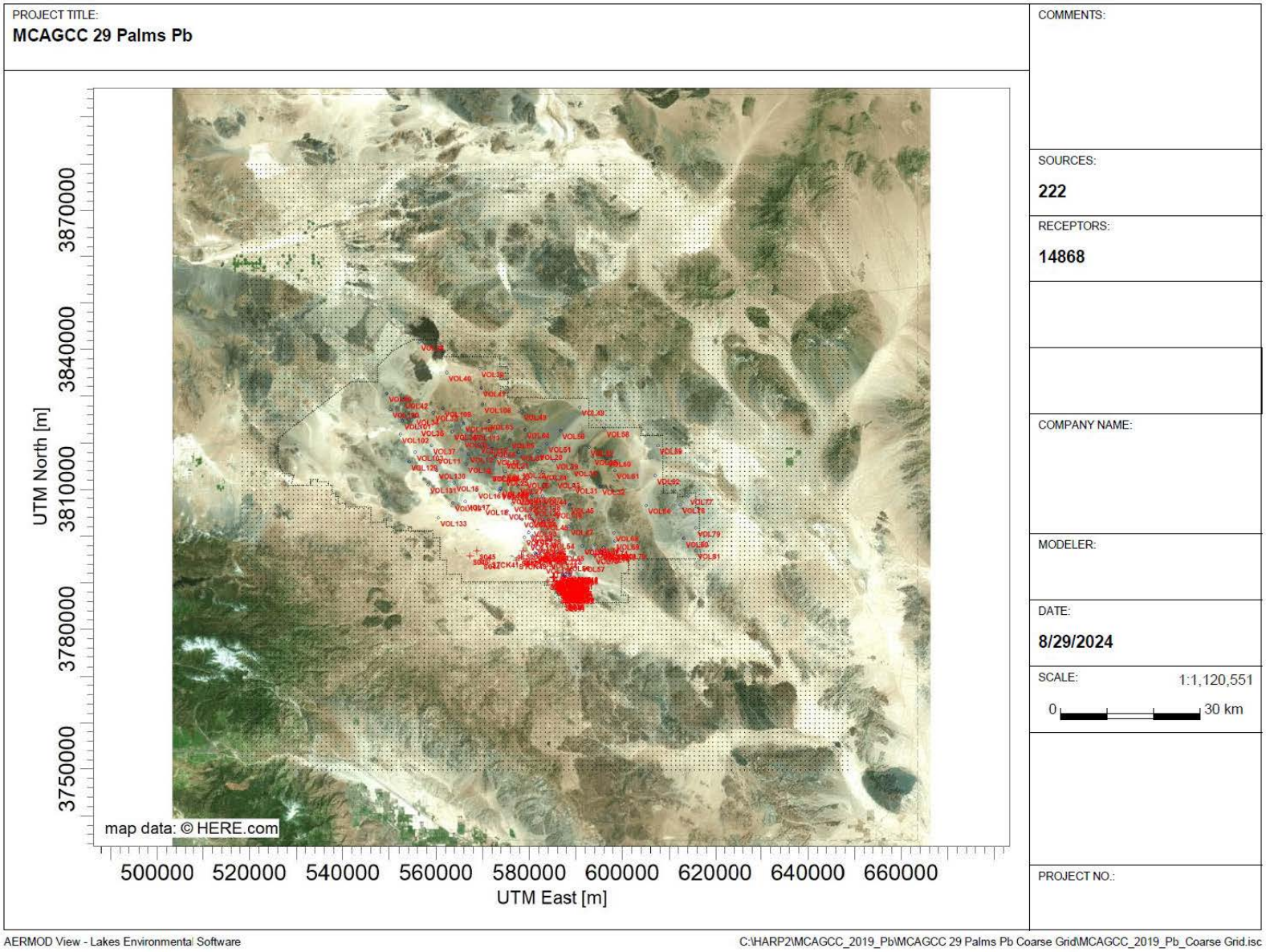


Figure 4-3. Source Modelled 3-Month Maximum Pb Concentrations Contour (ug/m3)
(9 Meter Explosive Detonation Volume Source Dimensions)

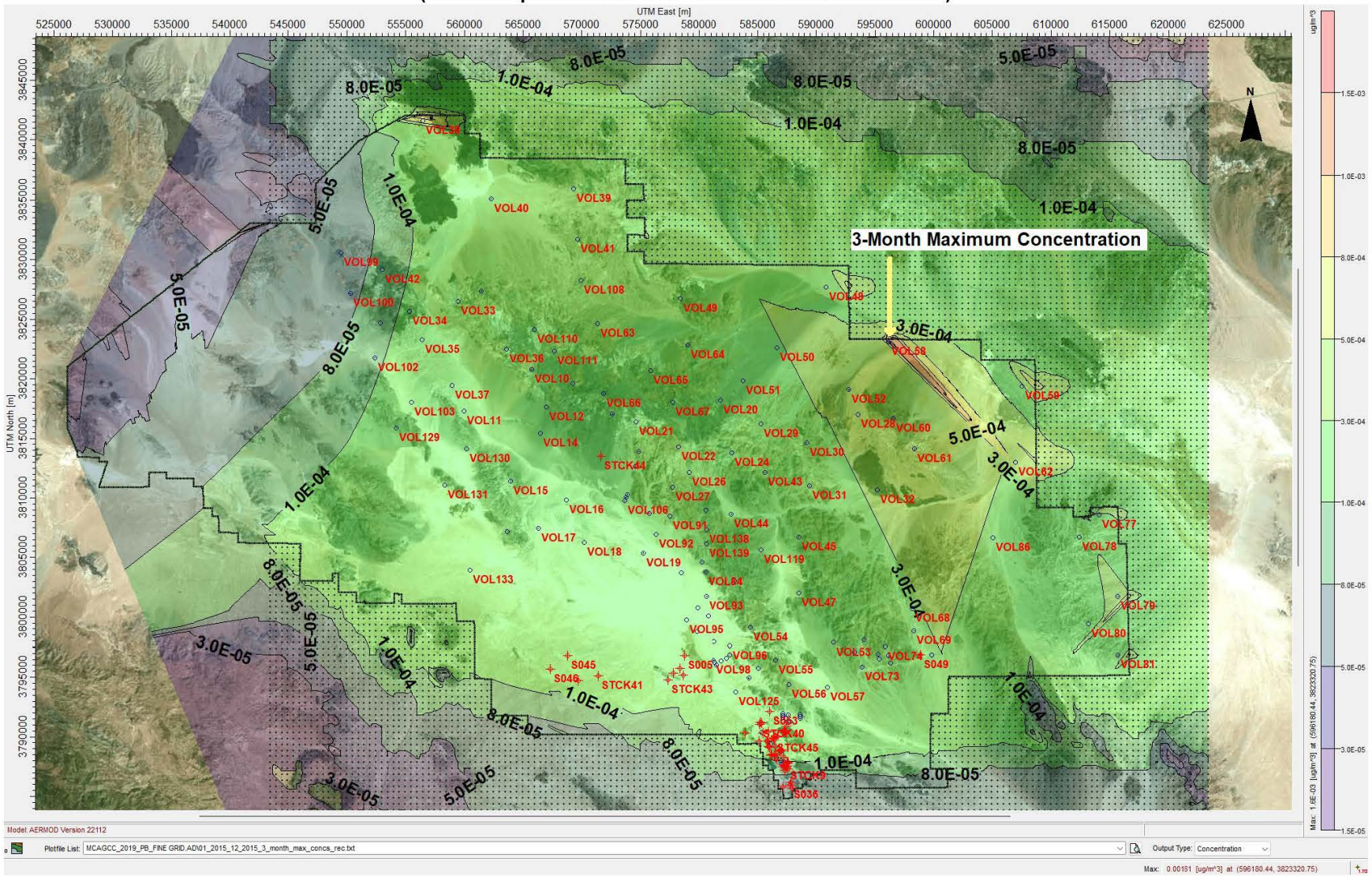


Figure 4-4. Source Modelled 3-Month Maximum Pb Concentration Receptor (ug/m3)
(9 Meter Explosive Detonation Volume Source Dimensions)

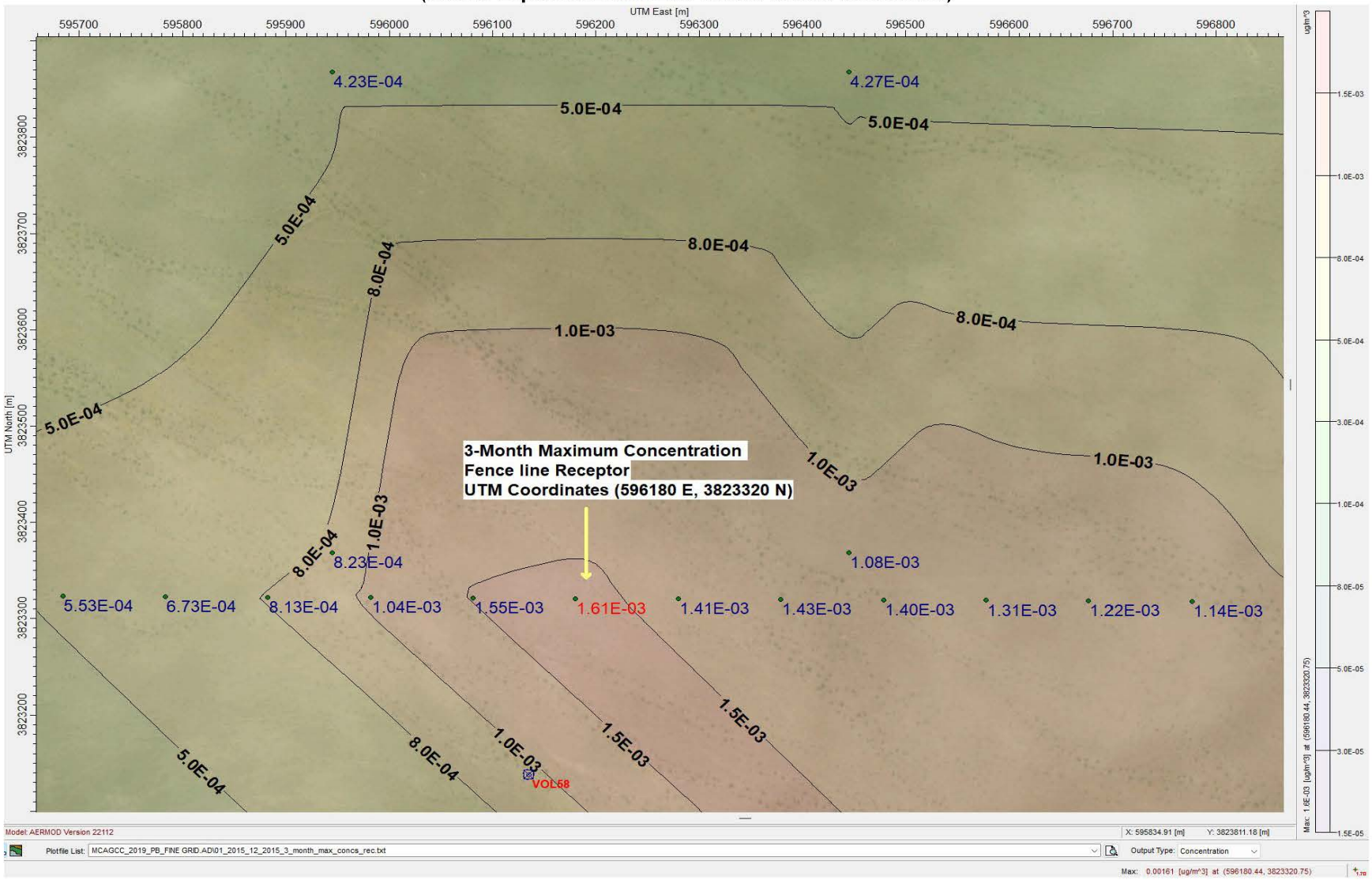


Figure 4-5. Source Modelled 3-Month Maximum Pb Concentration Contour (ug/m3)
(Supplemental 6 Meter Explosive Detonation Volume Source Dimensions)

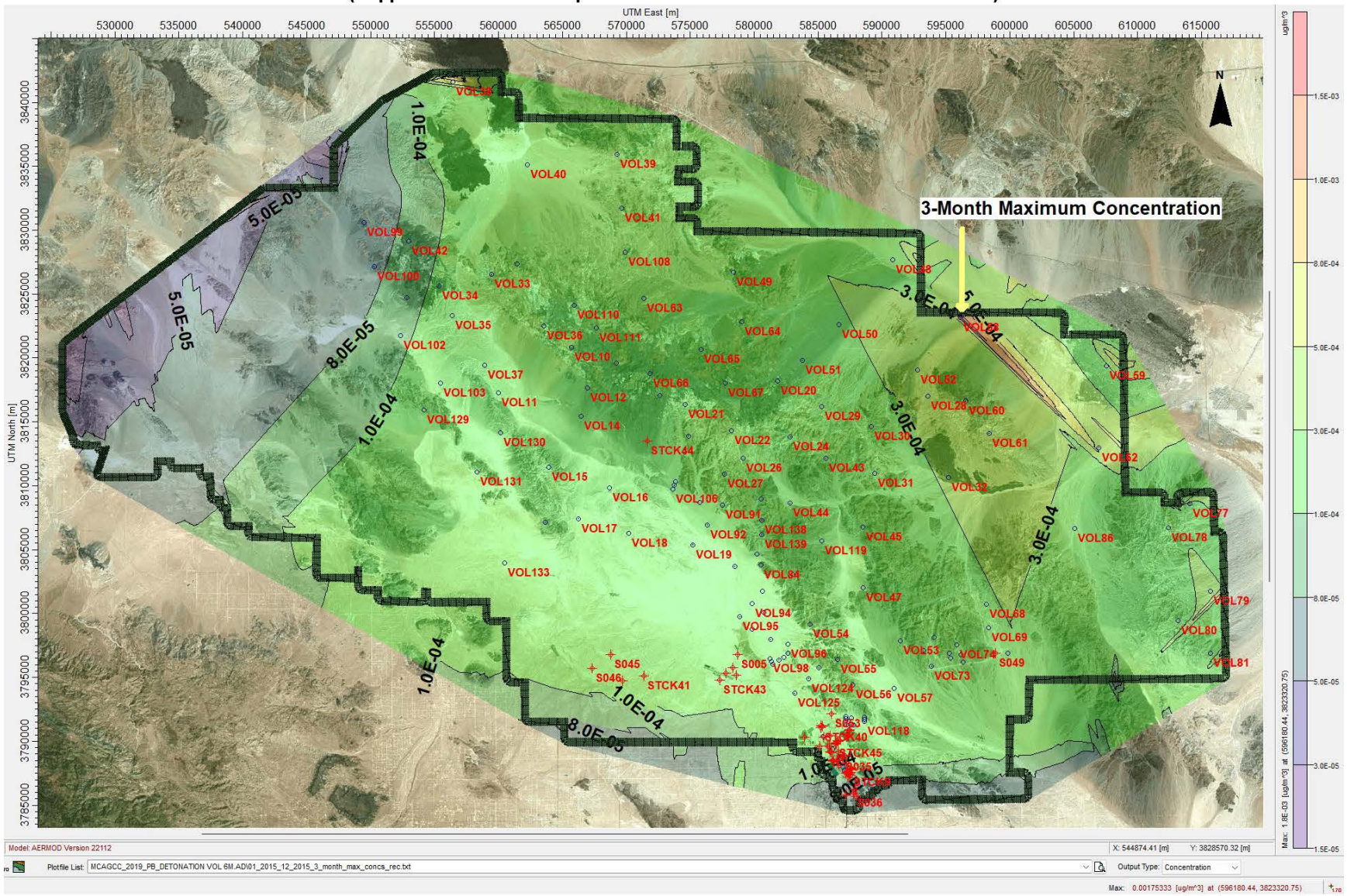
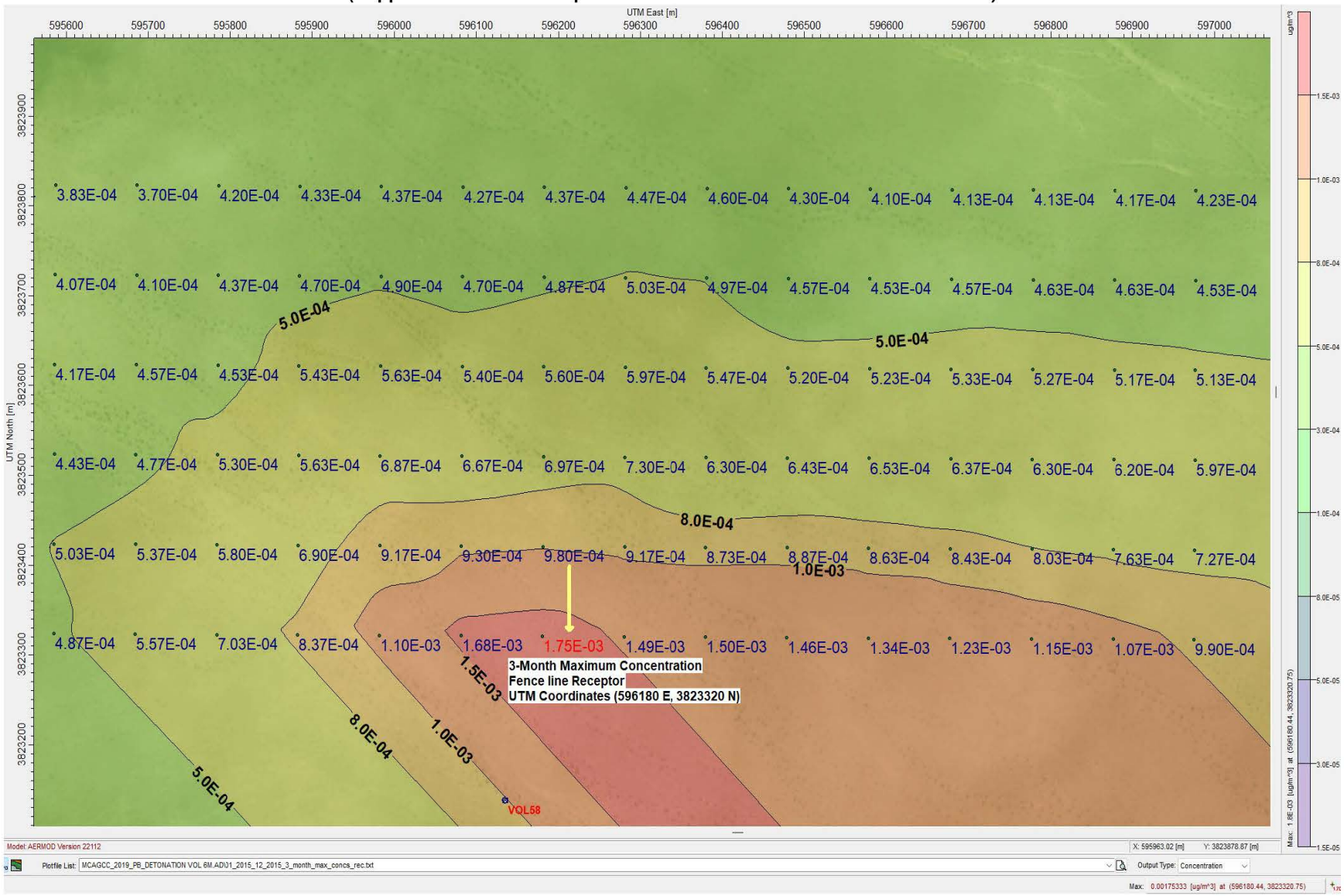


Figure 4-6. Source Modelled 3-Month Maximum Pb Concentration Receptor (ug/m3)
(Supplemental 6 Meter Explosive Detonation Volume Source Dimensions)



4.8 SUMMARY OF RESULTS

The overall 3-Month Maximum Averaged Concentration receptor and maximum 3-Month Moving Average background concentration are shown in Tables 4-7 and 4-8 below. The results, including the supplemental modelling evaluation, are well below 50% of the National Ambient Air Quality Standards (NAAQS) threshold of 0.15 ug/m3.

Table 4-7. MCAGCC Twentynine Palms Maximum Pb Concentration (9 Meter Explosive Detonation Volume Source Dimensions)

Maximum Location UTM Coordinates		Source 3-Month Maximum Average Concentration (ug/m3)	Background 3-Month Moving Average Maximum Concentration (ug/m3)	Source + Background 3-Month Maximum Concentration (ug/m3)	Percent of NAAQS 3-Month Maximum (0.15 ug/m3)
596180 E	3823320 N	0.0016	0.011	0.0126	8.4

Table 4-8. MCAGCC Twentynine Palms Maximum Pb Concentration (Supplemental 6 Meter Explosive Detonation Volume Source Dimensions)

Maximum Location UTM Coordinates		Source 3-Month Maximum Average Concentration (ug/m3)	Background 3-Month Moving Average Maximum Concentration (ug/m3)	Source + Background 3-Month Maximum Concentration (ug/m3)	Percent of NAAQS 3-Month Maximum (0.15 ug/m3)
596180 E	3823320 N	0.0018	0.011	0.0128	8.5

5 REFERENCES

AB 2588. 2007. Emission Inventory Criteria and Guidelines Report for the Air Toxics "Hot Spots" Program, 27 August.

CARB. 2020. Hotspots Analysis and Reporting Program.

EPA. 1995. White Paper for Streamlined Development of Part 70 Permit Applications. July 10.

EPA. 2002. Code of Federal Regulations, 40 CFR 51, Consolidated Emissions Reporting Rule.

MDAQMD. 2020. Comprehensive Emissions Inventory Guidelines.

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REGION 9
SAN FRANCISCO, CA 94105

April 18, 2025

Christian Anderson
Planning/Air Monitoring Supervisor
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392

Dear Supervisor Anderson:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the Mojave Desert Air Quality Management District's (MDAQMD) request to waive lead (Pb) monitoring near Pb sources emitting 0.5 or more tons per year for the Marine Corps Air Ground Combat Center (MCAGCC) source in Twentynine Palms, CA. Pb monitoring is required when sources may contribute to a Pb concentration that exceeds the 2008 Pb National Ambient Air Quality Standards (NAAQS), however, per 40 CFR 58 Appendix D, Section 4.5(a)(ii), the EPA may waive the monitoring requirement if "the State or, where appropriate, or local agency can demonstrate the Pb source will not contribute to a maximum Pb concentration in ambient air in excess of 50 percent of the NAAQS (based on historical monitoring data, modeling, or other means)."

To support this request, MDAQMD provided detailed a modeling report for this facility. MDAQMD used the most recent version of AERMOD available at the time modeling work commenced (23132), which is an EPA-preferred dispersion model, to quantify facility contributions to ambient Pb concentrations. A total of 90 sources were identified to emit Pb and were modeled in AERMOD. Although most of these sources were combustion sources, such as engines and boilers, approximately 93% of Pb emissions originate from munitions at training ranges around the facility. These detonations were modeled as continuous releases to account for temporal variations in meteorology and as volume sources at both six and nine meters, covering a range of possible release heights. Meteorological data from Barstow-Daggett Airport station were used, as it was determined to be the most representative station. Due to the large area of the facility, two separate AERSURFACE evaluations were utilized to assess land use characteristics. Receptors were appropriately placed at a finer resolution of 100 meters spacing along the fence line and at coarser resolutions further from facility boundaries. The highest three-month averaged concentration, including the background concentration, across all AERMOD simulations was modeled to be 0.0128 $\mu g/m^3$. This is 8.5% of the current 2008 3-month Pb NAAQS , which is set at 0.15 $\mu g/m^3$ Pb. Based on this analysis, the EPA has determined that the waiver request demonstrates the MCAGCC facility will not contribute to a maximum Pb concentration in ambient air in excess of 50 percent of the NAAQS. Therefore, in accordance with 40 CFR part 58, appendix D, section 4.5(a)(ii), EPA

approves a waiver for the ambient air Pb monitoring near this source which would have otherwise been required by 40 CFR part 58, appendix D, section 4.5(a).

Please include the waiver request and this enclosure in next year's California Air Resources Board (CARB) annual network plan and per 40 CFR §58.10(b)(10), in all future annual network plans, include the date the waiver was approved. Finally, please note that per 40 CFR 58 Appendix D, Section 4.5(a)(ii) this waiver needs to be renewed every 5 years as part of the network assessment.

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

Sincerely,

Vallano, Dena Digitally signed by Vallano, Dena Date: 2025.04.18 08:11:07 -07'00'

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

cc (via email): Alan De Salvio, MDAQMD
Sheri Haggard, MDAQMD
Alicia Kindred, CARB
Ariel Fideldy, CARB
Jin Xu, CARB
Melanie Levesque, CARB
Mike Ellitt, Marine Corps Air Ground Combat Center (MCAGCC)

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

Digitally signed by DENA VALLANO
Date: 2024.05.23 14:21:10 -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
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

February 10, 2025

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 the U.S. EPA to close the regional scale ambient air ozone monitoring station at Echo Summit (AQS # 060170012, Figure 1). The basis for this closure is per 40CFR Part 58.14(c): ***State, or where appropriate, local agency requests for SLAMS monitor station discontinuation, subject to the review of the Regional Administrator, will be approved if any of the following criteria are met and if the requirements of appendix D to this part, if any, continue to be met. Other requests for discontinuation may also be approved on a case-by-case basis if discontinuance does not compromise data collection needed for implementation of a NAAQS and if the requirements of appendix D to this part, if any, continue to be met.*** We have proposed a new ozone monitor at an existing alternate location (South Lake Tahoe – Sandy Way) to address monitoring needs in the county and representative statistical area. A separate start-up request will be submitted for the South Lake Tahoe site.

Echo Summit (ozone/meteorology): The monitoring station (Address: 21200 US Highway 50, Little Norway, CA 95721) is an 8'x8'x8' enclosure with several logistical issues preventing continued operation at the site. The enclosure is currently located in the Adventure Mountain Lake Tahoe parking lot, a snow park located on National Forest Service land. Due to significant snow accumulation during the winter, CARB repeatedly has been prevented from accessing the site for regular operation and data collection (Figure 2) when the seasonal ozone site is scheduled to begin operation on April 1. Over the past few years, it is typically mid to late May before the site is accessible. In addition, due to this remote location, we frequently have poor internet communication. Numerous cellular modem and antenna extenders have been evaluated and installed at the site. Despite this, we frequently lose connection and thus our real-time data stream for hours at a time. Lastly, the enclosure itself has been damaged from snowplows and other vehicles that pass through the area. The roof railings have been severely damaged and have been identified as a safety concern by our site operators and the CARB Health and Safety Unit (Figures 3 & 4). The damage has created enclosure leaks, resulting in water damage and mildew concerns. Extreme weather

conditions and the age of the shelter will require significant facility repairs in the near future, including shelter replacement, electrical improvements, and improved shelter protections (e.g. bollards, fencing, snowplow indicators).

Proactively, CARB began the process to investigate alternative ozone monitoring locations in the area. CARB currently operates a site at 3337 Sandy Way, South Lake Tahoe, CA 96150 (Figure 6). This site currently has a Beta Attenuation Monitor (BAM) PM10 sampler and thus all the necessary infrastructure in place for an air monitoring station. The Sandy Way location resides approximately 9 miles (14.5 km) northeast of the Echo Summit monitoring station (Figure 5). Table 1 and 2 list a detailed summary of the two locations' siting parameters. As shown, both locations share the same county and Sacramento-Roseville-Arden-Arcade metropolitan representative statistical area. CARB is dedicated to having representative, high quality and complete data in the area, and believes that closing Echo Summit while moving forward with the proposed ozone monitoring at Sandy Way will meet these measurement goals. More detail regarding the representativeness of data between Echo Summit and the proposed Sandy Way location will be included in a subsequent letter requesting the initiation of ozone monitoring at Sandy Way.

At the conclusion of the 2024 ozone season, CARB conducted a shutdown calibration and stopped monitoring at Echo Summit for the winter season. The start date for the new ozone monitor at the South Lake Tahoe – Sandy Way Monitoring Station is proposed for April 1, 2025, the start of the 2025 ozone season. Because of the accessibility at this location, we plan to operate this monitor year-round.

Thank you for your consideration in the closing of the Echo Summit monitoring station and the proposed changes in the CARB monitoring network. If you have any questions or require additional information, please contact Air Monitoring North Section Manager, *Dr. Michael R. Olson,* via email or at (279) 208-7972.

Sincerely,

Mike Miguel

Michael Miguel, Assistant Division Chief, Monitoring and Laboratory Division

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

Walter Ham, Ph.D., Chief, Monitoring and Laboratory Division

Manisha Singh, Chief, Quality Management Branch

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

Sylvia Vanderspek, Chief, Air Quality Planning Branch

Michael Olson, Manager, Air Monitoring North Section, Air Quality Surveillance Branch

Figure 1.

Echo Summit Monitoring Station aerial view as indicated by ⌂ icon.

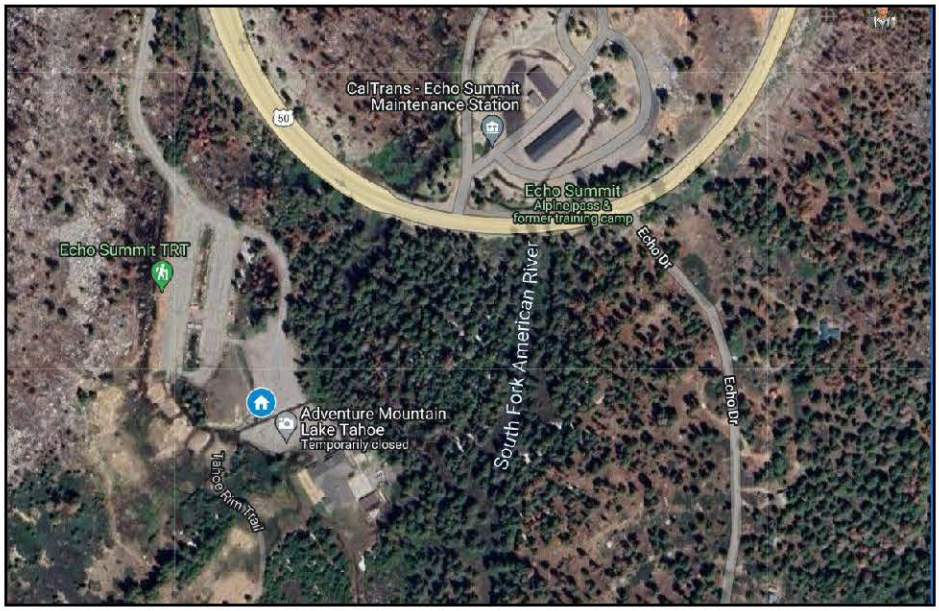

Figure 2.

Echo Summit Monitoring Station – Heavy snowfall covering enclosure making site inaccessible for the start of ozone season.

Figure 3.

Echo Summit Monitoring Station damaged roof safety railings.

Figure 4.

Echo Summit Monitoring Station damaged roof safety railings.

Figure 5.

The relative location of the Echo Summit and Sandy Way monitoring stations. Sandy Way is located 9 miles or 14.5 km northeast of the previous location.

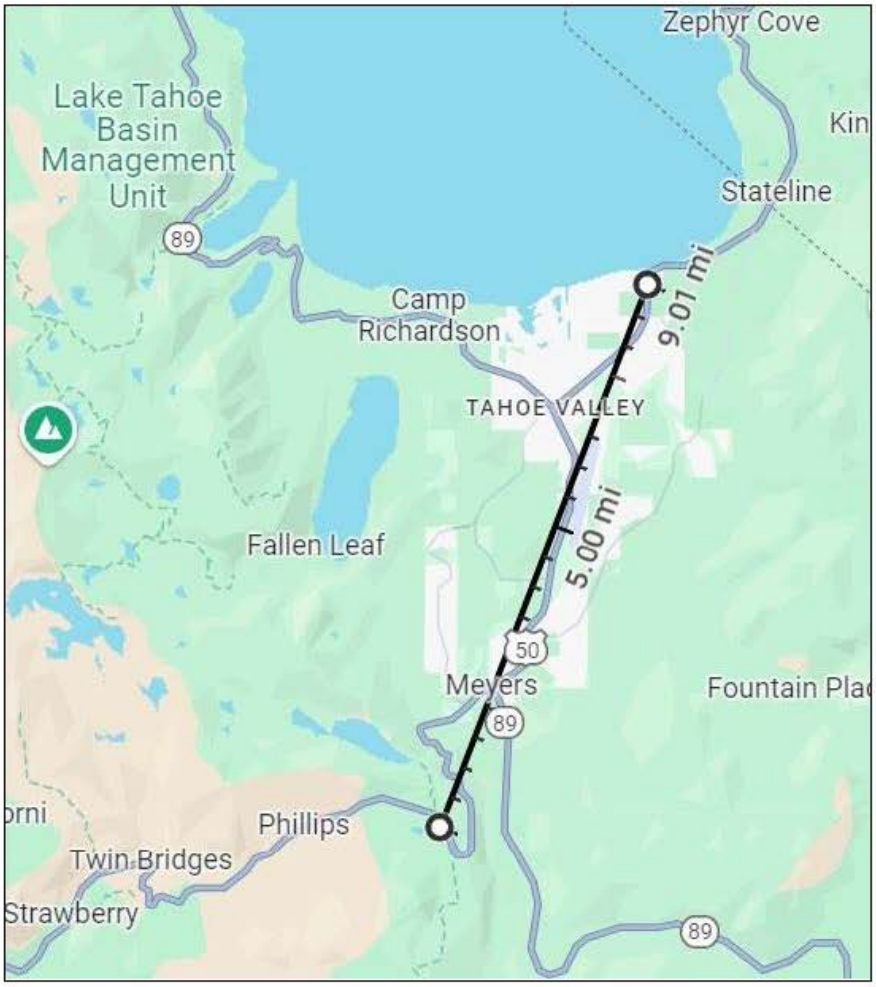

Figure 6.

Sandy Way Station aerial view as indicated by icon

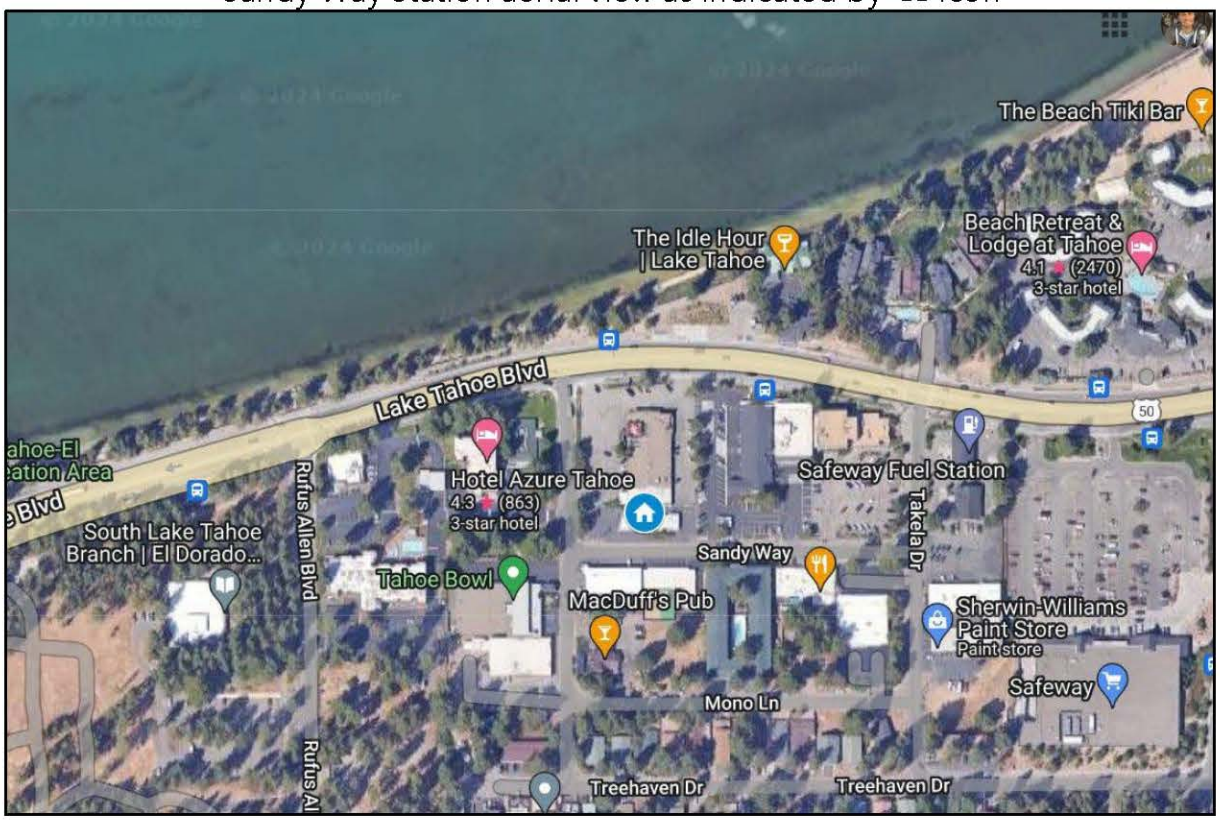

Table 1.

Site summary of the Echo Summit monitoring site

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)	10,000 (2015)			
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)	1.4			
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)	9 seconds			
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	6/11/2024			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A			

Table 2.

Site summary of the South Lake Tahoe – Sandy Way monitoring site

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)	29,200			
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	6/1/2001			
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)	3.0			
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)	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?	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	4/26/2024			

REGION 9
SAN FRANCISCO, CA 94105

April 15, 2025

Michael Miguel
Assistant Division Chief, Monitoring and Laboratory Division
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, California 95812

Dear Michael Miguel:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board's (CARB) discontinuation of the O_3 State/Local Air Monitoring Station (SLAMS) monitor at the Echo Summit (Air Quality System (AQS) Site ID: 06-017-0012) monitoring site. A letter requesting EPA approval of this network change was submitted to EPA on February 12, 2025. 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 specifically 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 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 CARB's request and data associated with this monitor and concluded 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 Echo Summit site.

The Echo Summit monitor was located in an O_3 nonattainment area for four standards: the 1979 1-hour, 1997 8-hour, 2008 8-hour, and 2015 8-hour O_3 NAAQS. The 2021 and 2022 design values for the 2015 8-hour O_3 NAAQS were violating the NAAQS, the 2020 and 2023-2024 design values were invalid for the 2015 8-hour O_3 NAAQS and the 2020-2024 design values were also invalid for the 1979 1-hour, 1997 8-hour and 2008 8-hour O_3 NAAQS primarily due to incomplete data from 2018-2024. While the 2021 and 2022 design values for the 2015 8-hour O_3 NAAQS were violating, Echo Summit's design values were 9-11 ppb lower than the design value site in the Sacramento Metro, CA nonattainment area for the 2015 8-hour O_3 NAAQS.

The 2020-2024 invalid design values were a result of incomplete data capture primarily due to site access challenges in the entire month of April and part of May for all years included in the 2020-2024 design value periods (calendar years 2018-2024). Since April-partial May data at the Echo Summit monitor were not available in recent years, April-partial May data were reviewed at other monitors in the area. The Cool (AQS Site ID: 06-017-0020) and the Placerville-Canal St (AQS Site ID: 06-017-2004, formally Gold Nugget (AQS Site ID: 06-017-0010)) sites are the two closest O_3 SLAMS monitors to the Echo Summit monitor within the Sacramento Metro, CA nonattainment area. A review of the April-partial May missing data against this same data at the two aforementioned monitors demonstrated that there were no exceedances of the 1979 1-hour, 1997 8-hour, 2008 8-hour, or 2015 8-hour NAAQS, indicating Echo Summit was unlikely to have exceeded any of the NAAQS during the incomplete data periods.

In addition, valid data were unavailable from August 29-October 31, 2021 because the monitor was within the Caldor wildfire. However, valid data from the August 29-October 31 period at the Echo Summit monitor were available and reviewed for calendar years 2018-2020 and 2022-2024. Exceedances of the 2015 8-hour O_3 NAAQS occurred in four instances during this period; three exceedances occurred in September 2020 and data were flagged with the "IT" informational qualifier code, indicating "Wildfire-U. S.", and one exceedance occurred on August 31, 2023. For the August 31, 2023 exceedance date, a review of all sites within the Sacramento Metro, CA nonattainment area indicated that the Echo Summit exceedance was not the highest exceedance value and was surpassed by Roseville-N Sunrise Ave (AQS ID: 06-061-0006). While a limited number of exceedances occurred at the Echo Summit monitor during the August 29-October 31, 2021 data period in 2018-2020 and 2022-2024, for the three years with complete data (2018, 2022-2023), Echo Summit's 4th highest daily 8-hour O_3 values measured 11-20 ppb lower than the 4th highest daily 8-hour O_3 value at the maximum site in the 2015 8-hour O_3 NAAQS Sacramento Metro, CA nonattainment area. Additionally, there were no exceedances of the 1979 1-hour O_3 NAAQS at the Echo Summit monitor during the August 29-October 31 period from calendar years 2018-2020 and 2022-2024.

The Echo Summit monitor was not the design value monitor for the 1979 1-hour, 1997 8-hour, 2008 8-hour, or 2015 8-hour O_3 NAAQS Sacramento Metro CA nonattainment areas, consistently measured lower concentrations of O_3 than other monitors in the nonattainment area, and is not specifically required by an attainment plan. Therefore, the closure of this monitor does not compromise data collection needed for implementation of any O_3 NAAQS.

CARB and local air districts within the CARB Primary Quality Organization (PQAO) currently operate 16 other O_3 SLAMS in the Sacramento-Roseville-Folsom, CA Metropolitan Statistical Area (MSA), exceeding 40 CFR 58 Appendix D minimum monitoring requirements for the area. This monitor is not needed to fulfill 40 CFR 58 Appendix D MSA requirements for the maximum O_3 concentration site in a metropolitan area. Therefore, the closure of this 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 Echo Summit O_3 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,

Vallano, Dena

Digitally signed by Vallano, Dena
Date: 2025.04.15 07:56:10 -07'00'

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

cc (via email): Manisha Singh, CARB
Walter Ham, CARB
Michael T. Benjamin, CARB
Michael Olson, CARB
Jin Xu, CARB
Melissa Niederreiter, CARB

February 10, 2025

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 the U.S. EPA to start a new regional scale ozone ambient air monitoring station at South Lake Tahoe – Sandy Way (AQS # 060170011, Figure 1). The basis for this change is per 40CFR Part 58.14(b): ***Each monitoring network may make or be required to make changes between the 5-year assessment periods, including for example, site relocations or the addition of PAMS networks in bumped-up ozone nonattainment areas. These modifications must address changes invoked by a new census and changes due to changing air quality levels. The State, or where appropriate local, agency shall provide written communication describing the network changes to the Regional Administrator for review and approval as these changes are identified.*** We have proposed to close our Echo Summit ozone monitoring station for reasons detailed below and relocating the ozone monitor to the new site which would address monitoring needs in the county and representative statistical area. Please note, a separate request has been submitted to close the Echo Summit location.

Echo Summit (ozone/meteorology): The monitoring station (Address: 21200 US Highway 50, Little Norway, CA 95721) is an 8'x8'x8' enclosure with several logistical issues. The enclosure is currently located in the Adventure Mountain Lake Tahoe parking lot. Due to heavy snowfall at this location, we repeatedly have not been able to access the site at the start of the seasonal ozone period that begins on April 1 (Figure 2); often delaying access until mid to late May. In addition, due to this remote location, we frequently have poor internet communication, despite multiple approaches, we frequently lose connection for our real-time data stream. Lastly, the enclosure itself has been damaged from snowplows and other vehicles that pass through the area. The roof railings have been severely damaged and have been identified as a safety concern by our site operators and the CARB Health and Safety Unit (Figures 3 & 4). Extreme weather conditions and the age of the shelter will require significant facility repairs in the near future, including shelter replacement, electrical improvements, and improved shelter protections (e.g. bollards, fencing, and snowplow indicators).

Proactively, CARB began the process to investigate alternative monitoring locations in the area. CARB currently operates a monitoring site at 3337 Sandy Way, South Lake Tahoe, CA 96150. This site currently has a Beta Attenuation Monitor (BAM) PM10 sampler and therefore most of the necessary infrastructure in place to start an ozone monitor. The Sandy Way location resides approximately 9 miles (14.5 km) northeast of the Echo Summit monitoring station (Figure 5). The meteorological conditions at both sites are similar, with the prevailing wind coming from the south at both locations (Figure 6). Table 1 and 2 list a detailed summary of the two locations' siting parameters. As shown, both locations share the same county and Sacramento-Roseville-Arden-Arcade metropolitan representative statistical area. CARB is dedicated to having representative, high quality and complete ozone data in the area, and believes that the new proposed monitoring site at Sandy Way will meet these measurement goals.

The South Lake Tahoe – Sandy Way Monitoring Station is a leased office building location, with a small enclosure on the rooftop. When adding the new ozone monitor to this site, we will be adding a larger, temperature-controlled ground-based enclosure at this same location. The Sandy Way lease allows for convenient options for site repairs, snow removal, and utility access. This arrangement will significantly simplify and expedite maintenance and repairs at the monitoring site. In addition, the new station provides much safer and secure access for CARB's staff and equipment. Being in a more populated area, the access roads and parking are frequently snow plowed during the winter months to allow for access year-round.

The start date for the new ozone monitor at the South Lake Tahoe – Sandy Way Monitoring Station is proposed for April 1, 2025, the start of the 2025 ozone season. Because of the accessibility at this location, we plan to operate this monitor year- round, providing an additional five months a year of regulatory ozone data in the area.

South Lake Tahoe – Sandy Way currently has a Quant AQ Mobile Air sensor installed at the site. It's intended use is to provide non-regulatory backup data in the event of a Public Safety Power Shutoff (PSPS) or for other comparison purposes. A comparison of 8-hour average ozone concentrations for the Sandy Way and the Echo Summit site using the sensor data is shown in Figure 7. This shows the ozone concentrations track closely to each other at both locations; this indicates the similarity and representativeness of the two locations. Please note, sensors are not calibrated, which can result in decreased accuracy, thus, despite the sensor showing higher maximum and minimum trends compared to the regulatory monitor, it is difficult to state whether one site is higher than another. They key observation is that the sensor data tracks very well between the two sites, indicating they represent the same airshed. To give context to this comparison, Figure 8 compares the co-located Quant AQ dataset for a location in Roseville, CA; demonstrating an apparent over-estimate bias for this co-located sensor, even though there is a strong agreement with the overall data trend. Figure 9 demonstrates both the sensor comparison and a comparison to other locations in the Lake Tahoe region, specifically the Placerville and Tahoe City (Placer County APCD site) ozone monitoring locations. These graphical summaries demonstrate

the Sandy Way site is a representative location that is consistent with previous ozone monitoring in Echo Summit, while offering a unique data set when compared to other regional sites. The proposed Sandy Way site will ensure data completeness, data quality, support staff safety concerns, and address Echo Summit maintenance concerns.

Thank you for your consideration in the start-up of ozone monitoring at the Sandy Way site and changes in the CARB monitoring network. If you have any questions or require additional information, please contact Air Monitoring North Section Manager, *Dr. Michael R. Olson,* via email or at (279) 208-7972.

Sincerely,

Mike Miguel

Michael Miguel, Assistant Division Chief, Monitoring and Laboratory Division

cc: Julia Carlstad, Ph.D., U.S. EPA, Region 9, Monitoring and Analysis Section (Air-2-3)
Walter Ham, Ph.D., Chief, Monitoring and Laboratory Division
Manisha Singh, Chief, Quality Management Branch
Michael T. Benjamin, Chief, Air Quality Planning and Science Division
Sylvia Vanderspek, Chief, Air Quality Planning Branch
Michael Olson, Manager, Air Monitoring North Section, Air Quality Surveillance Branch

Figure 1.

Proposed South Lake Tahoe – Sandy Way Monitoring Station aerial view as indicated by 🏠 icon.

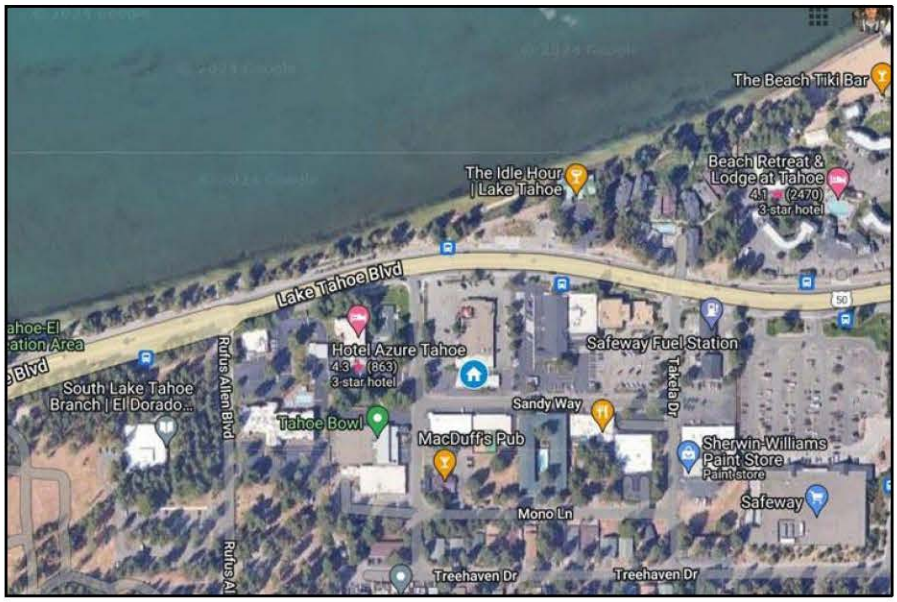

Figure 2.

Echo Summit Monitoring Station – Heavy snowfall covering enclosure making site inaccessible for the start of ozone season.

Figure 3.

Echo Summit Monitoring Station damaged roof safety railings.

Figure 4.

Echo Summit Monitoring Station damaged roof safety railings.

Figure 5.

The relative location of the Echo Summit and Sandy Way monitoring stations. Sandy Way is located 9 miles or 14.5 km northeast of the previous location.

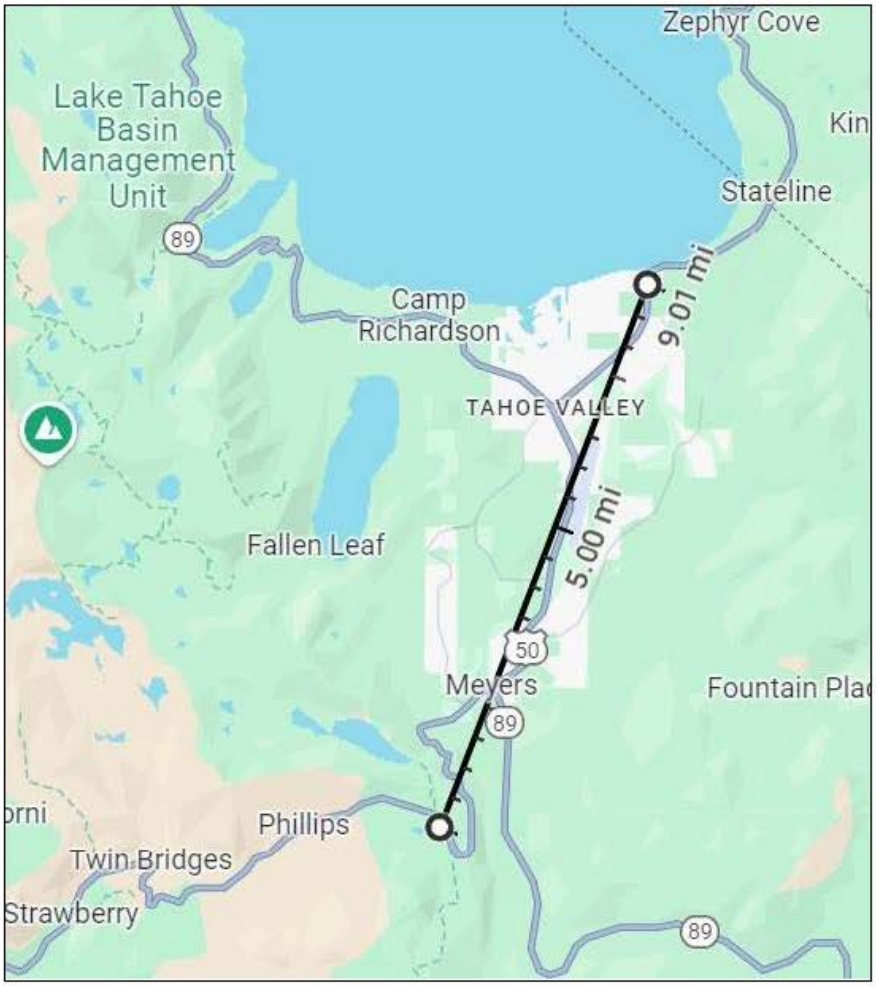

Figure 6.

The wind direction measured at the Sandy Way site in 2023 and during 2023 ozone season at Echo Summit. Wind patterns are almost identical at both sites.

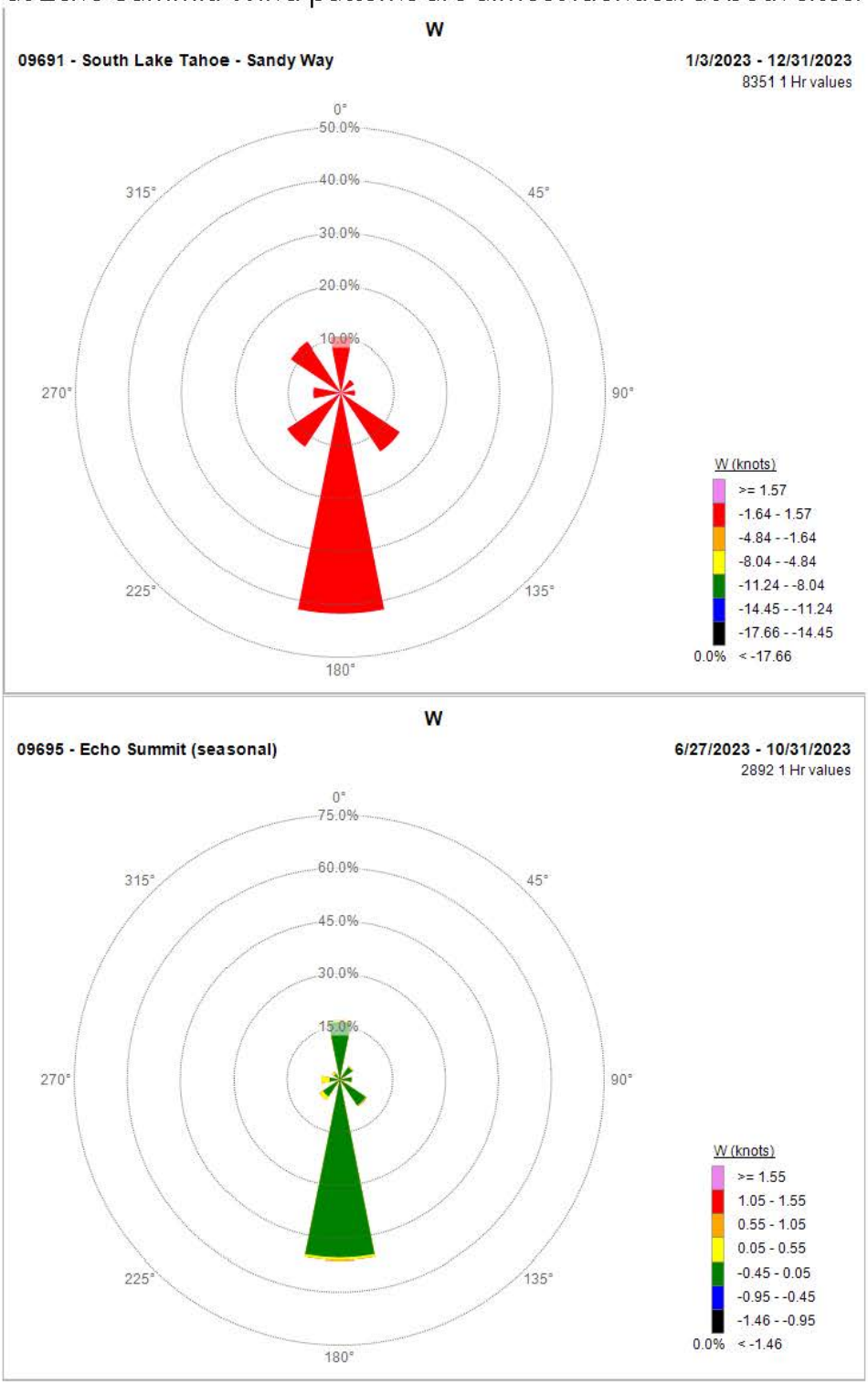

Figure 7.

8-hour average ozone concentrations (in ppb) at Echo Summit and Sandy Way (Quant AQ data) show the similarity of ozone measurements at both site locations.

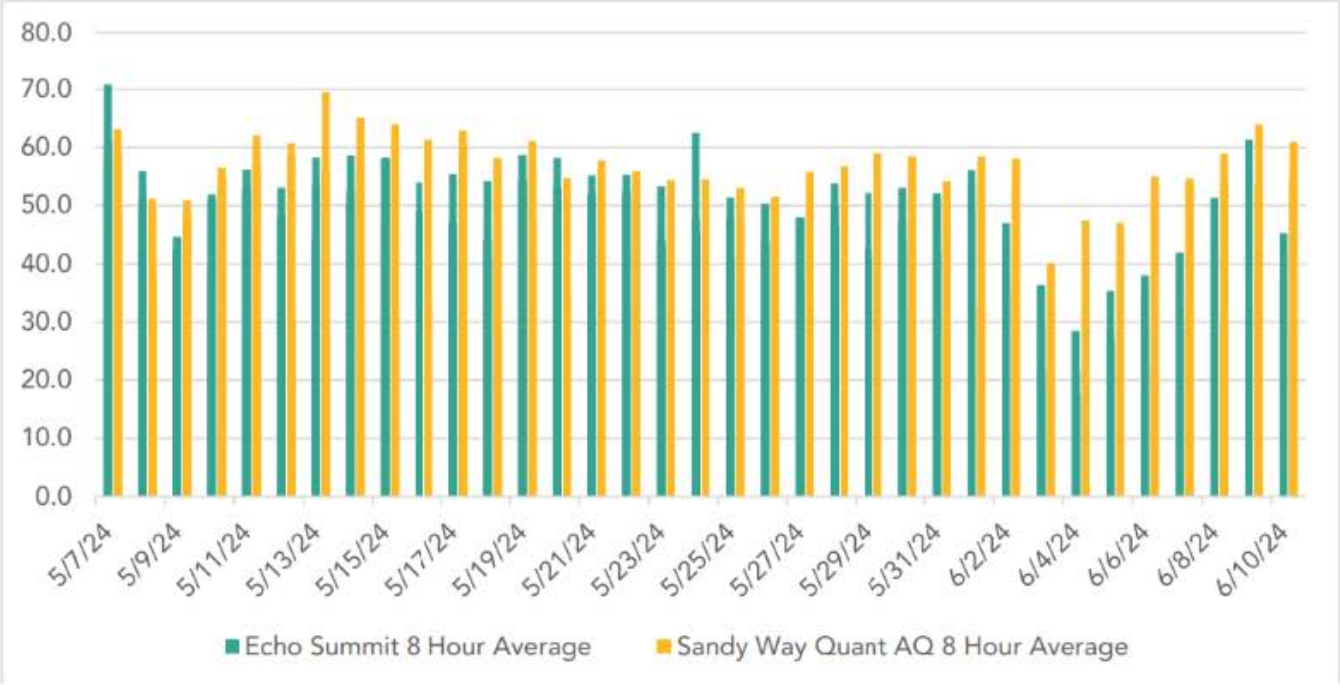

Figure 8.

Quant AQ ozone data compared to T400 regulatory monitor at a similar air monitoring station (Roseville). This is included for reference to display how the Quant data compares to regulatory data and its validity for comparison purposes.

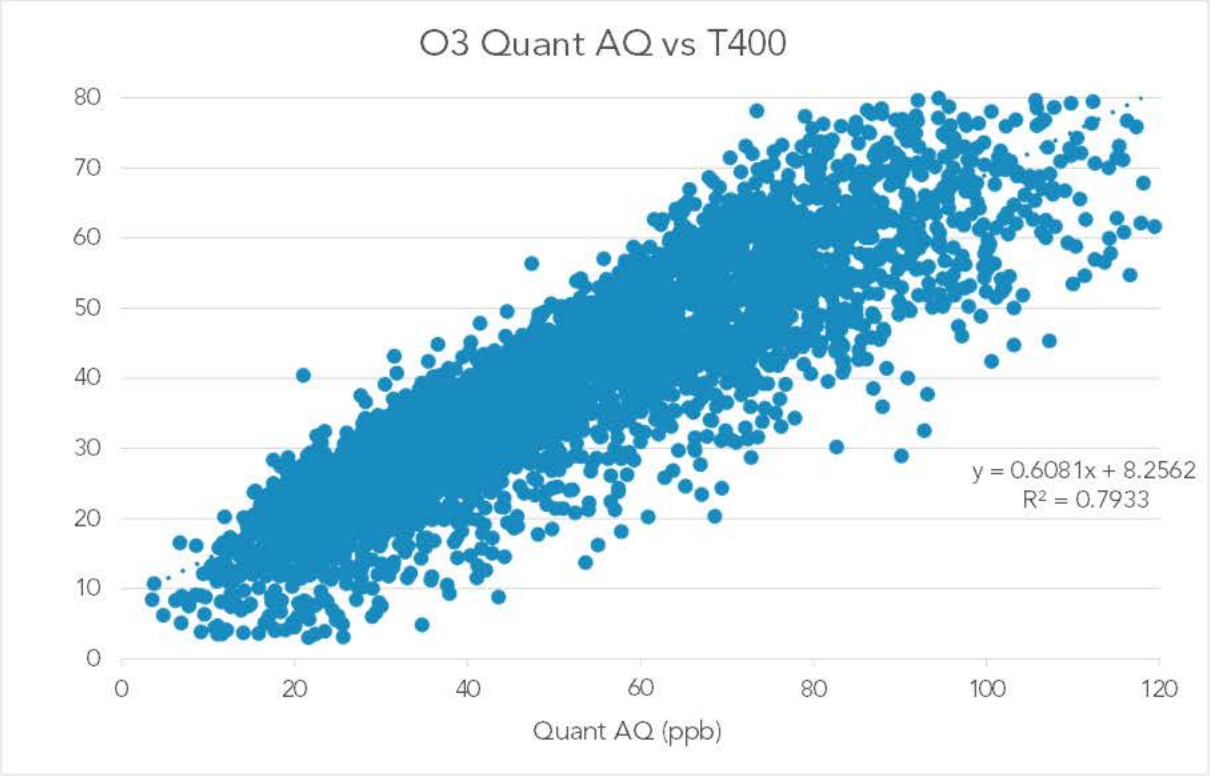

Figure 9.

Nearby ozone monitoring sites showing the variability in measurements during the current ozone season. Surrounding sites show regional similarities in ozone concentrations.

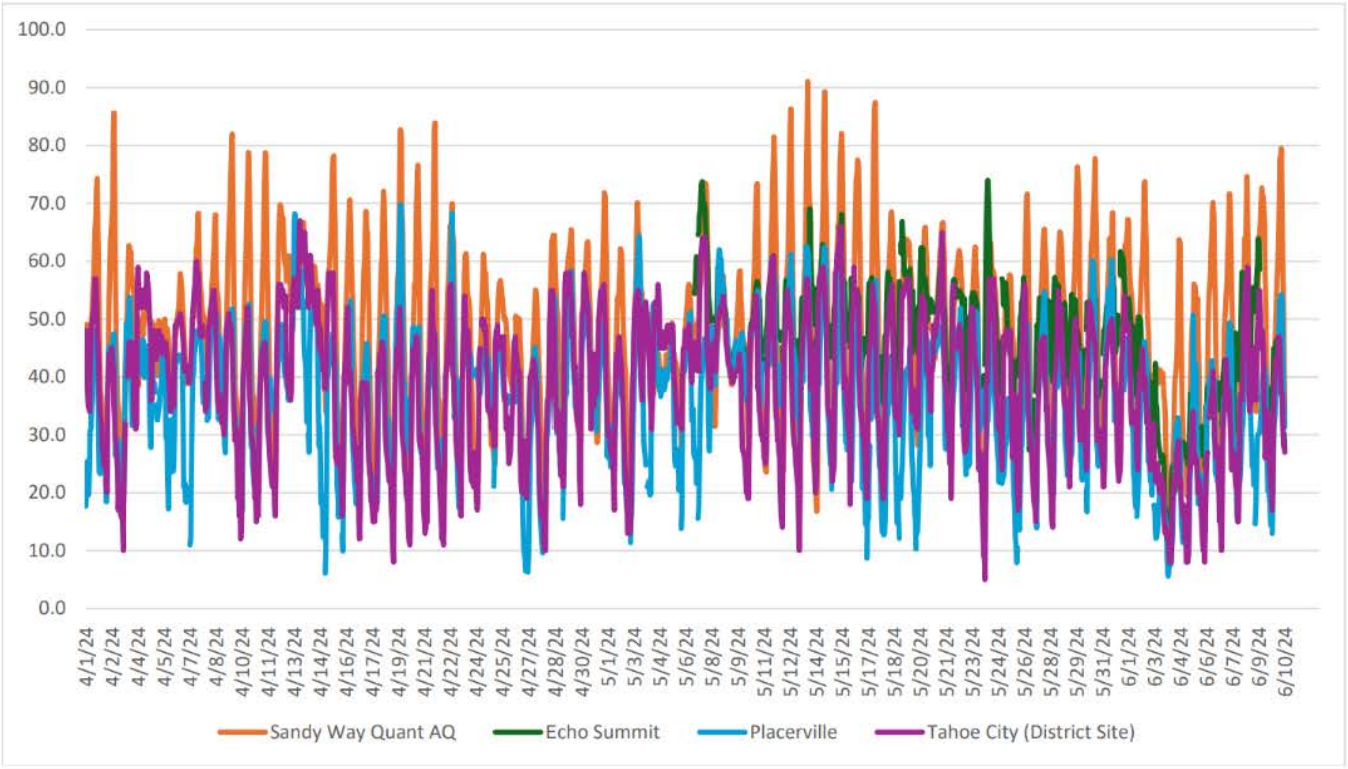

Table 1.

Site summary of the Echo Summit monitoring site

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)	10,000 (2015)			
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)	1.4			
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)	9 seconds			
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	6/11/2024			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A			

Table 2.

Site summary of the South Lake Tahoe – Sandy Way monitoring site

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)	29,200			
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	6/1/2001			
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)	3.0			
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)	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?	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	4/26/2024			

REGION 9
SAN FRANCISCO, CA 94105

April 15, 2025

Michael Miguel
Assistant Division Chief, Monitoring and Laboratory Division
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, California 95812

Dear Michael Miguel:

This letter provides the U.S. Environmental Protection Agency's (EPA) review and approval for the California Air Resources Board's (CARB) new State/Local Air Monitoring Station (SLAMS) O_3 monitor at the South Lake Tahoe – Sandy Way site (Air Quality System (AQS) Site ID: 06-017-0011). A request for EPA approval of this network change was submitted to EPA on February 12, 2025 with a proposed monitoring start date of April 1, 2025. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for modification to their monitoring network. SLAMS monitors must meet all applicable 40 CFR 58 requirements, including the quality assurance requirements, network design criteria, and siting requirements specified in appendices A, C, D, and E. EPA reviewed CARB's request and assumes that the new South Lake Tahoe – Sandy Way O_3 SLAMS site will meet all applicable criteria contained in 40 CFR 58. EPA therefore approves the new O_3 SLAMS monitor at the South Lake Tahoe – Sandy Way site. 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 Julia Carlstad at (415) 947-4107.

Sincerely,

Vallano, Dena Digitally signed by Vallano, Dena Date: 2025.04.15 07:55:04 -07'00'

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

cc (via email): Manisha Singh, CARB

Walter Ham, CARB
Michael T. Benjamin, CARB
Michael Olson, CARB
Jin Xu, CARB
Melissa Niederreiter, 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)	8.8				
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	10/22/24				
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	3/20/24, 9/4/24				

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)	7.1	8.4			
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	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	9/4/2024	9/4/2024			
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	Primary	QA-Collocated	
Parameter Code	81102	88502	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	3/20/24, 9/4/24	3/20/24, 9/4/24	3/20/24, 9/4/24	3/20/24, 9/4/24	

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)	11.0	11.4			
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	7/30/24	7/30/24			
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)	7.0	7.0	13.3	14.1	
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	2/22/2024	2/22/2024	2/22/2024	2/22/2024	
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	88502	86101	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	5-29-2024, 11/12/24	5-29-2024, 11/12/24	5-29-2024, 11/12/24	6/10/2024, 11/19/2024	

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)	50 m (southwest)				
Traffic Count (AADT,year)	122,000 / 2014 (Traffic count for nearest roads: H Street / Rte 99, Source: Caltrans 2017 AADDT)				
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)	9.5	8.6	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	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	10/30/2024	10/30/2024	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	5/13/2024; 10/30/2024	5/13/2024; 10/30/2024	

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)	7.7	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	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	9/6/24	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/20/24, 9/6/2024			

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)	16.8	18.7			
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	7/31/2024	7/31/2024			
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)	7.9	7.8	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	11/21/24	11/21/24	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	5/13/24, 11/21/24	5/13/2024, 11/21/24	

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)	6.02	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	4/9/24	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/9/24, 10/28/24			