

Agenda Date: August 17, 2017
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Board Agenda Item

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer

CONTACT: Joel Cordes, Monitoring and IT Supervisor (961-8816)

SUBJECT: 2016 Annual Air Quality Report

RECOMMENDATION:

Receive presentation and attached 2016 Annual Ambient Air Quality Report for Santa Barbara County.

BACKGROUND

The District has a network of 18 ambient air quality monitoring stations in Santa Barbara County designed to measure concentrations of pollutants including: ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, and particulate matter (both PM10 and PM2.5). The District summarizes the concentrations in an Annual Ambient Air Quality Report.

DISCUSSION:

In 2016, Santa Barbara County met the federal standards for all measured pollutants except ozone and PM10. In October of 2015, the US EPA revised the 8-hour ozone standard from 0.075 parts per million (ppm) to 0.070 ppm. In 2016 the revised standard was exceeded on three days. Attainment designations, however, are based on three years of data, which show that our county is still in attainment.

The federal 24-hour daily PM10 standard of 150 micrograms per cubic meter (ug/m3) was exceeded on 9 days total: five days in June/July 2016 and four days in October/November 2016. Preliminary analysis indicate that all of these high PM10 days are a direct result of both the Sherpa fire and Canyon Fires. The SBCAPCD has notified EPA of our intent to file for exceptional event status for these readings, which if approved, would exclude them from regulatory actions.

Santa Barbara County met the California state standards for all pollutants except for the 8-hour ozone standard, the 24-hour particulate matter less than 10 microns, and the annual arithmetic mean for particulate matter less than 10 microns.

The state 8-hour ozone standard of 0.070 ppm (70 ppb) was exceeded on 3 days. The California state PM10 standard of 50 µg/m³ was exceeded on 44 days. The Sherpa and Canyon fires also contributed to some of these days. The California state arithmetic mean PM10 standard of 10 µg/m³ was exceeded at 5 of the 6 stations collecting PM10 data.

The attached 2016 Annual Air Quality Report summarizes the 4 highest concentrations for each pollutant at each monitoring station. Included in the report are maps and tables showing the locations of each monitoring station and the pollutants measured. Also included is a discussion of any changes to the monitoring network during 2016.

The presentation to your board will summarize the 2016 Annual Air Quality with maps and tables. Also included in this presentation will be graphs showing historical trends for each pollutant in Santa Barbara County.

ATTACHMENT:

2016 Annual Air Quality Report

2016 Annual Air Quality Report for Santa Barbara County

2016 AIR QUALITY SUMMARY

This annual report provides information on the air quality in Santa Barbara County for 2016.

In 2016, Santa Barbara County met the federal standards for all measured pollutants except ozone and particulate matter less than 10 microns in diameter (PM10). The 8-hour ozone standard of 0.070 parts per million (ppm) or 70 parts per billion (ppb) was exceeded on 3 days: 1 day in April 2016 and 2 days in September 2016. The 24-hour daily PM10 standard of 150 $\mu\text{g}/\text{m}^3$ was exceeded on 9 days: 5 days in June/July 2016 and 4 days in October/November 2016. Preliminary analysis indicated that all of these high PM10 days are a direct result of both the Sherpa fire and Canyon Fires. The SBCAPCD has notified EPA of our intent to file for exceptional event status for these readings, which if approved, would exclude them from regulatory consideration.

Santa Barbara County met the California state standards for all pollutants except for the 8-hour ozone standard, the PM10, and the annual arithmetic mean for PM10.

The state 8-hour ozone standard of 0.070 ppm (70 ppb) was exceeded on 3 days. The California state PM10 standard of 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) was exceeded on 44 days.

The California state arithmetic mean PM10 standard of 20 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) was exceeded at 5 of the 6 stations collecting PM10 data.

Detailed information about the ozone and PM10 exceedances in Santa Barbara County can be found at: <https://www.ourair.org/days-exceeding-ozone-and-particulate-standards-santa-barbara-county/>.

National and State Ambient Air Quality Standards

The Federal Clean Air Act (CAA) (Title 1, Section 109) requires the Environmental Protection Agency (EPA) to prescribe national primary ambient air quality standards (NAAQS) for certain air pollutants where public health criteria have been established. These pollutant levels were chosen to protect the health of the most susceptible individuals in a population, including children, the elderly and those with chronic respiratory ailments. A secondary standard is also prescribed to protect human welfare (visibility, crop damage, building damage). These pollutants are known as criteria pollutants.

The EPA currently has NAAQS for six criteria pollutants: ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), lead (Pb), and particulate matter including (PM₁₀) and fine particulate matter (PM_{2.5}). Currently, Santa Barbara County is in attainment with all of the federal criteria pollutants.

In addition to the EPA standards, the California Air Resources Board (CARB) has set air quality standards for the same criteria pollutants and four others: sulfates, hydrogen sulfide (H₂S), vinyl chloride (chloroethene, C₂H₃Cl), and visibility reducing particles. The California Ambient Air Quality Standards are generally more health protective than the NAAQS, and typically are specified as not to be exceeded. A single exceedance is a violation of the applicable standard and triggers a nonattainment designation. As a result, Santa Barbara County is currently designated nonattainment-transitional for the 8-hour ozone standard, and nonattainment for the state 24-hour and annual PM₁₀ standards.

[Table 1](#) lists the Federal and California standards applicable in 2016 and [Figure 1](#) shows the locations of all monitoring stations in Santa Barbara County operating in 2016.

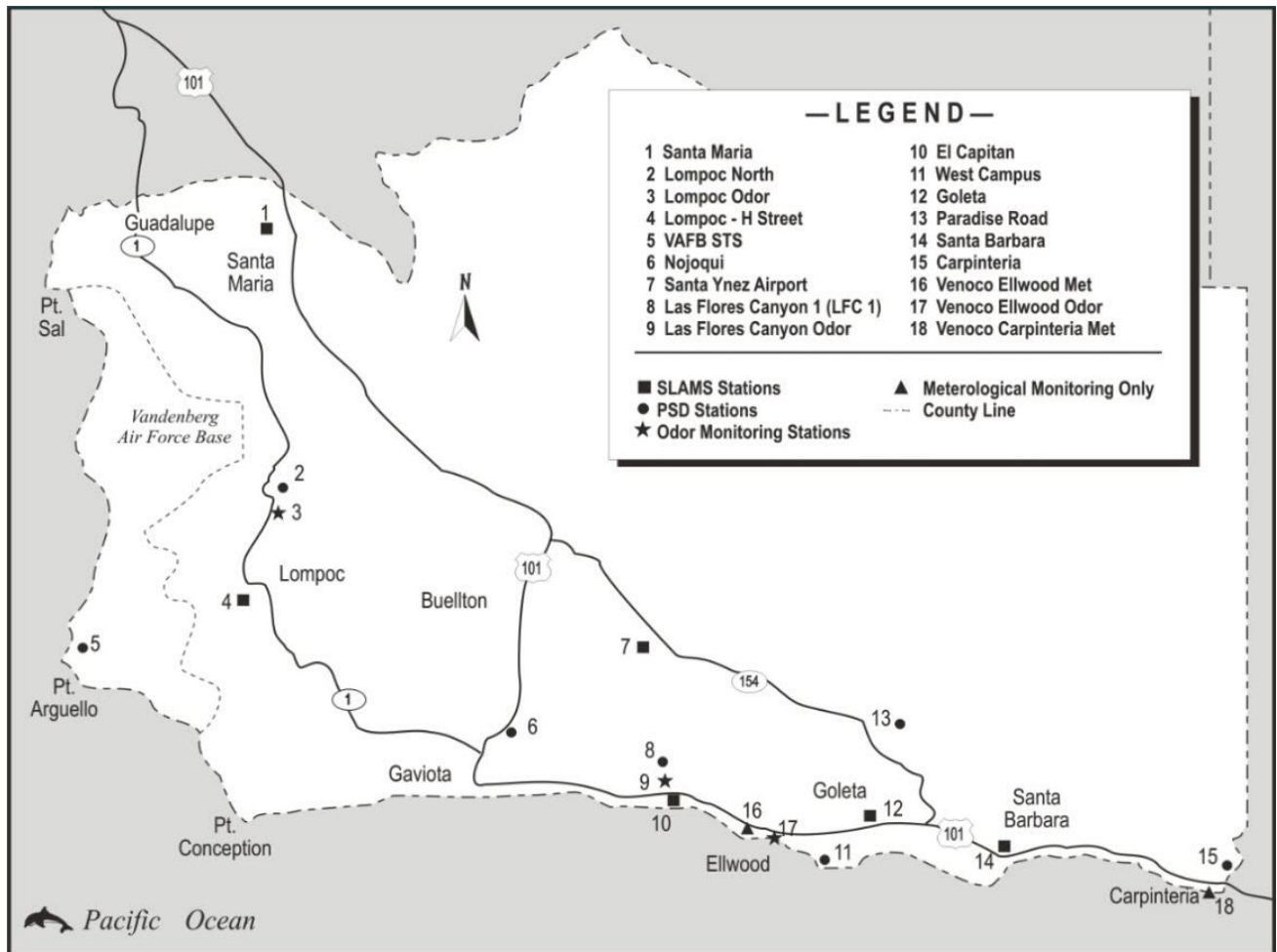
Table 1 - Federal and California Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards		National Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM10)	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM2.5)	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂)	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas)	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)	—	
Lead	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas)	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles	8 Hour		Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

Figure 1 – 2016 Santa Barbara County Air Quality Monitoring Stations



Air Quality Monitoring Station Status for 2016

In 2016, there were 18 monitoring stations operating in Santa Barbara County, of which eight were operated by the Santa Barbara County Air Pollution Control District (APCD). The remaining stations were operated by the CARB, and private industry. The monitoring stations are divided into two categories: State and Local Air Monitoring Stations (SLAMS) and Industrial Monitoring Stations (IMS). The SLAMS stations are designed to monitor the air in the urban areas of the county while the IMS stations are required by permit conditions in several oil and gas permits to monitor for impacts to the air quality from the operation of these oil and gas facilities. Table 2 lists the monitoring stations operating in Santa Barbara County during 2016 and the pollutants and parameters measured at each station. The Ellwood Odor monitoring station was granted a variance to temporarily suspend monitoring for one year during 2016 in order to relocate the site. The PM monitoring at the Santa Barbara station, operated by CARB, was temporarily suspended during 2016 due to access safety concerns.

TABLE 2. MONITORING STATION PARAMETER LIST - 2016														
STATION	O3	NO	NOx	NO2	SO2	CO	THC	H2S	WS	WD	ATM	TRS	PM10 BAM	PM2.5 BAM
Industrial (IMS)														
Carpinteria	■	■	■	■					■	■	■			
Carpinteria Met									■	■	■			
Nojoqui	■	■	■	■					■	■	■			
Lompoc North	■	■	■	■	■		■		■	■	■			
Paradise Road	■	■	■	■					■	■	■			
Lompoc Odor								■	■	■	■	■		
Vandenberg South Base	■	■	■	■	■	■	■		■	■	■		■	
Las Flores Canyon 1	■	■	■	■	■	■	■		■	■	■		■	
Las Flores Canyon Odor								■	■	■	■			
Venoco West Campus					■		■	■	■	■	■	■		
Venoco Ellwood Odor*								■	■	■	■	■		
Venoco Met									■	■	■			
SLAMS														
Lompoc H Street	■	■	■	■	■	■			■	■	■		■	■
El Capitan	■	■	■	■	■				■	■	■		■	
Santa Ynez	■													
Goleta	■	■	■	■		■			■	■	■		■	■
Santa Maria	■	■	■	■		■			■	■	■		■	■
Santa Barbara**	■	■	■	■		■			■	■	■		■	■

THC Total Hydrocarbons

WS Wind Speed

WD Wind Direction

TRS Total Reduced Sulfur

ATM Ambient Temperature

BAM Beta Attenuation Monitor

* = Venoco Ellwood Odor station temporarily shut down for 2016

** = Santa Barbara station Particulate (PM10 and PM2.5) temporarily shut down for 2016

Criteria Gaseous Pollutant Summary

The gaseous pollutant data collected in Santa Barbara County during 2016 has been summarized in Tables 3A through 3E. The tables show the four highest concentrations for each pollutant for 2016.

Table 3 - 2016 Santa Barbara County Gaseous Pollutant Summary

Table 3A - FOUR HIGHEST 1-HOUR O3 CONCENTRATIONS FOR 2016 (PPB)												
State Standard = 0.09 ppm (95 ppb)												
O3 1-HOUR												
STATION	1st	Date	Time	2nd	Date	Time	3rd	Date	Time	4th	Date	Time
PARADISE	87	9/7/2016	17:00	81	7/28/2016	17:00	78	7/30/2016	15:00	70	6/21/2016	13:00
NOJOQUI	85	6/3/2016	20:00	70	6/4/2016	2:00	69	9/27/2016	14:00	67	4/18/2016	13:00
SANTA BARBARA	83	4/18/2016	15:00	81	4/19/2016	13:00	72	10/8/2016	15:00	68	4/17/2016	15:00
EL CAPITAN	82	9/27/2016	14:00	81	4/18/2016	16:00	72	4/17/2016	15:00	71	4/19/2016	15:00
GOLETA	79	4/18/2016	15:00	75	4/19/2016	12:00	71	10/8/2016	13:00	68	4/17/2016	15:00
LAS FLORES CANYON	78	4/18/2016	16:00	76	9/27/2016	13:00	74	3/17/2016	13:00	74	10/8/2016	13:00
SANTA YNEZ	74	9/27/2016	14:00	71	9/7/2016	15:00	68	4/18/2016	13:00	67	9/18/2016	16:00
CARPINTERIA	72	4/19/2016	15:00	67	4/18/2016	14:00	65	6/16/2016	14:00	65	10/8/2016	13:00
VAFB SOUTH BASE	72	4/17/2016	16:00	71	4/18/2016	16:00	65	10/8/2016	13:00	63	2/16/2016	15:00
LOMPOC H STREET	68	4/18/2016	17:00	68	9/27/2016	12:00	66	4/17/2016	17:00	60	2/16/2016	15:00
LOMPOC NORTH	65	9/27/2016	16:00	64	9/7/2016	14:00	63	4/17/2016	18:00	63	4/18/2016	19:00
SANTA MARIA	62	9/27/2016	11:00	62	10/8/2016	14:00	61	4/17/2016	17:00	58	4/6/2016	13:00

Table 3B - FOUR HIGHEST 8-HOUR O3 CONCENTRATIONS FOR 2016 (PPB)												
Federal Standard = 0.070 ppm (70 ppb), State Standard = 0.070 ppm (70 ppb)												
O3 8-HOUR												
STATION	1st	Date	Time	2nd	Date	Time	3rd	Date	Time	4th	Date	Time
LAS FLORES CANYON	75	4/18/2016	11:00	69	9/27/2016	11:00	65	4/19/2016	9:00	64	4/17/2016	12:00
PARADISE	73	9/7/2016	11:00	66	7/28/2016	10:00	65	7/30/2016	9:00	64	4/18/2016	11:00
EL CAPITAN	72	9/27/2016	10:00	71	4/18/2016	10:00	63	4/17/2016	11:00	61	4/19/2016	9:00
SANTA BARBARA	72	4/18/2016	11:00	65	4/19/2016	10:00	62	4/17/2016	11:00	62	9/27/2016	10:00
GOLETA	71	4/18/2016	11:00	64	4/19/2016	10:00	62	4/17/2016	11:00	61	9/27/2016	10:00
SANTA YNEZ	67	9/27/2016	11:00	64	4/18/2016	10:00	62	4/19/2016	10:00	61	9/7/2016	10:00
NOJOQUI	67	6/3/2016	14:00	65	9/27/2016	12:00	63	4/18/2016	10:00	57	6/27/2016	13:00
VAFB SOUTH BASE	66	4/18/2016	10:00	63	4/17/2016	11:00	58	10/8/2016	9:00	57	4/19/2016	8:00
CARPINTERIA	64	4/19/2016	9:00	63	4/18/2016	9:00	55	9/25/2016	9:00	55	10/8/2016	9:00
LOMPOC NORTH	61	4/18/2016	12:00	61	9/27/2016	8:00	60	4/17/2016	14:00	59	10/7/2016	17:00
LOMPOC H STREET	61	4/18/2016	11:00	61	9/27/2016	10:00	59	4/17/2016	11:00	52	2/16/2016	12:00
SANTA MARIA	56	4/18/2016	11:00	54	4/17/2016	11:00	54	10/8/2016	9:00	53	9/27/2016	9:00

Table 3C - FOUR HIGHEST 1-HOUR NO2 CONCENTRATIONS FOR 2016 (PPB) Federal Standard = 0.100 ppm (100 ppb), State Standard = 0.18 ppm (180 ppb)												
NO2												
STATION	1st	Date	Time	2nd	Date	Time	3rd	Date	Time	4th	Date	Time
SANTA BARBARA	52	9/26/2016	8:00	46	10/21/2016	8:00	43	11/9/2016	17:00	42	11/10/2016	9:00
SANTA MARIA	36	2/28/2016	18:00	33	12/19/2016	17:00	33	11/10/2016	18:00	32	9/27/2016	8:00
LOMPOC H STREET	34	9/26/2016	5:00	30	2/8/2016	6:00	27	12/20/2016	6:00	26	2/2/2016	7:00
GOLETA	30	9/26/2016	8:00	28	11/4/2016	8:00	28	12/20/2016	9:00	27	11/9/2016	17:00
EL CAPITAN	29	11/11/2016	17:00	26	11/12/2016	17:00	25	6/16/2016	20:00	24	2/11/2016	18:00
NOJOQUI	19	6/3/2016	6:00	17	6/4/2016	0:00	17	7/26/2016	5:00	13	2/17/2016	10:00
PARADISE	17	8/19/2016	4:00	16	8/21/2016	3:00	7	2/17/2016	13:00	6	1/3/2016	10:00
LAS FLORES CANYON	15	2/17/2016	9:00	9	10/8/2016	14:00	6	4/19/2016	8:00	6	6/26/2016	21:00
CARPINTERIA	13	2/17/2016	12:00	12	11/5/2016	8:00	11	1/15/2016	16:00	11	9/28/2016	18:00
VAFB SOUTH BASE	7	1/9/2016	11:00	6	10/22/2016	15:00	6	12/28/2016	12:00	6	12/30/2016	6:00
LOMPOC NORTH	6	1/9/2016	11:00	6	9/29/2016	6:00	6	10/21/2016	19:00	5	2/17/2016	7:00

Table 3D - FOUR HIGHEST 1-HOUR SO2 CONCENTRATIONS FOR 2016 (PPB) Federal Standard = 0.075 ppm (75 ppb), State Standard = 0.25 ppm (250 ppb)												
SO2												
STATION	1st	Date	Time	2nd	Date	Time	3rd	Date	Time	4th	Date	Time
LAS FLORES CANYON	12	6/15/2016	21:00	3	6/16/2016	0:00	2	2/19/2016	2:00	2	4/4/2016	11:00
LOMPOC H STREET	5	9/22/2016	15:00	4	9/28/2016	4:00	2	8/24/2016	2:00	2	9/19/2016	4:00
VAFB SOUTH BASE	3	2/2/2016	2:00	3	2/3/2016	2:00	3	2/5/2016	2:00	3	2/9/2016	2:00
EL CAPITAN	3	6/16/2016	20:00	2	1/19/2016	2:00	2	3/19/2016	2:00	2	3/20/2016	2:00
WEST CAMPUS	2	1/28/2016	14:00	1	1/1/2016	0:00	1	1/2/2016	0:00	1	1/3/2016	0:00
LOMPOC NORTH	0	1/1/2016	0:00	0	1/2/2016	0:00	0	1/3/2016	0:00	0	1/4/2016	0:00

Table 3E - FOUR HIGHEST 1-HOUR CO CONCENTRATIONS FOR 2016 (PPM) Federal Standard = 35 ppm, State Standard = 20 ppm												
CO												
STATION	1st	Date	Time	2nd	Date	Time	3rd	Date	Time	4th	Date	Time
LAS FLORES CANYON	24.6	6/15/2016	22:00	10.9	6/17/2016	5:00	9.0	6/16/2016	0:00	6.6	6/18/2016	0:00
SANTA MARIA	3.6	5/27/2016	19:00	1.3	12/21/2016	20:00	1.2	1/8/2016	6:00	1.1	9/16/2016	17:00
SANTA BARBARA	1.8	1/12/2016	8:00	1.7	10/21/2016	7:00	1.5	1/27/2016	9:00	1.4	11/4/2016	7:00
GOLETA	1.7	2/9/2016	8:00	1.1	2/15/2016	11:00	1.0	1/27/2016	8:00	0.9	12/7/2016	8:00
LOMPOC H STREET	1.3	9/22/2016	15:00	1.1	9/20/2016	2:00	1.0	3/24/2016	6:00	0.9	8/19/2016	16:00
VAFB SOUTH BASE	0.6	10/9/2016	15:00	0.5	1/22/2016	2:00	0.5	1/28/2016	2:00	0.5	1/29/2016	2:00

There were 6 sites which exceeded the Federal and State 8-hour ozone standards in 2016: Las Flores Canyon, Paradise Road, El Capitan, Santa Barbara, and Goleta. There were a total of 3 days where at least 1 of these stations exceeded the standards.

No other Federal or State standards were exceeded for the other gaseous pollutants.

Particulate Matter Monitoring

Six stations collected PM10 data in 2016. The six stations used a PM10 Beta Attenuation Monitor (BAM) sampler running 24 hours a day and calculating real time hourly values for ambient PM concentrations. Three stations collected PM2.5 data using a PM2.5 BAM, collecting continuous hourly data.

The particulate data collected in Santa Barbara County during 2016 has been summarized in Tables 4A – 4C. The summaries contain the two highest 24-hour PM10 concentrations and the annual average. The California standards are based on data collected at local conditions (pressure and temperature measured at the time of the sampling) while the Federal standards are based on data collected at standard conditions (pressure and temperature corrected to standard conditions at sea level)

Table 4 – Particulate Matter Summaries

Table 4A - PM10 FEM BAMS CA Local Conditions					
California Annual Arithmetic Mean Standard: 20 ug/m3 State 24-Hour Standard: 50 ug/m3					
State 24-Hour Standard: 50 ug/m3					
STATION	Annual 24-Hour Arithmetic Mean	24-Hour High	Date	24-Hour 2nd High	Date
VAFB	29	268	11/16/2016	211	10/23/2016
SANTA MARIA	26	79	9/22/2016	63	4/25/2016
EL CAPITAN	25	179	6/16/2016	112	9/22/2016
LAS FLORES CANYON	24	448	6/16/2016	264	6/19/2016
LOMPOC H STREET	21	48	6/21/2016	47	7/23/2016
GOLETA	17	69	9/23/2016	55	6/16/2016
SANTA BARBARA*					

* = Santa Barbara did not sample in 2016.

Table 4B - PM10 FEM BAMS Standard Conditions					
Federal 24 Hour Standard: 150 ug/m3					
STATION	Annual 24-Hour Arithmetic Mean	24-Hour High	Date	24-Hour 2nd High	Date
VAFB	26	257	11/16/2016	204	10/23/2016
SANTA MARIA	24	76	9/22/2016	60	4/25/2016
EL CAPITAN	23	175	6/16/2016	109	9/22/2016
LAS FLORES CANYON	22	436	6/16/2016	266	6/19/2016
LOMPOC H STREET	19	46	6/21/2016	44	6/25/2016
GOLETA	15	67	9/23/2016	53	6/16/2016
SANTA BARBARA*					

* = Santa Barbara did not sample in 2016.

Table 4C - PM2.5 BAMS FEM Local Conditions					
California Annual Arithmetic Mean Standard: 12 ug/m3					
Federal Annual Arithmetic Mean Standard: 12 ug/m3					
Federal 24-Hour Standard: 35 ug/m3					
STATION	Annual 24-Hour	24-Hour High	Date	24-Hour 2nd	Date
LOMPOC H STREET	7.0	30	9/22/2016	28	9/20/2016
SANTA MARIA	7.0	19	7/24/2016	18	7/23/2016
GOLETA	6.9	26	6/16/2016	17	6/20/2016
SANTA BARBARA*					

* = Santa Barbara did not sample in 2016.

There were three stations in 2016 with measurements over the federal 24-hour PM10 standard of 150 µg/m3 combining for a total of 9 days over the standard. Preliminary analysis indicate that all of these high PM10 days are a direct result of both the Sherpa fire and Canyon Fires. The SBCAPCD has notified EPA of our intent to file for exceptional event status for these readings, which if approved, would exclude them from regulatory actions. The highest 24 hour value was 436 ug/m3 was measured at Las Flores Canyon when the Sherpa fire was burning around the monitoring station.

Five of the six stations measured particulate levels over the state 24-hour California PM10 standard of 50 µg/m3 for at least one day during the year. The highest 24 hour value for 2016 (448 µg/m3) was recorded at the Las Flores station when the Sherpa fire was burning around the monitoring station. There were also five stations that measured a particulate level over the California state annual arithmetic mean standard of 20 µg/m3 for the year. The highest annual arithmetic mean was at the VAFB station with a value of 29 µg/m3.

There were no stations over the PM2.5 air quality standards in 2016.

New in 2016

EPA changes to the NAAQS:

The final ozone rule and associated standard of 70 ppb took effect on December 28, 2015. No additional changes to the NAAQS occurred in 2016.

Monitoring station changes in 2016:

No permanent changes to monitoring station locations or measured parameters occurred during 2016.