

BAY AREA AIR POLLUTION SUMMARY — 2006

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second page

MONITORING STATIONS	OZONE						CARBON MONOXIDE			NITROGEN DIOXIDE			SULFUR DIOXIDE			PM ₁₀				PM _{2.5}				
	Max 1-Hr	Cal Days	Max 8-Hr	Nat Days	Cal Days	3-Yr Avg	Max 1-Hr	Max 8-Hr	Nat/Cal Days	Max 1-Hr	Ann Avg	Nat/Cal Days	Max 24-Hr	Ann Avg	Nat/Cal Days	Ann Avg	Max 24-Hr	Nat Days	Cal Days	Max 24-Hr	Nat Days	3-Yr Avg	Ann Avg	3-Yr Avg
North Counties	(ppb)		(ppb)				(ppm)			(ppb)			(ppb)				(µg/m ³)			(µg/m ³)			(µg/m ³)	
Napa	96	1	72	0	2	60	3.5	2.8	0	55	11	0	-	-	-		21.9	52	0	1	-	-	-	-
San Rafael	89	0	58	0	0	50	2.6	1.5	0	54	14	0	-	-	-		18.1	68	0	1	-	-	-	-
Santa Rosa	77	0	58	0	0	47	2.4	1.7	0	44	11	0	-	-	-		18.8	90	0	2	59.0	1	28.7	9.2
Vallejo	80	0	69	0	0	57	3.7	2.9	0	55	12	0	4	1.0	0		19.8	50	0	0	42.2	2	35.6	9.8
Coast & Central Bay																								
Richmond	-	-	-	-	-	-	-	-	-	-	-	-	6	1.6	0		-	-	-	-	-	-	-	-
San Francisco	53	0	46	0	0	45	2.7	2.1	0	107	16	0	6	1.3	0		22.9	61	0	3	54.3	3	30.9	9.7
San Pablo	61	0	50	0	0	48	2.5	1.4	0	55	13	0	5	1.6	0		21.3	62	0	2	-	-	-	-
Eastern District																								
Bethel Island	116	9	90	1	14	73	1.3	1.0	0	44	8	0	7	2.1	0		19.4	84	0	1	-	-	-	-
Concord	117	8	92	4	14	74	1.7	1.3	0	47	11	0	7	0.8	0		18.5	81	0	3	62.1	5	35.0	9.3
Crockett*	-	-	-	-	-	-	-	-	-	-	-	-	8*	1.8*	0*		-	-	-	-	-	-	-	-
Fairfield	106	3	87	1	8	69	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
Livermore	127	13	101	5	15	80	3.3	1.8	0	64	14	0	-	-	-		21.8	69	0	3	50.8	3	33.5	9.8
Martinez	-	-	-	-	-	-	-	-	-	-	-	-	7	1.9	0		-	-	-	-	-	-	-	-
Pittsburg	105	3	93	1	10	70	3.3	1.9	0	52	11	0	9	2.4	0		19.9	59	0	2	-	-	-	-
South Central Bay																								
Fremont	102	4	74	0	3	60	2.9	1.8	0	63	15	0	-	-	-		20.0	57	0	1	43.9	2	30.3	10.3
Hayward*	101	2	71	0	1	*	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
Redwood City	85	0	63	0	0	53	5.5	2.4	0	69	14	0	-	-	-		19.8	70	0	2	75.3	1	29.4	9.6
San Leandro	88	0	66	0	0	53	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
Santa Clara Valley																								
Gilroy	120	4	101	2	8	70	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
Los Gatos	116	7	87	4	11	73	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
San Jose Central	118	5	87	1	5	63	4.1	2.9	0	74	18	0	-	-	-		21.0	73	0	2	64.4	6	38.5	10.8
San Jose, Tully Road*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		35.0*	106*	0	13*	30.6*	0*	*	*
San Martin	123	7	105	5	11	76	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
Sunnyvale	106	3	78	0	1	58	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
Total Bay Area Days over Standard	18		12	22			0			0			0				0	15			10			

*See NOTES on second page

2006 NOTES

The annual Bay Area Air Pollution Summary summarizes measurements for the national and California pollutant standards.

*Station Information (see asterisks on front page)

Crockett was closed from March 27, 2005 to March 3, 2006 due to construction on site.

Hayward was closed part of 2005 due to construction on site. There was insufficient data for calculating three-year average ozone statistics.

San Jose-Tully PM_{2.5} monitoring was discontinued on September 30, 2006 in preparation for moving the monitor to Gilroy in 2007, so there was insufficient data for calculating annual and three-year average PM_{2.5} statistics. There was also construction activity near the site, which the Air District believes affected PM₁₀ measurements.

Explanation of Terms

State and national excesses occur when pollutant concentrations surpass the indicated standards. For comparison, values in ppb must be converted to ppm and rounded to the same number of decimal places as the original standard.

MAX HR / MAX 8-HR / MAX 24-HR

The highest average contaminant concentration over a one-hour period, an eight-hour period (on any given day), or a 24-hour period (from midnight to midnight).

ANN AVG

The yearly average (arithmetic mean) of the readings taken at a given monitoring station.

NAT DAYS

The number of days during the year for which the monitoring station recorded contaminant concentrations in excess of the national standard.

CAL DAYS

The number of days during the year for which the station recorded contaminant levels in excess of the California standard.

TOTAL BAY AREA DAYS OVER STANDARD is not a sum of excesses at individual stations, but rather a sum of the number of days for which excesses occurred at any one or more stations.

3-YR AVG (Nat. 8-hr ozone standard)

The 3-year average of the fourth highest 8-hour average ozone concentration for each monitoring station. A 3-year average greater than 84 ppb at any monitoring station means

that the region does not meet the standard and may be designated non-attainment by the EPA.

PM₁₀

Particulate matter ten microns or smaller in size. (PM₁₀ is only sampled every sixth day. Actual days over standard can be estimated to be six times the number shown.)

PM_{2.5}

Particulate matter 2.5 microns or smaller in size. PM_{2.5} is a sub-category of PM₁₀.

PM₁₀ ANN AVG and MAX 24-HR

This table shows PM₁₀ data reported at local temperature and pressure conditions, according to the California standards. National PM₁₀ data is converted to standard temperature and pressure conditions, which generally results in slightly lower readings.

3-YR AVG (PM_{2.5} 24-hour standard)

The 3-year average of the annual 98th percentiles of the individual 24-hour concentrations of PM_{2.5}. A 3-year average greater than 35 µg/m³ at any monitoring station means that the region does not meet the standard and may be designated non-attainment by the EPA.

3-YR AVG (PM_{2.5} annual standard)

The 3-year average of the quarterly averages of PM_{2.5}. A 3-year average greater than 15 µg/m³ at any monitoring station means that the region does not meet the standard and may be designated non-attainment by the EPA.

HEALTH-BASED AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Std	National Std
Ozone	1 Hour	0.09 ppm	—
	8 Hour	0.070 ppm	0.08 ppm
Carbon Monoxide	1 Hour	20 ppm	35 ppm
	8 Hour	9.0 ppm	9 ppm
Nitrogen Dioxide	1 Hour	0.25 ppm	—
	Annual	—	0.053 ppm
Sulfur Dioxide	24 Hour	0.04 ppm	0.14 ppm
	Annual	—	0.03 ppm
Particulates ≤ 10 microns	24 Hour	50 µg/m ³	150 µg/m ³
	Annual ¹	20 µg/m ³	—
Particulates ≤ 2.5 microns	24 Hour ¹	—	35 µg/m ³
	Annual	12 µg/m ³	15 µg/m ³

¹On Dec. 17, 2006, the U.S. EPA implemented a more stringent national 24-hour PM_{2.5} standard—revising it from 65 µg/m³ to 35 µg/m³—and revoked the national annual average PM₁₀ standard. PM_{2.5} exceedance days for 2006 reflect the new standard.

Concentrations

ppm
parts per million

ppb
parts per billion

µg/m³
micrograms per cubic meter

TEN-YEAR BAY AREA AIR QUALITY SUMMARY

DAYS OVER STANDARDS

YEAR	OZONE			CARBON MONOXIDE		Nitrogen Dioxide	Sulfur Dioxide	PM ₁₀		PM _{2.5}
	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	24-Hr	24-Hr*	24-Hr**	
	Nat		Cal	Nat	Cal	Cal	Nat	Nat	Cal	Nat
1997	-	8	-	0	0	0	0	0	4	-
1998	16	29	-	0	0	0	0	0	5	-
1999	9	20	-	0	0	0	0	0	12	-
2000	4	12	-	0	0	0	0	0	7	1
2001	7	15	-	0	0	0	0	0	10	5
2002	7	16	-	0	0	0	0	0	6	7
2003	7	19	-	0	0	0	0	0	6	0
2004	0	7	-	0	0	0	0	0	7	1
2005	1	9	9	0	0	0	0	0	6	0
2006	12	18	22	0	0	0	0	0	15	10

^{*}PM₁₀ is sampled every sixth day—actual days over standard can be estimated to be six times the numbers listed.

^{**}2000 was the first complete year of PM_{2.5} data.