

# BAY AREA AIR POLLUTION SUMMARY — 2007

—See NOTES on  
second page

MONITORING STATIONS	OZONE						CARBON MONOXIDE			NITROGEN DIOXIDE			SULFUR DIOXIDE				PM <sub>10</sub>				PM <sub>2.5</sub>				
	Max 1-Hr	Cal 1-Hr Days	Max 8-Hr	Nat 8-Hr 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	Ann Avg	Max 24-Hr	Nat Days	3-Yr Avg	Ann Avg	3-Yr Avg
<b>North Counties</b>	(ppb)		(ppb)			(ppm)			(ppb)			(ppb)			(µg/m <sup>3</sup> )				(µg/m <sup>3</sup> )			(µg/m <sup>3</sup> )			
Napa	74	0	61	0	0	57	3.2	2.0	0	53	10	0	-	-	-	21.4	50	0	0	-	-	-	-	-	
San Rafael	72	0	57	0	0	48	2.8	1.3	0	57	14	0	-	-	-	17.5	56	0	1	-	-	-	-	-	
Santa Rosa	71	0	59	0	0	47	2.6	1.7	0	46	11	0	-	-	-	17.1	37	0	0	32.0	0	30.4	7.6	8.1	
Vallejo	78	0	66	0	0	54	3.3	2.7	0	58	11	0	4	1.3	0	19.0	52	0	2	40.8	4	36.2	9.8	9.8	
<b>Coast &amp; Central Bay</b>																									
Richmond	-	-	-	-	-	-	-	-	-	-	-	-	7	1.6	0	-	-	-	-	-	-	-	-	-	-
San Francisco	60	0	49	0	0	45	2.5	1.6	0	69	16	0	6	1.5	0	21.9	70	0	2	45.2	5	29.3	8.7	9.3	
San Pablo	74	0	51	0	0	47	2.4	1.2	0	52	12	0	5	1.6	0	20.6	57	0	2	-	-	-	-	-	
<b>Eastern District</b>																									
Benicia*	83	0	71	0	1	*	1.1	0.6	0	39	*	0	7	*	0	*	31	0	0	-	-	-	-	-	
Bethel Island	93	0	78	0	4	73	1.1	0.8	0	48	8	0	5	1.5	0	18.8	49	0	0	-	-	-	-	-	
Concord	105	1	81	0	4	73	2.2	1.4	0	49	11	0	5	1.3	0	16.8	52	0	2	46.2	7	34.0	8.4	8.9	
Crockett	-	-	-	-	-	-	-	-	-	-	-	-	9	2.0	0	-	-	-	-	-	-	-	-	-	
Fairfield	89	0	67	0	0	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Livermore	120	2	91	1	3	77	3.3	1.8	0	52	13	0	-	-	-	19.8	75	0	2	54.9	3	34.8	9.0	9.3	
Martinez	-	-	-	-	-	-	-	-	-	-	-	-	8	1.7	0	-	-	-	-	-	-	-	-	-	
Pittsburg	100	1	74	0	2	70	2.8	1.5	0	51	10	0	7	2.2	0	19.4	59	0	4	-	-	-	-	-	
<b>South Central Bay</b>																									
Fremont	79	0	68	0	0	58	2.5	1.6	0	58	14	0	-	-	-	19.6	61	0	1	51.2	2	30.4	8.7	9.4	
Hayward*	75	0	65	0	0	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Redwood City	77	0	69	0	0	51	5.5	2.3	0	57	13	0	-	-	-	19.6	56	0	1	45.4	1	31.0	8.3	8.9	
San Leandro	71	0	54	0	0	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Santa Clara Valley</b>																									
Gilroy*	91	0	70	0	0	70	-	-	-	-	-	-	-	-	-	-	-	-	-	21.5	0	*	*	*	
Los Gatos	84	0	65	0	0	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
San Jose Central	83	0	68	0	0	61	3.5	2.7	0	65	17	0	-	-	-	22.0	69	0	3	57.5	9	38.3	10.7	11.1	
San Jose, Tully Road*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.6	78	0	3	-	-	-	-	-	
San Martin	96	1	73	0	4	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sunnyvale	77	0	68	0	0	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total Bay Area Days over Standard</b>	4		1 9			0			0			0			0 4				14						

\*See NOTES on second page

# 2007 NOTES

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

**\*Station Information (see asterisks on front page)**

PM<sub>2.5</sub> monitoring began at Gilroy on March 1, 2007. Since there are only 3 complete quarters of data for 2007, annual statistics are not provided for PM<sub>2.5</sub>.

The Benicia site was opened on April 1, 2007. Since there are only 3 quarters of data for 2007, annual statistics are not provided for this site.

The San Jose-Tully site was closed on December 31, 2007.

The Hayward station was closed part of 2005 due to construction on site. Therefore, three-year average ozone statistics are not available

An Oakland site was opened on November 1, 2007, and a Berkeley site was opened on December 13, 2007. Since there is only a brief period of data available for these sites in 2007, summary reporting will not begin until 2008.

## 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.

**PM<sub>10</sub>**

Particulate matter ten microns or smaller in size. (PM<sub>10</sub> is only sampled every sixth day. Actual days over standard can be estimated to be six times the number shown.)

**PM<sub>2.5</sub>**

Particulate matter 2.5 microns or smaller in size. PM<sub>2.5</sub> is a sub-category of PM<sub>10</sub>.

**PM<sub>10</sub> ANN AVG and MAX 24-HR**

This table shows PM<sub>10</sub> data reported at local temperature and pressure conditions, according to the California standards. National PM<sub>10</sub> data is converted to standard temperature and pressure conditions, which generally results in slightly lower readings.

**3-YR AVG (PM<sub>2.5</sub> 24-hour standard)**

The 3-year average of the annual 98th percentiles of the individual 24-hour concentrations of PM<sub>2.5</sub>. A 3-year average greater than 35 µg/m<sup>3</sup> 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<sub>2.5</sub> annual standard)**

The 3-year average of the quarterly averages of PM<sub>2.5</sub>. A 3-year average greater than 15 µg/m<sup>3</sup> 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
<b>Ozone</b>	1 Hour	0.09 ppm	—
	8 Hour	0.070 ppm	0.08 ppm*
<b>Carbon Monoxide</b>	1 Hour	20 ppm	35 ppm
	8 Hour	9.0 ppm	9 ppm
<b>Nitrogen Dioxide</b>	1 Hour	0.25 ppm	—
	Annual	—	0.053 ppm
<b>Sulfur Dioxide</b>	24 Hour	0.04 ppm	0.14 ppm
	Annual	—	0.03 ppm
<b>Particulates ≤ 10 microns</b>	24 Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
	Annual <sup>1</sup>	20 µg/m <sup>3</sup>	—
<b>Particulates ≤ 2.5 microns</b>	24 Hour <sup>1</sup>	—	35 µg/m <sup>3</sup>
	Annual	12 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>

<sup>1</sup>On May. 17, 2008, the U.S. EPA implemented a more stringent national 8-hour ozone standard of 0.075 ppm. Ozone exceedance days in this 2007 Summary reflect the 0.08 ppm standard that was then in place.

**Concentrations** | ppm parts per million | ppb parts per billion | µg/m<sup>3</sup> micrograms per cubic meter

## TEN-YEAR BAY AREA AIR QUALITY SUMMARY

DAYS OVER STANDARDS

YEAR	OZONE			CARBON MONOXIDE		Nitrogen Dioxide	Sulfur Dioxide	PM <sub>10</sub>		PM <sub>2.5</sub>	
	8-Hr Nat	1-Hr Cal	8-Hr Cal	1-Hr Nat	8-Hr Cal	1-Hr Cal	24-Hr Nat	24-Hr Cal	24-Hr* Nat	24-Hr** Nat	
1998	16	29	-	0	0	0	0	0	0	5	-
1999	9	20	-	0	0	0	0	0	0	12	-
2000	4	12	-	0	0	0	0	0	0	7	1
2001	7	15	-	0	0	0	0	0	0	10	5
2002	7	16	-	0	0	0	0	0	0	6	7
2003	7	19	-	0	0	0	0	0	0	6	0
2004	0	7	-	0	0	0	0	0	0	7	1
2005	1	9	9	0	0	0	0	0	0	6	0
2006	12	18	22	0	0	0	0	0	0	15	10
2007	1	4	9	0	0	0	0	0	0	4	14

\*PM<sub>10</sub> is sampled every sixth day—actual days over standard can be estimated to be six times the numbers listed.

\*\*On Dec. 17, 2006, the U.S. EPA implemented a more stringent national 24-hour PM<sub>2.5</sub> standard—revising it from 65 µg/m<sup>3</sup> to 35 µg/m<sup>3</sup>. PM<sub>2.5</sub> exceedance days for 2006 and 2007 reflect the new standard.