

# BAY AREA AIR POLLUTION SUMMARY — 2001

—See notes of explanation  
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MONITORING STATIONS	OZONE				CARBON MONOXIDE			NITROGEN DIOXIDE			SULFUR DIOXIDE			PM <sub>10</sub>							
	Max 1-Hr	Nat Days	Cal Days	3-Yr Avg	Max 8-Hr	Nat 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 Geo Mean	Ann Avg	Max 24-Hr	Nat Days*	Cal Days*
<b>North Counties</b>	(pphm)				(pphm)			(ppm)			(pphm)			(ppb)			(µg/m <sup>3</sup> )				
Napa	10	0	1	0.0	8	0	6.6	5.7	3.0	0	6	1.3	0	-	-	-	21.4	24.0	91	0	2
San Rafael	9	0	0	0.0	7	0	5.1	5.2	2.4	0	6	1.7	0	-	-	-	18.1	20.4	79	0	2
Santa Rosa	9	0	0	0.0	6	0	5.6	4.8	2.4	0	6	1.3	0	-	-	-	18.4	21.1	74	0	2
Vallejo	9	0	0	0.0	7	0	6.2	5.6	4.1	0	6	1.3	0	4	1.0	0	16.5	19.4	86	0	3
<b>Coast &amp; Central Bay</b>																					
Oakland	7	0	0	0.0	4	0	4.2	5.0	4.0	0	-	-	-	-	-	-	-	-	-	-	-
San Francisco	8	0	0	0.0	5	0	4.6	4.0	3.3	0	7	1.9	0	7	2.1	0	22.9	26.4	67	0	7
San Pablo	9	0	0	0.0	8	0	4.8	2.3	1.4	0	6	1.4	0	5	1.3	0	-	-	-	-	-
<b>Eastern District</b>																					
Bethel Island	13	1	3	0.7	10	2	8.2	2.5	1.5	0	4	1.0	0	7	2.1	0	18.7	22.7	87	0	3
Concord	13	1	6	1.3	9	1	8.1	4.4	2.7	0	7	1.5	0	4	1.1	0	17.8	20.4	106	0	2
Crockett	-	-	-	-	-	-	-	-	-	-	-	-	-	16	1.7	0	-	-	-	-	-
Fairfield	10	0	3	0.3	8	0	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livermore	11	0	9	1.3	9	2	8.3	5.8	3.2	0	7	1.7	0	-	-	-	21.1	24.6	109	0	3
Martinez	-	-	-	-	-	-	-	-	-	-	-	-	-	5	1.3	0	-	-	-	-	-
Pittsburg	12	0	2	0.0	9	1	7.3	5.2	2.4	0	6	1.4	0	11	2.7	0	16.6	20.6	98	-	-
<b>South Central Bay</b>																					
Fremont	11	0	3	0.3	8	0	6.2	5.4	2.7	0	8	1.9	0	-	-	-	20.8	23.4	58	0	3
Hayward	10	0	2	0.0	9	1	6.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redwood City	11	0	1	0.0	7	0	4.9	7.1	3.9	0	7	1.7	0	-	-	-	19.9	22.6	65	0	4
San Leandro	9	0	0	0.0	6	0	5.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Santa Clara Valley</b>																					
Gilroy	12	0	3	0.0	10	2	7.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Los Gatos	12	0	2	0.0	9	1	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Jose, 4th Street	11	0	2	0.0	7	0	6.0	7.6	5.1	0	11	2.4	0	-	-	-	25.6	28.9	77	0	4
San Jose East	9	0	0	0.0	6	0	5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Jose, Tully Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.2	22.8	75	0	4
San Martin	12	0	7	0.3	9	2	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunnyvale	8	0	0	-	6	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Bay Area Days over Standard</b>	<b>1</b>		<b>15</b>		<b>7</b>			<b>0</b>			<b>0</b>			<b>0</b>			*Since PM <sub>10</sub> is only sampled every sixth day, actual days over standard can be estimated to be six times the numbers shown.				

# NOTES

The annual Bay Area Air Pollution Summary summarizes measurements for the federal and California time-averaged pollutant standards.

The federal eight-hour average ozone standard is in effect, but the U.S. Supreme Court has decreed that EPA must issue implementation guidance through new rulemaking.

The Gilroy station reopened on April 1, 2001. It was closed for the year 2000 due to major construction activity on the property. A new monitoring station in Sunnyvale was opened on April 1, 2001.

## Explanation of Terms

State and federal excesses occur when pollutant concentrations surpass the indicated standards, with values in most cases rounded to the same number of decimal places.

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

The highest average contaminant concentration over a one-hour period, an eight-hour period, or a 24-hour period.

### NAT DAYS

The number of days during the year for which the monitoring station recorded contaminant concentration levels 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.

### 3-YR AVG (1-hr ozone standard)

The average number of days per year in excess of the national ozone standard, based on the most recent three-year period. *An average higher than 1.0 means the region will be considered out of attainment by the EPA.*

### 3-YR AVG (8-hr ozone standard)

The average of the fourth highest 8-hour average ozone concentration for each monitoring station, based on the most recent three-year period. *A concentration greater than 8.5 means that the region will be considered out of attainment by the EPA.*

### ANN AVG

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

### ANN GEO MEAN

The annual geometric mean concentration level (used for PM<sub>10</sub>). The geometric mean of *n* positive numbers is the *n*th root of their product.

### 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.)

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

# HEALTH-BASED AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Std	National Std
<b>Ozone</b>	1 Hour	9 pphm	12 pphm
	8 Hour	—	8 pphm
<b>Carbon Monoxide</b>	1 Hour	20 ppm	35 ppm
	8 Hour	9.0 ppm	9 ppm
<b>Nitrogen Dioxide</b>	1 Hour	25 pphm	—
	Annual	—	5.3 pphm
<b>Sulfur Dioxide</b>	24 Hour	40 ppb	140 ppb
	Annual	—	30 ppb
<b>Particulates &lt; 10 microns</b>	24 Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
	Annual	—	50 µg/m <sup>3</sup>
	Annual Geometric Mean	30 µg/m <sup>3</sup>	—

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

## TEN-YEAR BAY AREA AIR QUALITY SUMMARY

YEAR	OZONE			CARBON MONOXIDE				Nitrogen Dioxide	Sulfur Dioxide		PM <sub>10</sub>	
	1-Hr		8-Hr*	1-Hr		8-Hr		1-Hr	24-Hr		24-Hr	
	Nat	Cal	Nat	Nat	Cal	Nat	Cal	Cal	Nat	Cal	Nat**	Cal**
1992	2	23	-	0	0	0	0	0	0	0	0	18
1993	3	19	-	0	0	0	0	0	0	0	0	10
1994	2	13	-	0	0	0	0	0	0	0	0	9
1995	11	28	-	0	0	0	0	0	0	0	0	7
1996	8	34	-	0	0	0	0	0	0	0	0	3
1997	0	8	-	0	0	0	0	0	0	0	0	4
1998	8	29	16	0	0	0	0	0	0	0	0	5
1999	3	20	9	0	0	0	0	0	0	0	0	12
2000	3	12	4	0	0	0	0	0	0	0	0	7
2001	1	15	7	0	0	0	0	0	0	0	0	10

\*EPA promulgated the 8-Hr standard in mid-1997

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