

# BAY AREA AIR POLLUTION SUMMARY — 2003

—See NOTES on back of this page

MONITORING STATIONS	OZONE				CARBON MONOXIDE			NITROGEN DIOXIDE			SULFUR DIOXIDE			PM <sub>10</sub>				PM <sub>2.5</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 Days	Cal Days	Max 24-Hr	Nat Days	3-Yr Avg	Ann Avg	3-Yr Avg			
<b>North Counties</b>	(pphm)				(pphm)			(ppm)			(pphm)			(µg/m <sup>3</sup> )				(µg/m <sup>3</sup> )							
Napa	11	0	2	0.0	8	0	6.5	4.7	2.5	0	7	1.2	0	-	-	-	21.3	41	0	0	-	-	-	-	-
San Rafael	9	0	0	0.0	7	0	4.9	3.8	2.0	0	7	1.6	0	-	-	-	17.6	41	0	0	-	-	-	-	-
Santa Rosa	10	0	1	0.0	8	0	5.4	3.1	1.8	0	6	1.2	0	-	-	-	16.9	36	0	0	39	0	37.9	8.8	10.0
Vallejo	10	0	2	0.0	7	0	6.5	4.0	2.9	0	7	1.2	0	5	1.2	0	17.3	39	0	0	31	0	35.0	9.4	11.8
<b>Coast &amp; Central Bay</b>																									
Oakland	8	0	0	0.0	5	0	4.0	3.9	2.8	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Richmond	-	-	-	-	-	-	-	-	-	-	-	-	-	5	0.9	0	-	-	-	-	-	-	-	-	-
San Francisco	9	0	0	0.0	6	0	4.8	3.6	2.8	0	7	1.8	0	7	2.2	0	22.7	52	0	1	42	0	47.3	10.1	11.6
San Pablo	9	0	0	0.0	7	0	5.3	3.1	1.8	0	7	1.3	0	5	1.5	0	20.6	49	0	0	-	-	-	-	-
<b>Eastern District</b>																									
Bethel Island	9	0	0	0.3	8	0	7.9	1.6	0.9	0	5	0.9	0	6	2.2	0	19.4	51	0	1	-	-	-	-	-
Concord	10	0	5	0.3	9	1	8.2	3.2	2.0	0	6	1.3	0	3	0.6	0	16.4	34	0	0	50	0	41.0	9.7	11.2
Crockett	-	-	-	-	-	-	-	-	-	-	-	-	-	6	1.2	0	-	-	-	-	-	-	-	-	-
Fairfield	9	0	0	0.0	8	0	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livermore	13	1	10	1.0	9	3	8.4	3.7	1.9	0	7	1.6	0	-	-	-	18.9	33	0	0	42	0	43.0	9.0	11.6
Martinez	-	-	-	-	-	-	-	-	-	-	-	-	-	7	1.6	0	-	-	-	-	-	-	-	-	-
Pittsburg	9	0	0	0.0	8	0	7.5	3.4	1.7	0	6	1.2	0	8	2.1	0	21.1	59	0	1	-	-	-	-	-
<b>South Central Bay</b>																									
Fremont	12	0	4	0.0	9	1	6.5	3.2	1.9	0	8	1.7	0	-	-	-	18.2	37	0	0	34	0	37.4	8.7	11.1
Hayward	12	0	3	0.0	9	1	6.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redwood City	11	0	1	0.0	8	0	5.8	5.4	2.6	0	8	1.5	0	-	-	-	19.8	38	0	0	34	0	37.7	9.0	10.6
San Leandro	10	0	2	0.0	7	0	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Santa Clara Valley</b>																									
Gilroy	11	0	6	0.0	9	2	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Los Gatos	12	0	7	0.0	10	2	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Jose Central*	12	0	4	*	8	0	*	5.5	4.0	0	9	2.1	0	-	-	-	23.6	60	0	3	56	0	*	11.7	*
San Jose East	10	0	2	0.0	7	0	5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Jose, Tully Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.8	58	0	2	52	0	40.2	10.1	11.1
San Martin	11	0	9	0.0	9	4	8.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunnyvale	11	0	4	0.0	9	2	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Bay Area</b>	<b>1 19</b>				<b>7</b>			<b>0</b>			<b>0</b>			<b>0 6</b>				<b>0</b>							
<b>Days over Standard</b>	*See notes of explanation on back of this page																								

# 2003 NOTES

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

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

The **San Jose 4th Street** station was closed for relocation on April 30, 2002. It reopened as **San Jose Central** on October 5, 2002. Three-year average ozone statistics and three-year average PM<sub>2.5</sub> statistics for San Jose Central have been omitted from this summary.

## Explanation of Terms

State and national 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 (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 (1-hr ozone standard)

The average number of days per year during which ozone levels were in excess of the national 1-hour standard, based on the most recent three-year period. *An average higher than 1.0 at any monitoring station means the region will be considered out of attainment by the EPA.*

### 3-YR AVG (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 8.4 at any monitoring station means that the region will be considered out of 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

California PM<sub>10</sub> Annual Average and Maximum 24-Hour concentrations are reported at local temperature and pressure conditions. National PM<sub>10</sub> Annual Average and Maximum 24-Hour concentrations are reported at standard temperature and pressure conditions. This table shows the California readings for PM<sub>10</sub> Ann Avg and Max 24-Hr, which are generally slightly higher than the national 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 65 µg/m<sup>3</sup> at any monitoring station means that the region will be considered out of 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 will be considered out of attainment by the EPA.*

# HEALTH-BASED AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Std	National Std
Ozone	1 Hour	9 pphm	12 pphm
	8 Hour	—	8 pphm
Carbon Monoxide	1 Hour	20 ppm	35 ppm
	8 Hour	9.0 ppm	9 ppm
Nitrogen Dioxide	1 Hour	25 pphm	—
	Annual	—	5.3 pphm
Sulfur Dioxide	24 Hour	40 ppb	140 ppb
	Annual	—	30 ppb
Particulates < 10 microns	24 Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
	Annual	20 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
Particulates < 2.5 microns	24 Hour	—	65 µg/m <sup>3</sup>
	Annual	12 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>

Concentrations    ppm parts per million    ppb parts per hundred 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>
	1-Hr		1-Hr		8-Hr		1-Hr	24-Hr		24-Hr*	24-Hr**
	Nat	Cal	Nat	Cal	Nat	Cal	Cal	Nat	Cal	Nat	Nat
1994	2	13	-	0 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	1		
2001	1	15	7	0 0	0 0	0	0 0	0 10	5		
2002	2	16	7	0 0	0 0	0	0 0	0 6	7		
2003	1	19	7	0 0	0 0	0	0 0	0 6	0		

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

\*\*2000 is the first full year for which the Air District measured PM<sub>2.5</sub> levels.