BAY AREA AIR POLLUTION SUMMARY – 2013																										
MONITORING STATIONS	OZONE				CARBON MONOXIDE			NITROGEN DIOXIDE			SULFUR DIOXIDE			PM ₁₀			PM _{2.5}									
	Max 1-Hr	Cal 1-Hr Days	Max 8-Hr	Nat 8-Hr Days	Cal 8-Hr Davs	3-Yr Avg	Max 1-Hr		Nat/Cal Days	Max 1-Hr		Nat 1-Hr Days	Cal 1-Hr Days	Max 1-Hr	24-Hr	Nat 1-Hr Davs	Cal 24-Hr Days	Ann Avg	Max 24-Hr	Nat 24-Hr Days	Cal 24-Hr Days	Max 24-Hr	Nat 24-Hr Days	3-yr Avg	Ann Avg	3-yr Avg
North Counties	(ppb)	Dayo	(ppb)	Dayo	Dujo		(pp	m)		(pr		Dayo	Dayo	(pp		Dayo	Dayo	(μg	/m ³)	Dayo	Dayo	(µg/m³)			(μg/	/m ³)
Napa*	89	0	76	1	2	59	3.1	1.7	0	43	9	0	0	- " .	-	-	-	18.9		0	0	35.8	1	*	11.7	*
San Rafael	81	0	69	0	0	53	2.2	1.1	0	50	12	0	0	-	-	-	-	15.7	54	0	1	44.9	2	24	10.8	9.6
Santa Rosa	74	0	64	0	0	47	1.8	1.2	0	40	9	0	0	-	-	-	-	-	-	-	-	28.1	0	22	8.5	8.4
Vallejo	82	0	68	0	0	57	2.8	2.3	0	49	10	0	0	8.1	2.5	0	0	-	-	-	-	42.6	6	28	9.9	9.6
Coast & Central Bay																										
Oakland	76	0	54	0	0	44	3.6	2.0	0	60	14	0	0	-	-	-	-	-	-	-	-	37.9	2	26	10.3	10.0
Oakland-West*	71	0	59	0	0	45	3.8	3.2	0	64	17	0	0	49.8	7.1	0	0	-	-	-	-	42.7	2	*	12.8	*
Richmond	-	-	-	-	-	-	-	-	-	-	-	-	-	13.1	3.1	0	0	-	-	-	-	-	-	-	-	-
San Francisco	69	0	59	0	0	46	1.8	1.4	0	73	14	0	0	-	-	-	-	18.3		0	0	48.5	2	25	10.1	9.3
San Pablo*	74	0	65	0	0	51	2.2	1.0	0	47	10	0	0	11.0	1.9	0	0	18.4	48	0	0	41.2	2	*	12.0	*
Eastern District																										
Bethel Island*	82	0	75	0	1	68	1.0	8.0	0	33	*	0	0	4.0	1.5	0	0	*	51	0	1	-	-	-	-	-
Concord	74	0	62	0	0	67	1.2	1.0	0	44	9	0	0	11.1	2.8	0	0	16.0	51	0	1	36.2	1	24	7.6	7.3
Crockett	-	-	-	-	-	-	-	-	-	-	-	-	-	64.6	8.1	0	0	-	-	-	-	-	-	-	-	-
Fairfield	87	0	75	0	1	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livermore	96	3	77	1	2	71	-	-	-	51	12	0	0	-	-	-	-	-	-	-	-	40.1	4	27	8.4	7.6
Martinez	-	-	-	-	-	-	-	-	-	-	-	-	-	16.3	4.6	0	0	-	-	-	-	-	-	-	-	-
Patterson Pass	-	-	-	-	-	-	-	-	-	25	4	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
San Ramon*	84	0	67	0	0	*	-	-	-	42	8	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
South Central Bay																										
Hayward	85	0	75	0	1	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redwood City	83	0	75	0	1	53	3.6	1.6	0	54	13	0	0	-	-	-	-	-	-	-	-	39.0	3	25	10.7	9.3
Santa Clara Valley																										
Cupertino	91	0	77	1	1	62	3.1	1.3	0	42	9	0	0	13.9	2.9	0	0	14.6	34	0	0	-	-	-	-	-
Gilroy	80	0	68	0	0	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.5	0	19	8.6	8.0
Los Gatos	87	0	75	0	1	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Jose	93	0	79	1	1	58	3.1	2.5	0	59	15	0	0	2.5	1.4	0	0	22.3	58	0	5	57.7	6	32	12.4	10.5
San Martin	94	0	76	1	1	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Bay Area		3		3	3				0			0	0			0	0			0	6		13			
Days over Standard										1	*Se	ee NO		on se	cond p	_										
,		Dash (-) indicates pollutant is not monitored at the site.																								

2013 NOTES

The annual Bay Area Air Pollution Summary summarizes pollutant concentrations for comparison to the national and California air pollution standards.

*Station Information (see asterisks on front page)

PM_{2.5} monitoring using the federally accepted method began at Napa, Oakland West, and San Pablo in December 2012. Therefore, 3-year average PM_{2.5} statistics are not available.

Air monitoring at Bethel Island was stopped during May-July, 2013 so that an upgrade of the instrument trailer could be completed. Therefore, annual statistics for Nitrogen Dioxide and PM₁₀ are not available.

Ozone monitoring at San Ramon began in January 2012 for an air monitoring study. Therefore, 3-year average ozone statistics are not available.

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 pollutant 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.

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

The number of days during the year for which the station recorded pollutant concentrations 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 75 ppb at any monitoring station means that the region does not meet the standard and may be designated non-attainment by the EPA.

Particulate matter ten microns or smaller in size. PM₁₀ is sampled every third day at San Jose and every sixth day at all other sites.

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 are 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. The method for calculating the 98th percentile was changed by the EPA effective March 18, 2013.

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 12.0 µg/m³ at any monitoring station means that the region does not meet the standard and may be designated non-attainment by the EPA.

Pollutant **Averaging Time** California Std National Std Ozone 1 Hour 0.09 ppm 8 Hour 0.070 ppm 0.075 ppm Carbon Monoxide 1 Hour 20 ppm 35 ppm 8 Hour 9.0 ppm 9 ppm **Nitrogen Dioxide** 0.18 ppm 0.100 ppm 1 Hour Annual 0.030 ppm 0.053 ppm **Sulfur Dioxide** 0.075 ppm 1 Hour 24 Hour 0.04 ppm

50 ug/m³

 $20 \, \mu g/m^3$

12 μg/m³

150 $\mu g/m^3$

35 ug/m³ 12.0 $\mu g/m^3$

HEALTH-BASED AMBIENT AIR QUALITY STANDARDS

ppm ppb μg/m3 Concentrations parts per million parts per billion micrograms per cubic meter

24 Hour

Annual

24 Hour

Annual

Particulates ≤ 10 microns

Particulates ≤ 2.5 microns

Т	TEN-YEAR BAY AREA AIR QUALITY SUMMARY DAYS OVER CURRENT STANDARDS														
	(DZONE		ı		BON Oxide	.	NITRO DIOX			.FUR XIDE	PM	PM _{2.5}		
YEAR	8-Hr	1-Hr	1-	Hr	8-	8-Hr		٦r	1-Hr 24-Hr		24-Hr		24-Hr		
	Nat Cal			Nat	Cal	Nat	Cal	Nat	Cal	Nat	Cal	Nat	Cal	Nat	
2004	7	7	13	0	0	0	0	0	0	1	0	0	7	20	
2005	5	9	9	0	0	0	0	0	0	0	0	0	6	21	
2006	17	18	22	0	0	0	0	1	0	0	0	0	15	10	
2007	2	4	9	0	0	0	0	0	0	0	0	0	4	14	
2008	12	9	20	0	0	0	0	0	0	2	0	0	5	12	
2009	8	11	13	0	0	0	0	0	0	0	0	0	1	11	
2010	9	8	11	0	0	0	0	0	0	0	0	0	2	6	
2011	4	5	10	0	0	0	0	0	0	0	0	0	3	8	
2012	4	3	8	0	0	0	0	1	0	0	0	0	2	3	
2013	3	3	3	0	0	0	0	0	0	0	0	0	6	13	