BAY AREA AIR POLLUTION SUMMARY – 2014

MONITORING STATIONS	OZONE				ARBO NOXI		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	Max 8-Hr	Nat/Cal Days	Max 1-Hr	Ann Avg	Nat 1-Hr Davs	Cal 1-Hr Days	Max 1-Hr	Max 24-Hr	Nat 1-Hr Days	Cal 24-Hr Davs	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)	, -	(ppb)	, -	, -		(pp	m)		(pp	b)	, -	, -	(pr				(µg/	/m ³)	, 	, , -	(µg/m ³)			(μg/	m ³)
Napa*	74	0	66	0	0	58	2.2	1.4	0	46	8	0	0	-	-	-	-	15.8	39	0	0	29.9	0	*	12.0	*
San Rafael	88	0	68	0	0	56	1.9	1.1	0	62	11	0	0	-	-	-	-	14.1	41	0	0	38.1	1	22	10.8	9.8
Sebastopol*	67	0	61	0	0	*	1.4	0.9	0	44	4	0	0	-	-	-	-	-	-	-	-	26.2	0	*	7.7	*
Vallejo	77	0	68	0	0	58	2.5	2.1	0	50	8	0	0	23.9	2.4	0	0	-	-	-	-	39.6	1	26	9.9	9.6
Coast & Central Bay																										
Laney College Freeway*	-	-	-	-	-	-	2.0	1.1	0	65	17	0	0	-	-	-	-	-	-	-	-	26.0	0	*	8.4	*
Oakland	83	0	68	0	0	47	2.8	1.7	0	82	12	0	0	-	-	-	-	-	-	-	-	37.6	1	24	8.5	9.4
Oakland-West*	72	0	59	0	0	47	3.0	2.6	0	56	14	0	0	16.5	3.3	0	0	-	-	-	-	38.8	1	*	9.5	*
Richmond	-	-	-	-	-	-	-	-	-	-	-	-	-	19.2	5.0	0	0	-	-	-	-	-	-	-	-	-
San Francisco	79	0	69	0	0	47	1.6	1.2	0	84	12	0	0	-	-	-	-	17.0	36	0	0	33.2	0	23	7.7	8.6
San Pablo*	75	0	60	0	0	52	1.8	1.0	0	52	9	0	0	15.3	5.8	0	0	16.4	46	0	0	38.2	1	*	10.5	*
Eastern District																										
Bethel Island	92	0	71	0	1	67	0.9	0.7	0	33	5	0	0	10.5	3.4	0	0	16.7	61	0	1	-	-	-	-	-
Concord	95	1	80	2	2	64	1.4	1.1	0	48	8	0	0	29.1	4.5	0	0	14.2	43	0	0	30.6	0	22	6.6	7.0
Crockett	-	-	_	-	-	_	-	-	_	_	-	_	_	25.7	5.4	0	0	-	-	_	_	_	_	-	-	-
Fairfield	81	0	70	0	0	63	_	-	-	-	-	-	-	_	_	_	_	-	-	-	-	-	-	-	-	-
Livermore	93	0	80	4	7	72	-	-	-	49	10	0	0	-	-	-	-	-	-	-	-	42.9	1	27	7.6	7.5
Martinez	-	-	_	_	-	_	-	-	-	_	_	-	-	21.2	4.6	0	0	-	-	-	-	-	_	_	_	_
Patterson Pass	_	_	_	-	-	-	_	_	_	21	3	0	0		-	-	-	_	_	_	_	_	_	_	_	_
San Ramon	86	0	77	3	4	67	_	-	-	37	6	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
		-																								
South Central Bay	00	4	75	0	4	C1																				
Hayward	96	1	75	0	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redwood City	86	0	65	0	0	56	3.2	1.6	0	55	11	0	0	-	-	-	-	-	-	-	-	35.0	0	23	7.1	8.8
Santa Clara Valley																										
Gilroy	84	0	74	0	4	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.7	0	18	6.8	7.6
Los Gatos	90	0	77	1	3	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Jose	89	0	66	0	0	60	2.4	1.9	0	58	13	0	0	3.0	0.9	0	0	19.9	55	0	1	60.4	2	30	8.4	10.0
San Jose Freeway*	-	-	-	-	-	-	2.2	1.9	0	65	*	0	0	-	-	-	-	-	-	-	-	24.3	0	*	*	*
San Martin	97	1	78	3	5	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Bay Area		3		5	10				0			0	0			0	0			0	2		3			
Days over Standard		-		Ĵ					2		*S	-		on se	cond p								5			
									Da	sh (-) i						-		ne site.								

2014 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 Sebastopol began in January 2014. Therefore, 3-year average statistics for ozone and PM_{2.5} are not available. In addition, the Sebastopol site replaced the Santa Rosa site which closed on December 13, 2013. Therefore, statistics for Santa Rosa are not provided in the 2014 summary.

Near-road air monitoring at Laney College Freeway began in February 2014. Therefore, 3-year average PM_{2 5} statistics are not available.

Near-road air monitoring at San Jose Freeway began in September 2014. Therefore, annual average NO₂ and 3-year average PM_{2.5} 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.

NAT DAYS

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.

PM_{10}

Particulate matter ten microns or smaller in size. PM₁₀ is sampled every third day at San Jose and every sixth or twelfth 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 PM2 5. A 3-year average greater than 35 μ g/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_{25} . A 3-year average greater than 12.0 μ g/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	0.075 ppm
Carbon Monoxide	1 Hour	20 ppm	35 ppm
	8 Hour	9.0 ppm	9 ppm
Nitrogen Dioxide	1 Hour	0.18 ppm	0.100 ppm
	Annual	0.030 ppm	0.053 ppm
Sulfur Dioxide	1 Hour	_	0.075 ppm
	24 Hour	0.04 ppm	_
Particulates ≤ 10 microns	24 Hour	50 μg/m ³	150 μg/m ³
	Annual	20 μg/m ³	–
Particulates ≤ 2.5 microns	24 Hour	_	35 μg/m ³
	Annual	12 μg/m ³	12.0 μg/m ³

ppm Concentrations

ppb

µg/m3 parts per million parts per billion micrograms per cubic meter

TEN-YEAR BAY AREA AIR QUALITY SUMMARY DAYS OVER CURRENT STANDARDS CARBON

	(DZONE		ſ	-	DON	Ξ	DIOX			XIDE	PM	10	PM _{2.5}
YEAR	8-Hr 1-Hr 8-H		8-Hr	1-	1-Hr		8-Hr		١r	1-Hr	24-Hr	24-	Hr	24-Hr
	Nat	at Cal		Nat	Cal	Nat	Cal	Nat	Cal	Nat	Cal	Nat	Cal	Nat
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
2014	5	3	10	0	0	0	0	0	0	0	0	0	2	3