

Air Quality Standards Compliance Report

Statistics for August 2001

Vol. 14, No. 8

Published March, 2002

AUGUST 2001 AIR QUALITY

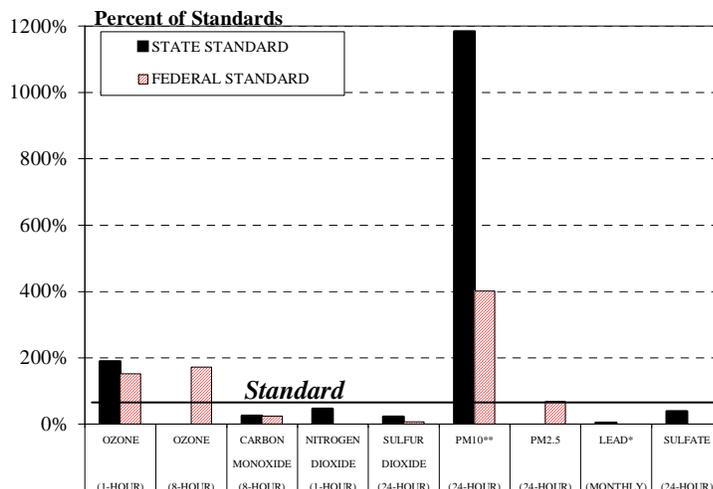
Air quality statistics in the South Coast Air Basin and the downwind desert area of Coachella Valley in the Salton Sea Air Basin for August 2001 are shown and summarized in the following figures and tables. Figure 1 compares the maximum pollutant concentrations recorded in August 2001 as percentages of the state and federal standards. Figure 2 shows January- August 2001 maximum concentrations for non-attainment pollutants in the Basin compared to the same period maximum concentrations in the previous three years.

Table 1 shows the maximum concentrations for all criteria pollutants recorded in August 2001 compared to the state and federal ambient air quality standards. It also shows the date of the maximum concentration, maximum Air Quality Index (AQI) value recorded in August for each pollutant, and the location where the maximum concentration was recorded.

Figure 3 shows the location of the District's air monitoring stations in each source/receptor area. The source/receptor area names and numbers, air monitoring station numbers, the number of days exceeding the state and federal standards and the maximum concentrations of the pollutants in each source/receptor area during August 2001 are summarized in Table 2 (pages 4 and 5). Table 3 (pages 6-7) shows year-to-date cumulative statistics for the year 2001. The state and federal ambient air quality standards are given in Table 4.

This monthly publication satisfies the requirements for reporting on air quality in the South Coast Air Basin set by California legislation (Chapter 1301, Statutes of 1987; Health and Safety Code Section 40451(d)), and supplies similar information for the areas of the Salton Sea Desert Air Basin served by the District.

Subscription request forms for subscription to the Air Quality Standards Compliance Report (AQSCR) may be obtained by calling (909) 396-3720. The annual subscription fee for the calendar year 2001 is \$11.55.



* Higher lead concentrations were recorded at special monitoring sites located immediately downwind of stationary sources of lead.
**High PM10 concentration was recorded in the desert portion of Coachella Valley area due to the high wind.

Figure 1
Maximum Concentrations Recorded in August 2001 as Percentages of State and Federal Standards

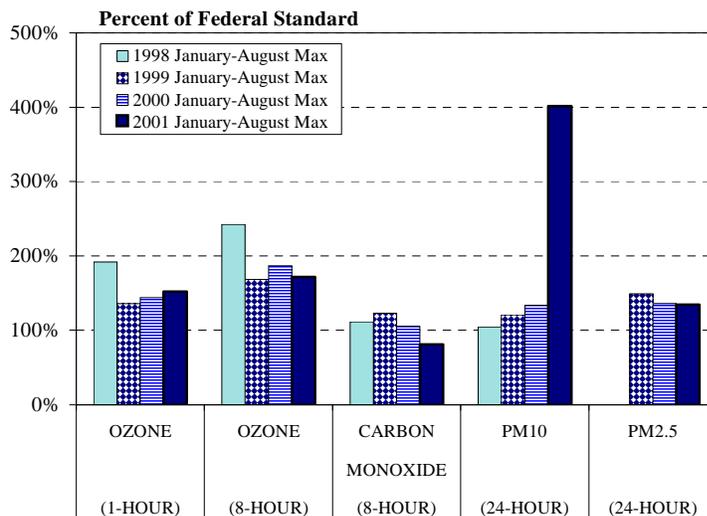


Figure 2
Year-to-Date Maximum Concentrations in 2001 Compared to the previous Years



South Coast Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
<http://www.aqmd.gov>

Table 1. Maximum Concentrations and Corresponding AQIs Reported in August 2001

Pollutant Averaging Time	Maximum Concentrations					Location
	ppm/ ug/m3	Date	% State Standard	% Federal Standard	AQI	
Ozone						
1-Hour	0.19	August 26	190%	152%	182	East San Gabriel Valley
8-Hour	0.146	August 25	--	172%	209	East San Bernardino Valley
Carbon Monoxide						
8-Hour	2.25	August 24	25%	24%	25	Central Los Angeles
Nitrogen Dioxide						
1-Hour	0.12	August 14,17,25	46%	--	--	Several Locations
24-Hour	0.066	August 18	--	--	66	East San Fernando Valley
Sulfur Dioxide						
1-Hour	0.08	August 2	31%	--	--	Central Los Angeles
24-Hour	0.010	August 20	22%	7%	15	Metropolitan Riverside County
Particulate (PM10)						
24-Hour	604++	August 17	480%	162%	500	Coachella Valley
Particulate (PM2.5)						
24-Hour	44.8	August 25	--	68%	109	Metropolitan Riverside County
Sulfates						
24-Hour	9.6	August 17	38%	--	--	Southwest Coastal Los Angeles County
Lead*						
30-Day	0.05	a)	3%	--	--	Several Locations
30-Day*	0.30	a)	20%	--	--	Southeast Los Angeles County

* Maximum monthly average concentration recorded at special monitoring sites in the immediate vicinity of major lead sources.

a) Monthly average.

++This high PM10 concentration recorded in the desert portion of the District was due to the high wind and may be excluded in accordance with EPA's natural Event policy.

AMBIENT AIR QUALITY STANDARDS

Ambient air quality standards shown in Table 4 (page 8) represent targets for acceptable concentrations of specified pollutant in outdoor air. The Federal Clean Air Act requires EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

The Federal Clean Air Act also permits states to adopt additional or more protective air quality standards if needed. California has set standards

for certain pollutants, such as ozone and PM10, which are more protective of public health than respective NAAQS. California has also set standards for some pollutants that are not addressed by federal standards (please see Table 4).

To attain NAAQS (other than ozone, PM10 and those based on annual averages), standards are not to be exceeded more than once a year. To attain the ozone standard, the 1-hour average concentration must not exceed the federal standard more than once per year, averaged over three consecutive years. For PM10, the 24-hour concentration must not exceed the standard more than once per year, averaged over three years. To attain the federal annual PM10 standard, the annual arithmetic mean, averaged over three years, must not exceed the standard.

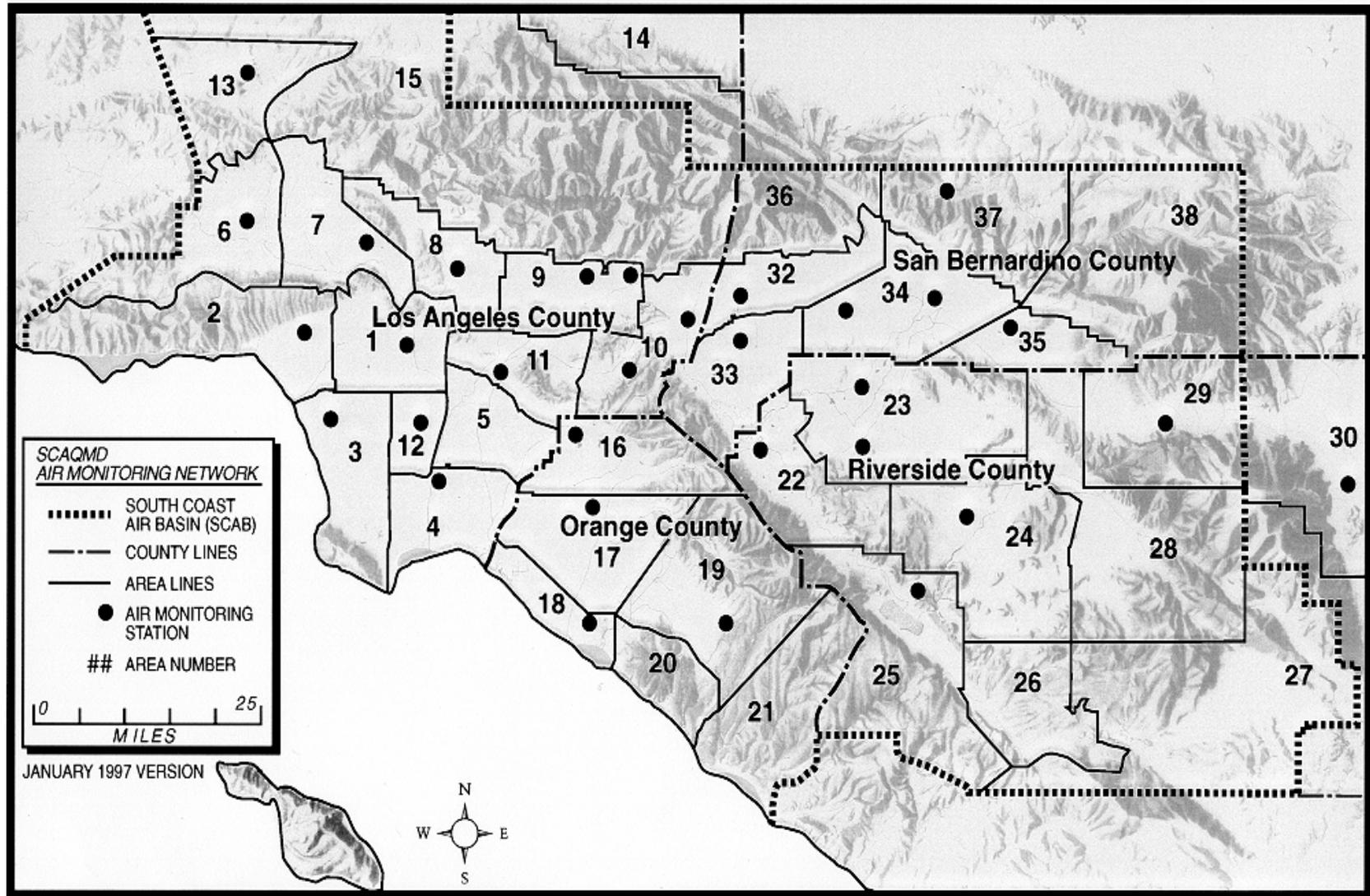


Figure 3
South Coast Air Basin and Adjoining Areas of Salton Sea and Mojave Desert
Air Basins and Monitoring Stations

Table 2
August 2001
Exceedances of Standards and Maximum Concentrations

Source/Receptor	Ozone								Carbon Monoxide				Nitrogen Dioxide		Sulfur Dioxide	
	Days Exceeding State Std	Days Exceeding Health Advisory	Days Exceeding Fed Std	Max 1-hr ppm	Max 8-hr ppm	Days Exceeding State Std	Days Exceeding Fed Std	Max 8-hr ppm	Max 1-hr ppm	Days Exceeding State Std	Max 1-hr ppm	Max 24-hr ppm	Max 1-hr ppm			
	1-hr	8-hr	1-hr	8-hr	8-hr/1-hr	8-hr/1-hr	8-hr/1-hr	8-hr/1-hr	ppm	ppm	ppm	ppm	ppm			
LOS ANGELES COUNTY																
1 Central LA	087	4	0	0	1	0.12	0.099	0/0	0/0	2.25	5	0	0.12	0.004	0.08	
2 Northwest Coastal LA County	091	0	0	0	0	0.08	0.071	0/0	0/0	1.00	2	0	0.05			
3 Southwest Coastal LA County	094	0	0	0	0	0.09	0.076	0/0	0/0	1.29	2	0	0.06	0.006	0.03	
4 South Coastal LA County	072	0	0	0	0	0.08	0.068	0/0	0/0	1.00	1	0	0.12	0.007	0.04	
6 West San Fernando Valley	074	13	0	2	5	0.14	0.118	0/0	0/0	1.43	2	0	0.07			
7 East San Fernando Valley	069	4	0	1	1	0.13	0.105	0/0	0/0	1.86	2	0	0.11	0.001	0.01	
8 West San Gabriel Valley	088	10	1	1	4	0.16	0.123	0/0	0/0	2.00	2	0	0.10			
9 East San Gabriel Valley 1	060	12	1	4	8	0.19	0.131	0/0	0/0	1.86	2	0	0.09			
9 East San Gabriel Valley 2	591	19	2	6	8	0.19	0.134	0/0	0/0	1.29	2	0	0.08			
10 Pomona/Walnut Valley	075	5	0	1	2	0.14	0.109	0/0	0/0	1.71	2	0	0.09			
11 South San Gabriel Valley	085	1	0	1	1	0.13	0.100	0/0	0/0	1.29	2	0	0.08			
12 South Central LA County 1	084	0	0	0	0	0.08	0.061	0/0	0/0	2.00	3	0	0.07			
12 South Central LA County 2	801															
13 Santa Clarita Valley	090	18	1	3	11	0.15	0.123	0/0	0/0	1.29	2					
ORANGE COUNTY																
16 North Orange County	3177	1	0	0	1	0.11	0.085	0/0	0/0	1.00	1	0	0.08			
17 Central Orange County	3176															
18 North Coastal Orange County	3195	0	0	0	0	0.09	0.073	0/0	0/0	1.00	1	0	0.03	0.002	0.01	
19 Saddleback Valley	3812	2	0	0	0	0.10	0.084	0/0	0/0	0.88	1					
RIVERSIDE COUNTY																
22 Norco/Corona	4155															
23 Metropolitan Riverside County 1	4144	11	0	4	9	0.14	0.121	0/0	0/0	1.43	2	0	0.06	0.010	0.01	
23 Metropolitan Riverside County 2	4146							0/0	0/0	1.88	3					
24 Perris Valley	4149	22	2	10	17	0.15	0.133									
25 Lake Elsinore	4158	20	1	6	16	0.15	0.123	0/0	0/0	1.00	1	0	0.10			
29 Banning/San Gorgonio Pass	4164	16	1	6	12	0.15	0.118					0	0.12			
30 Coachella Valley 1**	4137	6	0	2	5	0.14	0.114	0/0	0/0	1.00	1	0	0.06			
30 Coachella Valley 2**	4157	2	0	0	2	0.11	0.099									
SAN BERNARDINO COUNTY																
32 Northwest San Bernardino Valley	5175	16	3	7	11	0.17	0.140	0/0	0/0	1.00	1	0	0.10			
33 Southwest San Bernardino Valley	5817															
34 Central San Bernardino Valley 1	5197	13	3	6	8	0.17	0.131					0	0.11	0.003	0.01	
34 Central San Bernardino Valley 2	5203	17	3	9	13	0.18	0.144	0/0	0/0	1.17	2	0	0.08			
35 East San Bernardino Valley	5204	20	4	9	18	0.17	0.146									
37 Central San Bernardino Mountains	5181	23	6	9	21	0.16	0.139									
District maximum		23	6	10	21	0.19	0.146	0/0	0/0	2.25	5	0	0.12	0.010	0.08	

** Salton Sea air basin

Table 2 - continued
August 2001
Exceedances of Standards and Maximum Concentrations

Source/Receptor	No. (%) Days Exceeding State Standard	NO. (%) Days Exceeding Federal Standard	PM10		Lead***		Sulfate		PM2.5			
			Number Days Sampled	Max 24-hr Average	Number Days Sampled	Monthly Average ug/m3	Number Days Sampled	Maximum 24-hr Average ug/m3	Number Days Sampled	Number days Exceeding Federal Standard	Maximum 24-hr Conc. ug/m3	
LOS ANGELES COUNTY												
1 Central LA	087	0(0%)	5	46	5	0.05	5	8.6	29	0	41.1	
2 Northwest Coastal LA County	091						5	7.6				
3 Southwest Coastal LA County	094	1(20%)	5	55	5	0.01	5	9.6				
4 South Coastal LA County	072	0(0%)	5	37	5	0.02	5	8.8	30	0	29.1	
6 West San Fernando Valley	074								7	0	28.1	
7 East San Fernando Valley	069	0(0%)	5	47					10	0	35.6	
8 West San Gabriel Valley	088						5	6.2	8	0	31.0	
9 East San Gabriel Valley 1	060	2(40%)	5	66			5	7.6	19	0	26.1	
9 East San Gabriel Valley 2	591											
10 Pomona/Walnut Valley	075											
11 South San Gabriel Valley	085				4	0.02	4	8.8	8	0	33.6	
12 South Central LA County 1	084				5	0.01	5	8.5	9	0	38.5	
12 South Central LA County 2	801											
13 Santa Clarita Valley	090	0(0%)	5	46								
ORANGE COUNTY												
16 North Orange County	3177											
17 Central Orange County	3176											
18 North Coastal Orange County	3195											
19 Saddleback Valley	3812	0(0%)	4	25					8	0	16.6	
RIVERSIDE COUNTY												
22 Norco/Corona	4155	1(20%)	5	53								
23 Metropolitan Riverside County 1	4144	10(100%)	10	133	5	0.02	5	7.9	27	0	44.8	
23 Metropolitan Riverside County 2	4146				5	0.02	5	7.2	10	0	34.8	
24 Perris Valley	4149	1(20%)	5	78								
25 Lake Elsinore	4158											
29 Banning/San Geronio Pass	4164	2(40%)	5	219								
30 Coachella Valley 1**	4137	2(50%)	4	432					10	0	33.0	
30 Coachella Valley 2**	4157	10(100%)	10	604++					10	0	33.5	
SAN BERNARDINO COUNTY												
32 Northwest San Bernardino Valley	5175				5	0.05	5	6.8				
33 Southwest San Bernardino Valley	5817	2(40%)	5	91					10	0	36.6	
34 Central San Bernardino Valley 1	5197	4(80%)	5	106					10	0	31.6	
34 Central San Bernardino Valley 2	5203	4(80%)	5	106	5	0.05	5	8.7	10	0	31.8	
35 East San Bernardino Valley	5204	1(50%)	2	53								
37 Central San Bernardino Mountains	5181	1(20%)	5	69								
District maximum	10	1		604++		0.05		9.6		0	44.8	

** Salton Sea air basin

***Special monitoring of lead near stationary sources was carried out in August 2001 and the maximum monthly average was 0.30 ug/m3.

++ This high PM10 concentration was recorded in the desert portion of the Salton Sea Air Basin. The data for this sample may be excluded from the data according to the EPA's Natural Events Policy.

Table 3
January - August 2001
Year-to-Date Total Exceedances of Standards and Maximum Concentrations

Source/Receptor	Ozone								Carbon Monoxide				Nitrogen Dioxide		Sulfur Dioxide	
	Exceeding State Std	Days Exceeding Health Advisory	Days Exceeding Fed Std	Days Exceeding 1-hr 8-hr	Max 1-hr ppm	Max 8-hr ppm	Exceeding State Std	Days Exceeding Fed Std	Max 8-hr ppm	Max 1-hr ppm	Exceeding State Std	Max 1-hr ppm	Max 24-hr ppm	Max 1-hr ppm		
															Days Exceeding 1-hr 8-hr	Days Exceeding Fed Std
LOS ANGELES COUNTY																
1 Central LA	087	6	0	0	1	0.12	0.099	0/0	0/0	4.29	6	0	0.13	0.010	0.08	
2 Northwest Coastal LA County	091	1	0	0	0	0.10	0.080	0/0	0/0	3.00	4	0	0.10			
3 Southwest Coastal LA County	094	1	0	0	0	0.10	0.080	0/0	0/0	5.00	7	0	0.10	0.012	0.09	
4 South Coastal LA County	072	0	0	0	0	0.09	0.070	0/0	0/0	3.86	6	0	0.13	0.012	0.04	
6 West San Fernando Valley	074	24	0	2	8	0.14	0.118	0/0	0/0	6.00	7	0	0.08			
7 East San Fernando Valley	069	15	0	2	4	0.13	0.105	0/0	0/0	4.71	6	0	0.12	0.003	0.01*	
8 West San Gabriel Valley	088	25	1	1	10	0.16	0.123	0/0	0/0	5.00	7	0	0.13			
9 East San Gabriel Valley 1	060	31	3	9	18	0.19	0.131	0/0	0/0	2.29	3	0	0.10			
9 East San Gabriel Valley 2	591	53	5	13	28	0.19	0.138	0/0	0/0	2.25	3	0	0.08			
10 Pomona/Walnut Valley	075	11	0	1	3	0.14	0.109	0/0	0/0	3.29	5	0	0.11			
11 South San Gabriel Valley	085	4	0	1	2	0.13	0.100	0/0	0/0	4.00	6	0	0.10			
12 South Central LA County 1	084	0	0	0	0	0.08	0.061	0/0	0/0	7.71	12	0	0.09			
12 South Central LA County 2	801															
13 Santa Clarita Valley	090	45	2	9	29	0.18	0.130	0/0	0/0	3.14	6	0	0.08			
ORANGE COUNTY																
16 North Orange County	3177	2	0	0	2	0.11	0.091	0/0	0/0	4.71	11	0	0.09			
17 Central Orange County	3176	0	0	0	0	0.08	0.068	0/0	0/0	4.71	8	0	0.09			
18 North Coastal Orange County	3195	0	0	0	0	0.09	0.073	0/0	0/0	4.57	6	0	0.08	0.004	0.01	
19 Saddleback Valley	3812	4	0	0	0	0.10	0.084	0/0	0/0	2.38	3					
RIVERSIDE COUNTY																
22 Norco/Corona	4155															
23 Metropolitan Riverside County 1	4144	36	0	6	32	0.14	0.121	0/0	0/0	2.71	4	0	0.15	0.010	0.02	
23 Metropolitan Riverside County 2	4146							0/0	0/0	4.50	6					
24 Perris Valley	4149	67	5	19	53	0.15	0.136									
25 Lake Elsinore	4158	52	1	12	42	0.15	0.123	0/0	0/0	1.33	2	0	0.10			
29 Banning/San Gorgonio Pass	4164	52	2	16	46	0.15	0.131					0	0.24			
30 Coachella Valley 1**	4137	46	0	6	42	0.14	0.115	0/0	0/0	1.38	2	0*	0.06			
30 Coachella Valley 2**	4157	20	0	0	21	0.11	0.100									
SAN BERNARDINO COUNTY																
32 Northwest San Bernardino Valley	5175	48	6	13	31	0.17	0.140	0/0	0/0	1.75	2	0	0.10			
33 Southwest San Bernardino Valley	5817															
34 Central San Bernardino Valley 1	5197	41	5	12	27	0.17	0.136					0	0.11	0.010	0.01*	
34 Central San Bernardino Valley 2	5203	48	5	17	38	0.18	0.144	0/0	0/0	3.14	4	0*	0.10			
35 East San Bernardino Valley	5204	62*	7*	21*	52*	0.17	0.146									
37 Central San Bernardino Mountains	5181	78	12	26	71	0.17	0.139									
District maximum		78	12	26	71	0.19	0.146	0/0	0/0	7.71	12	0	0.24	0.012	0.09	

* = incomplete data

** Salton Sea air basin

Table 3 - continued
 January - August 2001
 Year-to-Date Total Exceedances of Standards and Maximum Concentrations

Source/Receptor		PM10				Lead***		Sulfate		PM2.5			
		No. (%) Days Exceeding State Standard	NO. (%) Days Exceeding Federal Standard	Number Days Sampled	Max 24-hr Average	Number Days Sampled	Monthly Average ug/m3	Number Days Sampled	Maximum 24-hr Average ug/m3	Number Days Sampled	Number days Exceeding Federal Standard	Maximum 24-hr Conc. ug/m3	
=====													
LOS ANGELES COUNTY													
1	Central LA	087	12(29%)	0(0%)	41	82	39	0.06	41	15.9	229	1	66.3
2	Northwest Coastal LA County	091							40	15.6			
3	Southwest Coastal LA County	094	7(18%)	0(0%)	39	75	41	0.04	41	20.6			
4	South Coastal LA County	072	6(15%)	0(0%)	41	91	43	0.05	45	14.5	205	0	52.2
6	West San Fernando Valley	074									69	0	56.9
7	East San Fernando Valley	069	8(20%)	0(0%)	41	86					76	2	69.4
8	West San Gabriel Valley	088							41	13.4	73	0	55.3
9	East San Gabriel Valley 1	060	15(37%)	0(0%)	41	91			39	14.1	196*	0*	61.7*
9	East San Gabriel Valley 2	591											
10	Pomona/Walnut Valley	075											
11	South San Gabriel Valley	085					41	0.07	41	12.1	58*	1*	77.3*
12	South Central LA County 1	084					39	0.23	39	15.4	77	1	73.1
12	South Central LA County 2	801											
13	Santa Clarita Valley	090	3(7%)	0(0%)	41	62							
=====													
ORANGE COUNTY													
16	North Orange County	3177											
17	Central Orange County	3176	6(22%)*	0(0%)*	27*	93*					143*	0*	55.0*
18	North Coastal Orange County	3195											
19	Saddleback Valley	3812	2(5%)	0(0%)	38	55					70*	0*	40.3*
=====													
RIVERSIDE COUNTY													
22	Norco/Corona	4155	10(29%)	0(0%)	35	109							
23	Metropolitan Riverside County 1	4144	53(67%)	0(0%)	79	133	37	0.04	37	10.7	210	9	87.9
23	Metropolitan Riverside County 2	4146					38	0.03	38	9.2	72	3	65.8
24	Perris Valley	4149	9(23%)	0(0%)	40	79							
25	Lake Elsinore	4158											
29	Banning/San Gorgonio Pass	4164	3(8%)	1(3%)	37	219							
30	Coachella Valley 1**	4137	2(6%)	1(3%)	33	432					74	0	44.7
30	Coachella Valley 2**	4157	39(51%)	4(5%)	77	604++					77	0	33.5
=====													
SAN BERNARDINO COUNTY													
32	Northwest San Bernardino Valley	5175					40	0.05	40	10.3			
33	Southwest San Bernardino Valley	5817	17(40%)	1(2%)	42	166					80	0	63.1
34	Central San Bernardino Valley 1	5197	24(59%)	0(0%)	41	106			40	10.7	77	1	74.8
34	Central San Bernardino Valley 2	5203	21(52%)	0(0%)	40	106	35	0.05	35	11.5	76	3	78.5
35	East San Bernardino Valley	5204	17(47%)	0(0%)	36	102							
37	Central San Bernardino Mountains	5181	2(5%)	0(0%)	40	69							
=====													
District maximum		53	4			604++		0.23		20.6		9	87.9
=====													

* = incomplete data

** Salton Sea air basin

***Special monitoring of lead near stationary sources was carried out in 2001 and the maximum monthly average was 0.57 ug/m3.

++ This high PM10 concentration was recorded in the desert portion of the Salton Sea Air Basin. The data for this sample may be excluded from the data according to the EPA's Natural Events Policy.

Table 4
AMBIENT AIR QUALITY STANDARDS

AIR POLLUTANT	CALIFORNIA		FEDERAL		
	CONCENTRATION	DISTRICT METHOD	PRIMARY (>)	SECONDARY (>)	METHOD ^{a)}
Ozone ^{b)}	0.09 ppm, 1-hour average >	U.V. Photometry	0.12 ppm, 1-hour average 0.08 ppm, 8-hour average ^{b)}	Same as Primary Standrd	Chemiluminescence
Carbon Monoxide	9.0 ppm, 8-hour average > ^{c)} 20 ppm, 1-hour average >	Gas Correlation	9 ppm, 8-hour average ^{d)} 35 ppm, 1-hour average	None	Non-dispersive Infra-Red Spectrophotometry
Nitrogen Dioxide	0.25 ppm, 1-hour average > ^{e)}	Gas Phase Chemiluminescence	0.053 ppm, annual average ^{f)}	Same as Primary Standrd	Gas Phase Chemiluminescence
Sulfur Dioxide	0.04 ppm, 24-hour average > ^{g)} 0.25 ppm, 1-hour average > ^{h)}	Ultraviolet PulseFluorescence	0.03 ppm, annual average 0.14 ppm, 24-hour average	0.50 ppm, 3-hour average	Para-roaniline
Suspended Particulate Matter (PM10)	30 µg/m ³ , annual geometric mean > 50 µg/m ³ , 24-hour average > ⁱ⁾	Size Segregation Inlet High Volume Sampling	50 µg/m ³ , annual arithmetic mean 150 µg/m ³ , 24-hour average ^{j)}	Same as Primary Standrd	Inertial Separation and Gravimetric Analysis
Suspended Particulate Matter (PM2.5) ^{k)}			15 µg/m ³ , annual arithmetic mean ^{k)} 65 µg/m ³ , 24-hour average ^{k)}	Same as Primary Standrd	Inertial Separation and Gravimetric Analysis
Lead	1.5 µg/m ³ , 30-day average >=	High Vol. Sampling Atomic Absorption	1.5 µg/m ³ , calendar quarter	Same as Primary Standrd	High Vol. Sampling Atomic Absorption
Sulfates	25 µg/m ³ , 24-hour average >=	High Vol. Sampling Ion Chouromatography	NO FEDERAL STANDARDS		
Hydrogen Sulfide	0.03 ppm, 1-hour average >=	Cadmium Hydroxide Stractan			
Vinyl Chloride	0.010 ppm, 24-hour average >=	Gas Chouromatography			
Visibility Reducing Particles	In sufficient amount to give an extinction coefficient > 0.23 inverse kilometers (visual range less than 10 miles), with relative humidity <70%, 8-hour average (10am-6pm, PST) ^{l)} .	Nephelometry and AISI Tape Sampler (COH)			

- a) Reference method as described by the federal government. An equivalent method of measurement may be used as approved by the federal government.
- b) In September 1997, a new federal 8-hour average standard was proposed by EPA. A 1999 federal court ruling blocked the implementation of this standard. The status of this standard is pending the EPA's appeal.
- c) Effective December 15, 1982. The previous standards were 10 ppm, 12-hour average and 40 ppm, 1-hour average.
- d) Effective September 13, 1985, standard changed from >10 µg/m³ (>=9.3 ppm) to > 9 ppm (>=9.5 ppm).
- e) Effective March 9, 1987, standard changed from >=0.25 ppm to > 0.25 ppm.
- f) Effective July 1, 1985, standard changed from > 100 µg/m³ (>0.0532 ppm) to > 0.053 ppm (>= 0.0535 ppm).
- g) Effective July 29, 1992. The previous standard was >= 0.05 ppm, 24-hour average with ozone >=0.1 ppm, 1-hour average or TSP >=100 µg/m³, 24-hour average.
- h) Effective October 5, 1984. The previous standard was 0.5 ppm, 1-hour average.
- i) Effective August 19, 1983. The previous standards were 60 µg/m³ TSP, annual geometric mean, and 100 µg/m³ TSP, 24-hour average.
- j) Effective July 1, 1987. The previous standards were :
 Primary - annual geometric mean TSP > 75 µg/m³, and 24 hour average TSP > 260 µg/m³.
 Secondary - annual geometric mean TSP > 60 µg/m³, and 24-hour average TSP > 150 µg/m³.
- k) In September 1997, new federal standards were proposed for PM2.5. There were no previous standards for PM2.5. A 1999 federal court ruling blocked the implementation of these standards.
- l) Effective October 18, 1989. The previous standard was "In sufficient amount to reduce the prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 observation", and was based on human observation rather than instrumental measurement.