FINAL 2007 AQMP
APPENDIX II

CURRENT AIR QUALITY

JUNE 2007

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD

Chairman: WILLIAM A. BURKE, Ed.D.
Speaker of the Assembly Appointee

Vice Chairman: S. ROY WILSON, Ed.D.
Supervisor, Fourth District
Riverside County Representative

MEMBERS:

MICHAEL D. ANTONOVICH
Supervisor, Fifth District
Los Angeles County Representative

BILL CAMPBELL
Supervisor, Third District
Orange County Representative

JANE W. CARNEY
Senate Rules Committee Appointee

RONALD O. LOVERIDGE
Mayor, City of Riverside
Cities Representative, Riverside County

GARY OVITT
Supervisor, Fourth District
San Bernardino County Representative

JAN PERRY
Councilmember, City of Los Angeles
Cities Representative, Los Angeles County, Western Region

MIGUEL A. PULIDO
Mayor, City of Santa Ana
Cities Representative, Orange County

TONIA REYES URANGA
Councilmember, City of Long Beach
Cities Representative, Los Angeles County, Eastern Region

VACANT
Governor's Appointee

DENNIS YATES
Mayor, City of Chino
Cities Representative, San Bernardino County

EXECUTIVE OFFICER
BARRY R. WALLERSTEIN, D.Env
.

CONTRIBUTORS

South Coast Air Quality Management District

Barry R. Wallerstein, D.Env.
Executive Officer

Elaine Chang, DrPH
Deputy Executive Officer
Planning, Rule Development, & Area Sources

Laki Tisopulos, Ph.D., P.E.
Assistant Deputy Executive Officer
Planning, Rule Development, & Area Sources

Jill Whynot
Planning and Rules Manager
Planning, Rule Development, & Area Sources

Authors

SCAQMD - Planning, Rule Development, & Area Sources
Tom Chico, Program Supervisor
Shoreh Cohanim, Air Quality Specilaist

Contributors

SCAQMD – Science & Technology Advancement
Leonard Edwards, Air Quality Data Translator
Sandra Hom, Sr. Air Quality Chemist
Hanna Zhuang, Air Quality Data Translator

U. S. Environmental Protction Agency:
Coe Owen

Reviewed By

Barbara Baird, J.D. - Principal Deputy District Counsel

Production

Patti Whiting, Staff Specilaist
Ann Scagliola, Secretary

Table of Contents

LIST OF FIGURES:

LIST OF TABLES:

ATTACHMENT LIST:

SUMMARY

South Coast Air Basin
Riverside County Salton Sea Air Basin
Seasonal, Day-of-Week, and Diurnal Variations

SUMMARY

This appendix contains a summary of the year 2005 air quality in the South Coast Air Basin (Basin) and the portion of Salton Sea Air Basin (SSAB) monitored by the AQMD. The Basin includes Orange county and the non-desert portions of Los Angeles, Riverside and San Bernardino counties. For those pollutants for which the Basin is in nonattainment of the federal standards (O_3; PM10; and PM2.5), air quality trends through the year 2005 are presented. Chapter 1 of this appendix presents brief descriptions of the pollutant emissions in the Basin, ambient air quality standards, and criteria air pollutant concentrations and trends in the region. Chapters 2 and 3 present a description of each of the criteria pollutant's properties, current concentration compared to the state and federal standards, and spatial, seasonal, and diurnal variations in the Basin and SSAB.

In 2005, the AQMD monitored concentrations of air pollutants at 34 locations in southern California's Los Angeles, Orange, Riverside and San Bernardino counties. Pollutant concentrations exceeded the federal and state standards for ozone and particulate matter (PM10, PM2.5). Standards for carbon monoxide, nitrogen dioxide, sulfur dioxide, sulfate, and lead were not exceeded. In the year 2005, the U.S. location with the highest number of days exceeding the federal ozone standard was located in the Basin.

South Coast Air Basin

In 2005, there were a total of 89 days on which the federal standards for 8-hour ozone or 24-hour PM2.5 were exceeded at one or more Basin locations. (The other criteria pollutants did not exceed the daily federal standards.)

The number of days exceeding the federal ozone standard varied widely by area, from zero to 69 days, depending on location. Exceedances were fewest at the coast, increasing to a maximum in the Basin's Central San Bernardino Mountains and inland valleys. The Central San Bernardino Mountains area exceeded the federal 8-hour average ozone standard most frequently (69 days). The previous federal 1-hour ozone standard was exceeded on 18 days. The more stringent 1-hour and 8-hour average state standards were exceeded on 80 and 102 days, respectively, in the same area. The highest 1-hour average and 8-hour average ozone concentration recorded in 2005 (0.182 ppm and 0.145 ppm) were 146 percent and 171 percent of the federal 1-hour and 8-hour standards, respectively.

Exceedances of the federal annual PM10 standard were confined to Riverside county, primarily in and around the Metropolitan Riverside County area. The more stringent state annual PM10 standard was exceeded in a much larger area, covering most of the

Basin. The federal 24-hour PM10 standard was not exceeded at any of the areas monitored in the District in 2005. The state 24-hour standard, however, was exceeded at most of the locations monitored, with the Metropolitan Riverside county area exceeding most frequently (56 percent of sampling days). The maximum 24-hour average and annual PM10 concentrations (131.0 $\mu g/m^3$ and 52.0 $\mu g/m^3$) were 87 percent and 103 percent of the federal 24-hour and annual standards, respectively.

Maximum 24-hour average and annual average PM2.5 concentrations (132.7 $\mu g/m^3$ recorded in the East San Gabriel Valley area and 21.0 $\mu g/m^3$ recorded in the Metropolitan Riverside County area) were 203 percent and 139 percent of the federal 24-hour and annual standards, respectively.

In 2005, carbon monoxide concentrations did not exceed the standards anywhere in the Basin for the third consecutive year. The maximum 8-hour average concentration of 5.9 ppm, recorded in South Central Los Angeles County, was 62 percent of the federal standard.

Riverside County Salton Sea Air Basin

Pollutant concentrations in the Riverside county portion of the SSAB were monitored at two locations in the Coachella Valley in 2005, and exceeded the federal and state standards for ozone and the state PM10 standards. No other standards were exceeded.

The highest 1-hour and 8-hour ozone concentrations recorded in the Coachella Valley in 2005 (0.139 ppm and 0.116 ppm) were 111 percent and 136 percent of the federal 1-hour and 8-hour standards, respectively. The federal 8-hour ozone standard was exceeded on 39 days in the SSAB in 2005.

The federal 24-hour and annual PM10 standards were not exceeded at either of the two locations monitored in SSAB in 2005. The more stringent state standards, however, were exceeded at both locations. PM2.5 concentrations were below the federal 24-hour and annual PM2.5 standards.

Seasonal, Day-of-Week, and Diurnal Variations

Concentrations of pollutants have been found to vary by season, day of week, and time of day, and these variations were examined for 2003-2005 for ozone, PM2.5 and PM10. Ozone concentrations generally peak in summer. Maximum 24-hour PM10 and PM2.5 concentrations peak in fall and winter months; however, seasonal variations for particulates are not as distinct as ozone concentration variations. Ozone concentrations tend to be higher on weekends than on weekdays and the time of day with highest average ozone concentrations is early afternoon in the peak ozone area. PM10 and

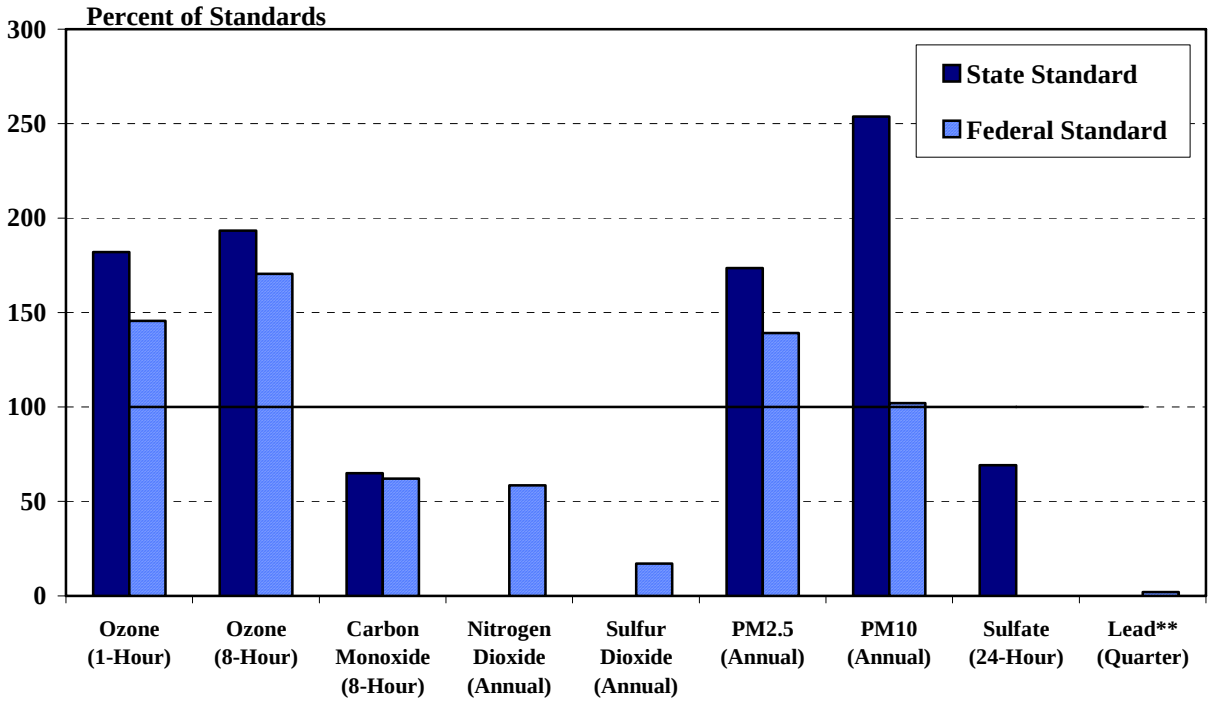
PM2.5 concentrations vary slightly on each day of the week and day-of-week variations depend on the location. Basinwide particulate matter variations show slightly higher overall PM2.5 concentrations on Saturday.

CHAPTER 1
INTRODUCTION

Air Quality Overview
Air Quality Standards and Episode Levels
South Coast Air Quality Management District
South Coast, Salton Sea, and Mojave Desert Air Basins
Weather
Emissions
Air Quality Trends
Air Quality in the District Compared to Other Areas of the U.S.

AIR QUALITY OVERVIEW

In 2005, the AQMD monitored ambient air quality for criteria pollutants (ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM10, PM2.5, lead, and sulfate) at 34 locations in Southern California's South Coast Air Basin (Basin) and in the neighboring Riverside county portion of the Salton Sea Air Basin (SSAB) that are within the District's jurisdiction. Pollutant concentrations exceeded federal and state standards for ozone and particulate matter (PM10 and PM2.5), while other pollutants were below the standards. Figure 1-1 shows the maximum pollutant concentrations for 2005 as a percentage of the federal and state standards.



** Higher lead concentrations were recorded at special monitoring sites immediately adjacent to sources known to emit lead.

FIGURE 1-1
2005 Maximum Pollutant Concentrations as Percent of Standards

Maximum 1-hour average and 8-hour average ozone concentrations in 2005 (0.182 ppm and 0.145 ppm) were 146 percent and 171 percent of the federal 1-hour and 8-hour standards, respectively. Maximum 24-hour average and annual average PM10 concentrations (131 $\mu g/m^3$ and 52.0 $\mu g/m^3$) were 87 percent and 103 percent of the federal 24-hour and annual standards, respectively. Maximum 24-hour average and annual average PM2.5 concentrations (132.7 $\mu g/m^3$ and 21.0 $\mu g/m^3$) were,

respectively, 203 percent and 139 percent of the federal 24-hour and annual standards.

The highest 8-hour average carbon monoxide concentration of the year (5.9 ppm) was 62 percent of the federal standard. The maximum annual average nitrogen dioxide concentration (0.0313 ppm) was 59 percent of the federal standard; the maximum 1-hour average nitrogen dioxide concentration (0.14 ppm) was 54 percent of the state standard. The maximum 24-hour sulfate concentration (17.3 $\mu g/m^3$) was 69 percent of the state standard (there is no federal sulfate standard). Sulfur dioxide and lead concentrations continued to remain well below the federal and state standards in 2005.

AIR QUALITY STANDARDS AND EPISODE LEVELS

Both the federal and state governments have adopted ambient air quality standards, which define the concentration below which long-term exposure to a pollutant is not expected to cause adverse effects to public health and welfare. Episode levels have also been established, below which short-term exposures are not expected to be injurious to health. The standards and episode levels are summarized in Tables A-1 and A-2 in the Attachment.

Both standards and episode levels are periodically reviewed to incorporate the findings from the most current research available on the effects of pollutants. In 1997, the U.S. EPA adopted new federal air quality standards for particulate matter and ozone. The 8-hour average ozone standard (0.08 ppm) was developed to protect the public health against the effects of prolonged exposure and represented a tightening of the previous 1-hour ozone standard. The 1-hour average federal ozone standard was revoked by the U.S. EPA and replaced by the 8-hour average ozone standard. CARB has also established a new 8-hour average state standard (0.07 ppm) effective May 17, 2006.

For particulate matter, federal annual and 24-hour standards and a state annual standard for the finest fraction of particulate, PM2.5 (particles less than 2.5 micrometers), were established in 1997 to complement the PM10 federal and state standards that cover a full range of inhalable particulate matter. PM2.5 is believed to be the portion of particulate most injurious to health, and causes the greatest visibility reduction. Over the years, the forms of the federal 24-hour PM10 standard and state annual PM10 standard were also revised. In a recent action by U.S. EPA on September 21, 2006, the federal 24-hour average PM2.5 standard was revised, significantly strengthening the daily standard for fine particles (from 65 $\mu g/m^3$ to 35 $\mu g/m^3$). The federal annual average PM10 standard was revoked, with U.S. EPA finding no evidence of adverse health effects due to long-term exposure to coarse

particles at the current standard level. The federal 24-hour PM10 standard and state 24-hour and annual standards were retained.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

California's first local air pollution control agency, the Los Angeles County Air Pollution Control District (LAAPCD), was formed in 1947, and APCDs were formed in Orange, Riverside, and San Bernardino counties not long afterward. These four agencies combined in 1976 to form the Southern California APCD, which was later replaced by the South Coast Air Quality Management District and the Mojave Desert AQMD.

The South Coast Air Quality Management District (AQMD or District) was established by state legislation effective February 1, 1977, and was assigned jurisdiction over air quality in the South Coast Air Basin. The District is also responsible for air quality in the Riverside county area of the Salton Sea Air Basin (SSAB), by contract with the county. The region encompassed by the District is shown in Figure 1-2. In 2005, the District maintained a network of 32 air monitoring stations in the Basin and an additional two in the District portions of SSAB (shown in Figure A-1 and Table A-3 in the Attachment).

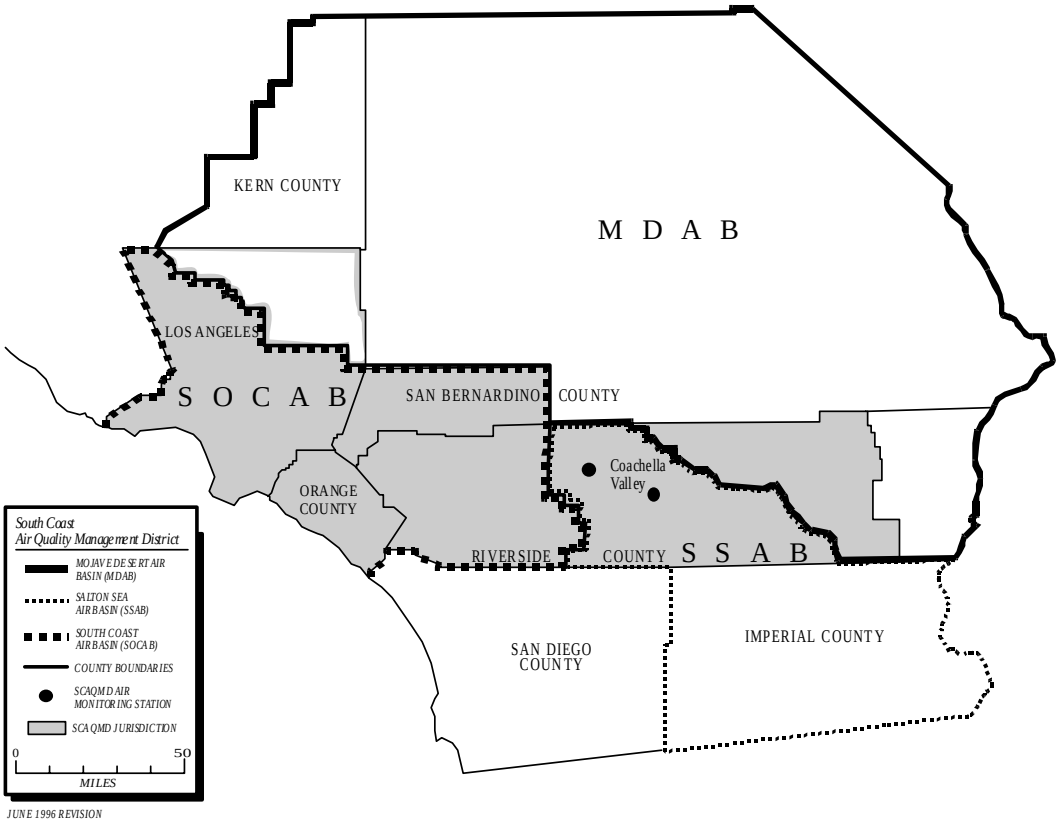


FIGURE 1-2
South Coast Air Quality Management District

SOUTH COAST, SALTON SEA, AND MOJAVE DESERT AIR BASINS

The South Coast Air Basin (Basin) has an area of 6,800 square miles and a population of 16 million in 2005. It includes all of Orange county and the non-desert areas of Los Angeles, Riverside, and San Bernardino counties. The Los Angeles urban area (the nation's second largest) and the Anaheim-Fullerton and Riverside-San Bernardino urban areas lie within the Basin's boundaries. About two-thirds of the Basin's population lives within Los Angeles county.

The Salton Sea Air Basin and the Mojave Desert Air Basin (MDAB) have a combined area of approximately 32,200 square miles. The two Basins include the desert portions of Los Angeles, Riverside, and San Bernardino counties, as well as Imperial county and part of Kern county.

The AQMD has jurisdiction over the Coachella Valley portion of Riverside county in the SSAB. The population in the SSAB portion under the jurisdiction of the District is about 380,000. The District also has the jurisdiction over a small portion of the MDAB in eastern Riverside county. The area is sparcely populated desert.

WEATHER

The South Coast Air Basin is arid, with virtually no rainfall and abundant sunshine during the summer months. It has light winds and poor vertical mixing compared to the other large urban areas in the U.S. The combination of poor dispersion and abundant sunshine provide conditions especially favorable to the formation of photochemical smog. The Basin is bounded to the north and east by mountains with maximum elevations exceeding 10,000 feet. The unfavorable combination of meteorology, topography, and emissions from the nation's second largest urban area result in the Basin having the worst air quality in the U.S.

EMISSIONS

The amount of each of the major pollutants emitted into the atmosphere of the Basin in 2002 is shown in Figure 1-3. Year 2002 emissions are the baseline used for the 2007 AQMP. In 2002, annual average daily emissions were approximately 4,800 tons of carbon monoxide (CO), 800 tons of volatile organic compounds (VOC), 1,100 tons of oxides of nitrogen (NOx), 50 tons of oxides of sulfur (SOx), 500 tons of total suspended particulate (TSP), 300 tons of directly emitted particulate (PM10), and 100 tons of fine particulate (PM2.5). (Additional PM10 forms through chemical reaction of the gaseous pollutants.) Emissions vary relatively little by season, but there are large seasonal differences in the atmospheric concentrations of pollutants due to seasonal variations in the weather. (Details of the 2002 emissions inventory are contained in Appendix III.)

VOCs and NOx are precursors of ozone. NOx and VOC also react to form nitrates and solid organic compounds, which are a significant fraction of PM10. SO_2 reacts to form sulfates which are also significant contributors to the Basin's PM10 and PM2.5 levels. In addition to the PM10 formed by the reaction of gaseous precursors, there is directly emitted PM10, most of which is attributed to fugitive dust sources such as re-entrained road dust, construction activities, farming operations and wind-blown dust.

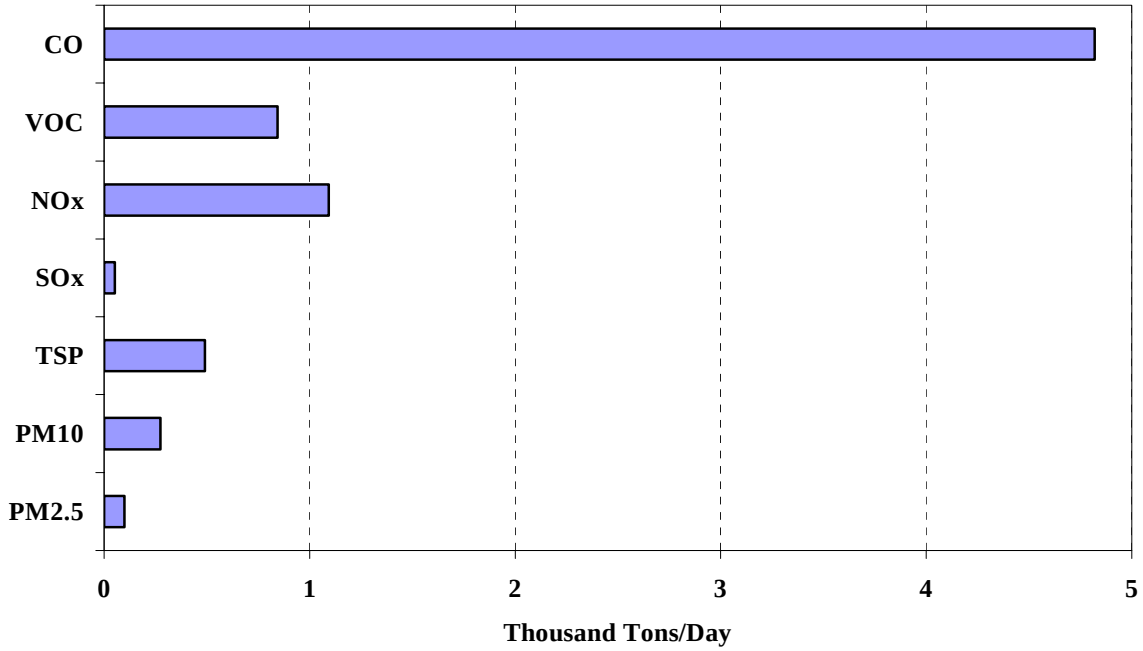


FIGURE 1-3
2002 Average Daily Emissions in the Basin

AIR QUALITY TRENDS

In 2005, Basin locations exceeded one or more of the federal standards on 89 days (based on the current 8-hour ozone and 24-hour PM2.5 standards). Figure 1-4 shows the long-term annual trend of percent "basin-days" exceedances of the federal standards for ozone and particulates. (A "basin-day" is recorded if any location in the Basin exceeds the standard. Multiple locations exceeding on the same day count as a single basin-day.)

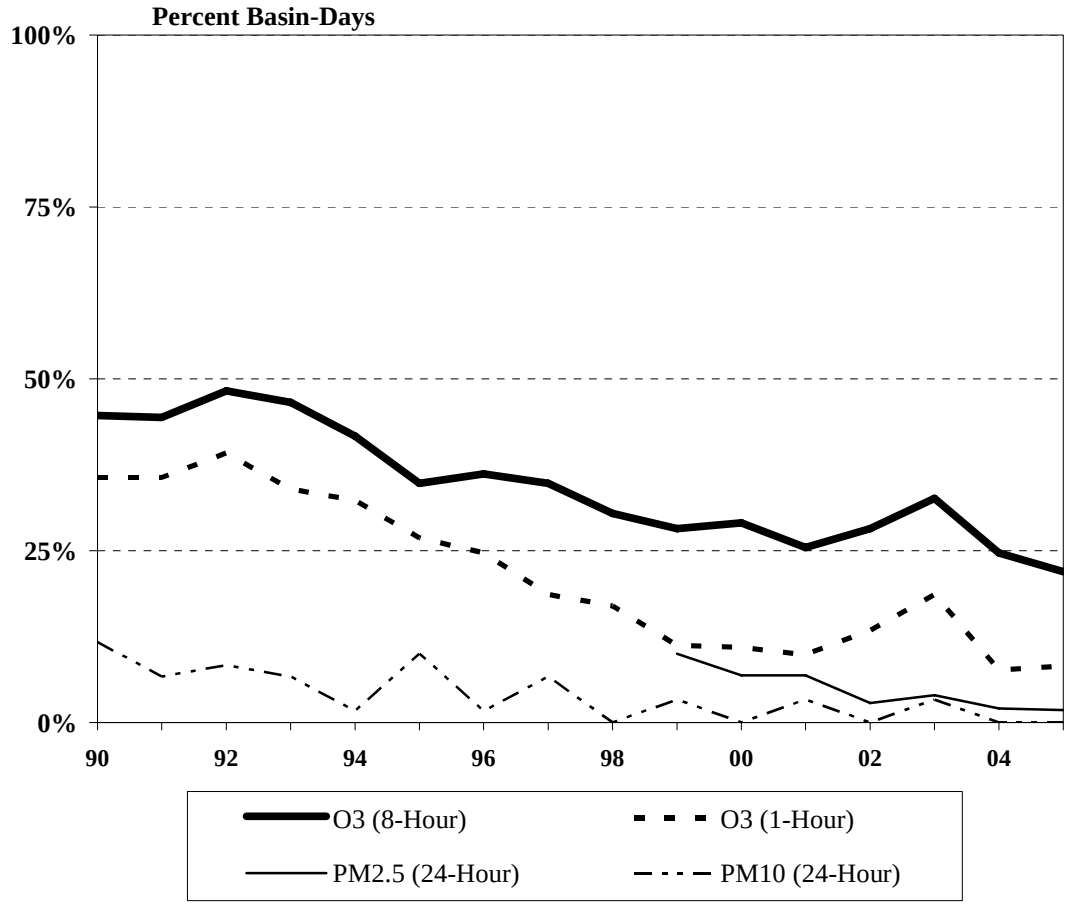


FIGURE 1-4
Percent Basin-Days Exceeding Federal Standards, 1990-2005

AIR QUALITY IN THE DISTRICT COMPARED TO OTHER AREAS OF THE U.S.

Despite the significant downtrend, the Basin still has some of the worst air quality in the nation in terms of the number of days per year exceeding the federal standards. In 2005, the U.S. location in terms of highest number of days over the federal 8-hour average ozone standard was located in the Basin (Central San Bernardino Mountains, 69 days). Other area with the greatest number of exceedances outside California was located in the Dallas Metropolitan Area in Texas (18 days).

The Basin did not exceed the federal 24-hour average PM10 standard in 2005 and the annual PM10 standard was exceeded at one location only. The Basin exceeded the 24-hour average PM2.5 standard by the widest margin nationwide in 2005, but the 98^{th} percentile PM2.5 concentration (which is used to compare with the federal PM2.5 standard) was below the standard at all locations monitored in the Basin.

Over the past decade, reductions in vehicular emissions have reduced carbon monoxide levels throughout the U.S.. The Basin was the last area to cease violating the standard. The AQMD has petitioned for redesignation to attainment, since monitoring for the last several years has not shown any violations. In 2005, the Basin did not exceed the carbon monoxide standard for the third consecutive year. More detailed information on air quality in the U.S. is available in U.S. EPA's annual National Air Quality and Emissions Trend Report (see www.epa.gov/airtrends/).

The following two chapters of this report summarize current air quality in the District. Analyses are presented for:

- Ozone (O_3)
- Carbon monoxide (CO)
- Nitrogen dioxide (NO_2)
- Sulfur dioxide (SO_2)
- Particulate matter (PM10)
- Particulate matter (PM2.5)
- Lead (Pb); and
- Sulfate ($SO_4^=$).

Chapters 2 and 3 contain summaries of air quality in the South Coast Air Basin, and the Riverside county portion of the Salton Sea Air Basin, respectively; Salton Sea Air Basin includes Coachella Valley. For ozone, PM10, and PM2.5 the pollutants

for which the Basin is still designated as nonattainment, maps are presented which show how air quality varies in different areas in the Basin. Detailed air quality statistics for each of the District's monitoring locations in the Basin and SSAB are contained in the Attachment to this report.

CHAPTER 2

AIR QUALITY IN THE SOUTH COAST AIR BASIN

Air Quality in the South Coast Air Basin
Ozone (O_3)
Suspended Particulate Matter
Particulate Matter (PM10)
Fine Particulate Matter (PM2.5)
Carbon Monoxide (CO)
Nitrogen Dioxide (NO_2)
Sulfur Dioxide (SO_2)
Sulfate ($SO_4^{=}$)
Lead (Pb)

AIR QUALITY IN THE SOUTH COAST AIR BASIN

The maximum pollutant concentrations recorded at District monitoring stations in 2005 (see Figure 1-1 in the previous chapter) were all recorded in the densely populated South Coast Air Basin. However, air quality in the Basin varies widely by season and by area.

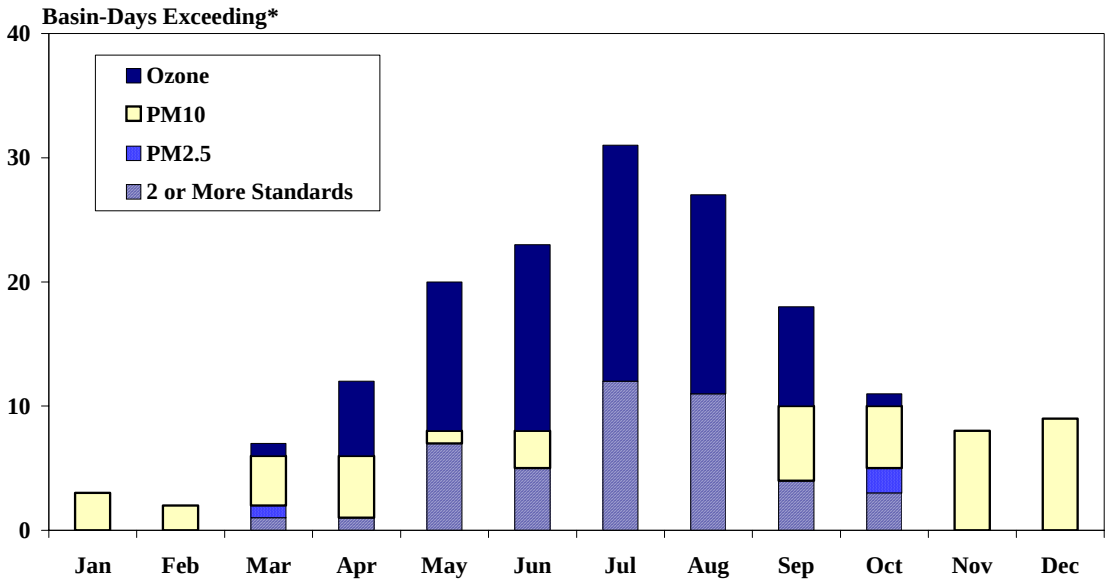
The prevailing daytime sea breeze tends to transport pollutants from coastal areas into the Basin's inland valleys, and from there, still further inland into neighboring areas of the SSAB, as well as the MDAB. Concentrations of primary pollutants (those emitted directly into the air) are typically highest close to the sources which emit them. However, secondary pollutants (those formed in the air by chemical reaction of precursors) reach maximum concentrations some distance downwind of the sources that emit the precursors, due to the fact that the polluted air mass is moved inland many miles by the prevailing winds before maximum concentrations are reached.

In 2005, the federal standards were exceeded on a total of 89 days in the Basin. The more stringent state standards were exceeded on 168 days. The Basin's air quality and occurance of exceedances vary with season due to seasonal differences in the weather. High ozone concentrations are generally recorded mainly during the May to October "smog season" and most frequent number of exceedances are normally recorded in July and August. Particulate matter (PM10 and PM2.5) levels do not have a clear pattern like ozone, and high concentrations may be recorded throughout the year. However, typically, high PM10 concentrations are recorded in summer and fall in inland valley areas while coastal areas show high concentrations mostly during late fall and winter months. PM2.5 concentrations tend to be higher in fall. Figure 2-1 shows the number of days per month when state or federal standards were exceeded in the Basin in 2005.

OZONE (O_3)

Properties

The Basin's unique air pollution problem was first recognized in the 1940's. Unlike the smog in many other urban areas, Los Angeles smog was worse in summer. Early research showed that ozone was being formed in the Basin's atmosphere from VOCs and NOx being emitted into the air in the presence of steady sunshine. Regular monitoring of total oxidants was begun by the Los Angeles Air Pollution Control District (LAAPCD) in the 1950's, and annual maximum 1-hour ozone concentrations in excess of 0.6 ppm were recorded at that time.



*The term Basin-days represents the number of days a standard was exceeded by at least one monitoring station in the Basin.

FIGURE 2-1
Number of Days per Month Exceeding State or Federal Standards in 2005

Ozone (O_3), a colorless gas with a sharp odor, is a highly reactive form of oxygen. High ozone concentrations exist naturally in the stratosphere. Some mixing of stratospheric ozone downward through the troposphere to the earth's surface does occur; however, the extent of ozone transport is limited. At the earth's surface in sites remote from urban areas, ozone concentrations are normally very low (0.03-0.05 ppm).

In urban areas, ozone is formed by a complicated series of chemical and photochemical reactions between VOCs, NOx, and the oxygen in the air. A decrease in ozone precursors may or may not give a decrease in ozone. Ozone concentrations are dependent not only on overall precursor emissions, but on the ratio of VOCs to NOx concentration, the reactivity of the specific VOCs present, the spatial and temporal distribution of emissions, and weather.

While ozone is beneficial in the stratosphere because it filters out skin-cancer-causing ultraviolet radiation, it is a highly reactive oxidant. It is this reactivity which accounts for its damaging effects on materials, plants, and human health at the earth's surface.

The propensity of ozone to react with organic materials causes it to be damaging to living cells, and ambient ozone concentrations in the Basin are frequently sufficient to cause health effects. Ozone enters the human body primarily through the respiratory tract and causes respiratory irritation and discomfort, makes breathing more difficult during exercise, and reduces the respiratory system's ability to remove inhaled particles and fight infection. People with respiratory diseases, children, the elderly, and people who exercise heavily are more susceptible to the effects of ozone.

Plants are sensitive to ozone at concentrations well below the health-based standards and ozone is responsible for significant crop damage. Ozone is also responsible for damage to forests and other ecosystems.

8-Hour Ozone Standard

The federal 1-hour ozone standard was revoked by the U.S. EPA and replaced by the 8-hour average ozone standard. Studies have shown that even relatively low concentrations of ozone, if lasting for several hours, can significantly reduce lung function in normal healthy people. In July 1997, the U.S. Environmental Protection Agency (U.S. EPA) adopted an 8-hour average federal ozone standard with a level of 0.08 ppm. The 8-hour ozone standard is more stringent than the 1-hour standard and provides greater protection to public health than the 1-hour standard. It is intended to help protect people who spend a significant amount of time working or playing outdoors -- a group that is particularly vulnerable to the effects of ozone. CARB also established a new 8-hour average state ozone standard of 0.07 ppm effective May 2006. The state 1-hour ozone standard continues to remain in effect.

The effect of the adopted 8-hour ozone standard on this region's attainment of federal ozone standards has been evaluated by comparing the number of exceedances of the previous 1-hour standard (0.12 ppm 1-hour average) with the number of exceedances of 8-hour average concentrations of 0.08 ppm. The number of exceedances in different areas in the Basin and SSAB vary; however, the federal 8-hour ozone standard level is exceeded more frequently in the inland valleys and adjacent mountains where high ozone concentrations normally occur.

Current Ozone Air Quality

In 2005, the District measured ozone concentrations at 29 regular ambient monitoring locations. The maximum 1-hour average and 8-hour ozone concentrations in the Basin in 2005 (0.182 ppm and 0.145) were 146 percent and 171 percent of the federal 1-hour and 8-hour standards, and 192 percent and 193 percent of the state standards, respectively. The federal 1-hour ozone standard was exceeded at one or more Basin locations on a total of 30 days, the 8-hour standard was exceeded on 84 days. The California state 1-hour and 8-hour standards were exceeded on 102 days and 120 days, respectively. The stage 1 episode level (1-hour average $\geq$ 0.20 ppm) was not exceeded anywhere in the Basin for the second consecutive year, but the health advisory level (0.15 ppm) was exceeded on 11 days.

Figure 2-2 shows the contour diagrams of the number of days exceeding the federal 1-hour ozone standard in different areas of the Basin in 2005. The 1-hour ozone standard was exceeded most frequently in the Basin's Central San Bernardino Mountains and adjacent valleys and in the Santa Clarita Valley area of Los Angeles county. The coastal areas of Los Angeles and Orange counties, the metropolitan areas of Los Angeles county and the farthest eastern portion of Coachella Valley (extending to the areas near

the boundary between the Basin and San Diego county) did not exceed the 1-hour federal ozone standard.

Figure 2-3 shows the number of days exceeding the 8-hour federal standard in the Basin in 2005. The federal 8-hour average standard was also exceeded most frequently in the Basin's Central San Bernardino Mountains and adjacent areas and in the Santa Clarita Valley area. The coastal areas did not exceed the federal 8-hour standard.

The more stringent state standards were exceeded almost everywhere in the Basin with the greatest number of exceedances occurring in the Central San Bernardino Mountains and adjacent valleys (not shown).

As monitored, in 2005, stage 1 episodes were not recorded anywhere in the Basin. Except for one day in 2003, the stage 1 episode level has not been exceeded in the Basin since 1998. There have been no exceedances of the stage 2 episode level (1-hour average O_3 greater than or equal to 0.35 ppm) since 1988 and the stage 3 episode level (1-hour average O_3 greater than or equal to 0.50 ppm) has not been exceeded since 1974.

Tables A-4 and A-5 in the Attachment show the number of exceedances of the federal 1-hour and 8-hour ozone standard at all District air monitoring sites, for all years for which data was available during the period 1990-2005. Tables A-6 and A-7 show the number of days exceeding stage 1 and stage 2 episode levels and the maximum 1-hour ozone concentrations over the time period 1990 to 2005. Please refer to Appendix II of the 2003 AQMP for prior-year statistics (1976-1989).

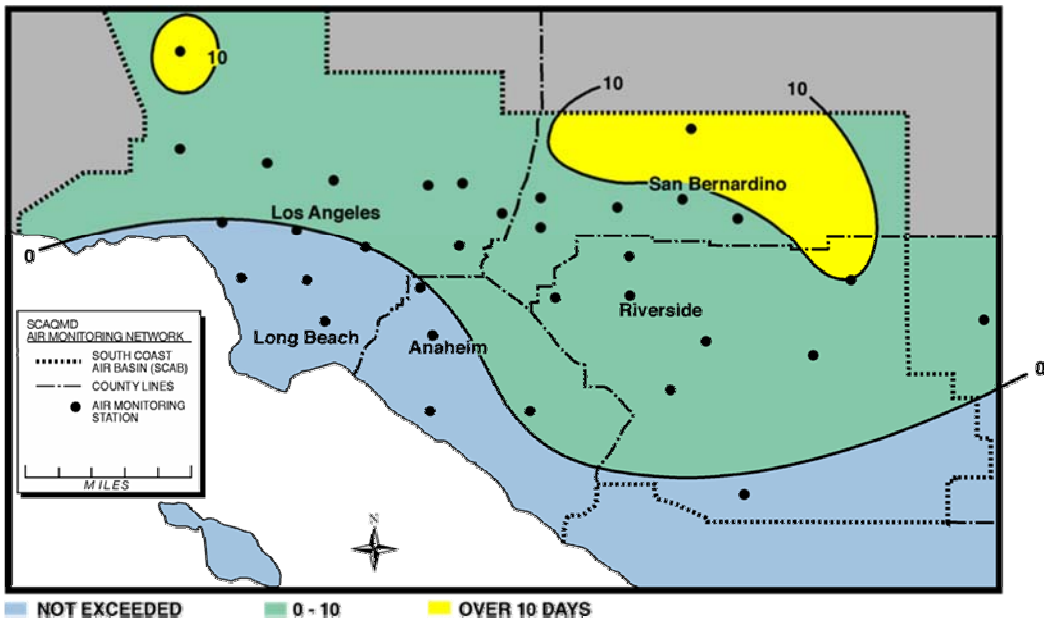


FIGURE 2-2
Ozone - 2005
Number of Days Exceeding 1-Hour Federal Standard
(1-hour average ozone > 0.12 ppm)

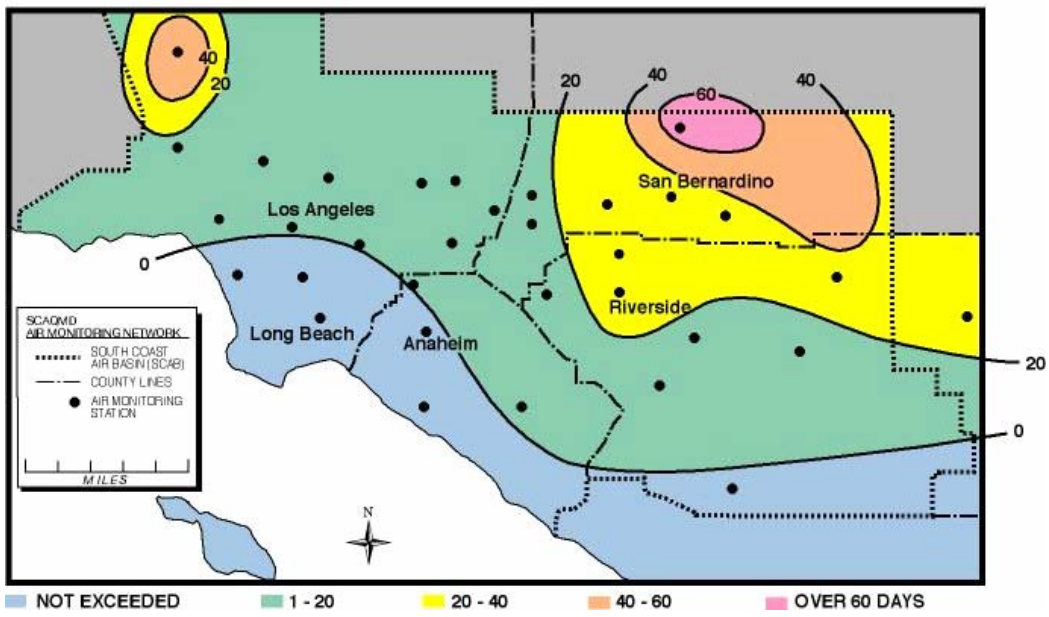


FIGURE 2-3
Ozone - 2005
Number of Days Exceeding 8-Hour Federal Standard
(8-hour average ozone > 0.08 ppm)

Seasonal Variation

Because photochemical reactions require sunlight to proceed, ozone formation is favored by strong solar radiation. Solar radiation is more intense and of longer duration, and temperature inversions are stronger and more persistent, in summer than in winter. This causes ozone concentrations to be higher in summer than in winter. Peak ozone concentrations generally occur near the middle of the day during the period May through October.

Figure 2-4 shows the number of days per month that one or more monitoring stations exceeded the federal 8-hour ozone standard level (8-hour average of 0.08 ppm) for the period 1985-2005. Up until the late 1980's it was common to have days exceeding the federal ozone standard as early as February and as late as November. By the late 1990's there were no exceedances in the months of January-February and November-December. Also, the frequency of exceedances in early spring and fall has been reduced significantly in recent years.

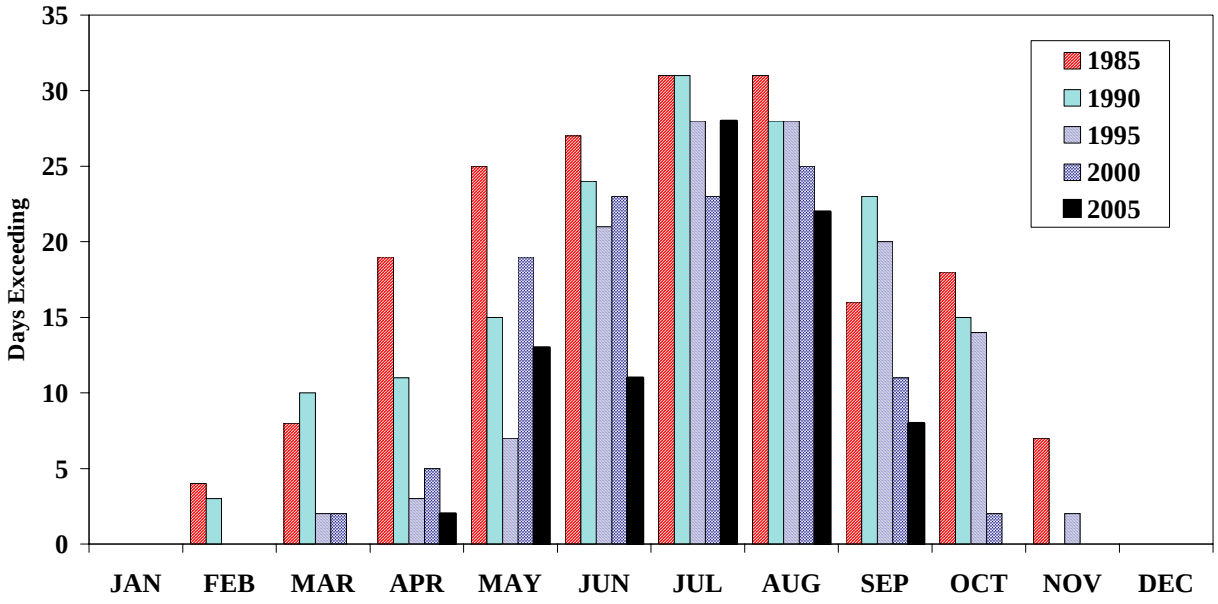


FIGURE 2-4
Number of Days Per Month
Exceeding Federal Ozone Standard in the Basin

Diurnal Variation

Because time and sunlight are required for precursor organic gases and nitrogen oxides to react to form ozone, peak ozone concentrations usually occur from afternoon to early evening. By this time, the prevailing sea breeze has moved the polluted air mass miles inland from the major sources of precursor emissions. Figure 2-5 illustrates the maximum moving 8-hour average ozone concentrations for each hour of the day in the Basin for the year 2005 (hours shown are the beginning of the 8-hour period).

Ozone concentrations in the Basin are typically low during early morning hours, increasing rapidly after sunrise and peaking in the afternoon. However, peak concentrations occur earlier in the day for coastal areas and later in the day for locations further downwind. Examining diurnal variation throughout the District, the time of the peak concentration was found to vary from noon - 1 p.m. PST in coastal-central Los Angeles county, to 4 - 7 p.m. in the farthest inland Basin and SSAB locations. In the mountain area where the Basin's highest concentrations have been recorded in recent years, concentrations are usually higher at all times and the peak is reached later in the afternoon (around 4 - 5 p.m.) and remains relatively high throughout the evening hours during the smog season. The diurnal pattern and occurrence of the peak concentrations in these areas serve to depict diurnal formation and impact of ozone transport.

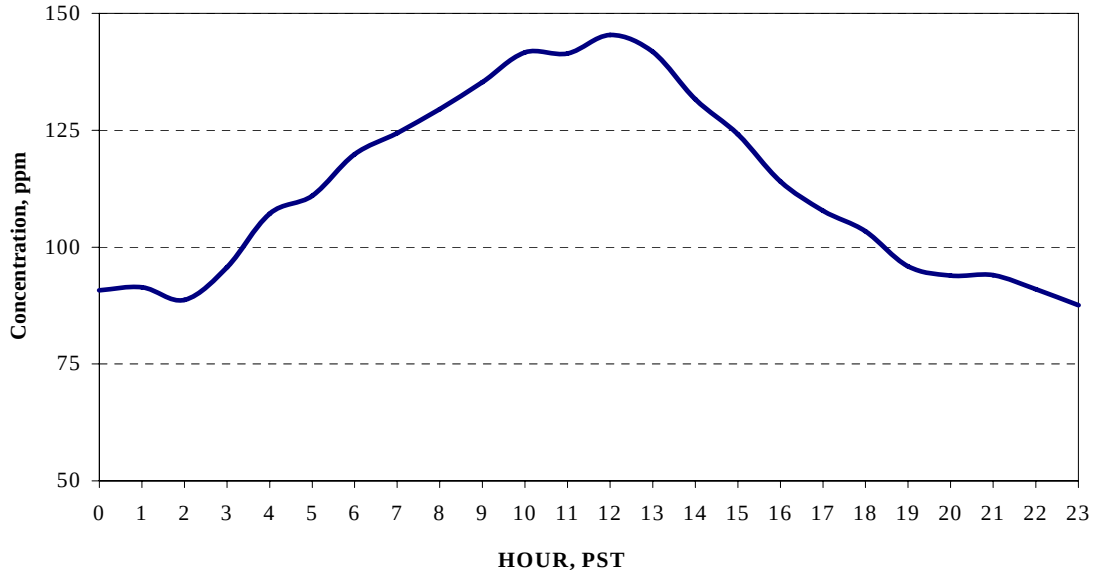
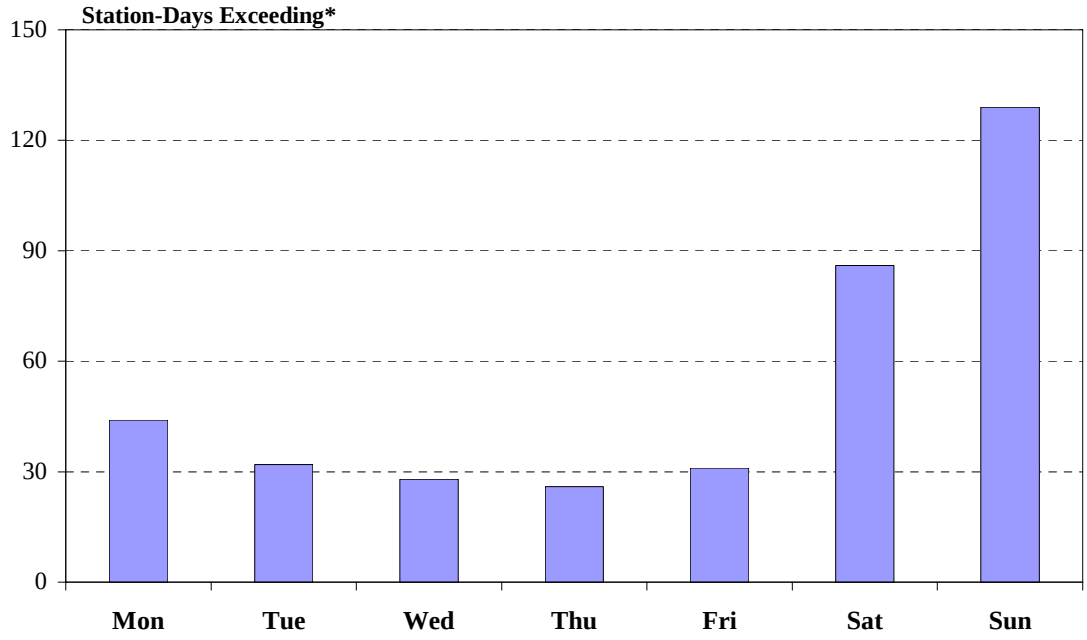


FIGURE 2-5
Ozone
Diurnal Variation, 2005
Maximum 8-hour Average Concentration for Each Hour in the Basin

Day-of-Week Variation

Since the mid-1970s, it has been documented that ozone concentrations in the Basin are higher on weekends than on weekdays, in spite of the fact that ozone pollutant precursors are lower on weekends than on weekdays. Similar effects have been observed in some other metropolitan areas in the nation such as San Francisco, Washington D.C., Philadelphia, and New York.

Figure 2-6 shows the number of station-days exceeding the federal 8-hour ozone standard for each day of the week in the Basin for the year 2005. The number of exceedances was higher on Sundays, followed by Saturdays. Average ozone concentrations also show a pattern similar to the average number of exceedances, with weekends tending to be higher than weekdays. The CARB has sponsored several research projects to study the causes of elevated ozone levels on weekends in the Basin. Changes in daily patterns that impact the quantity and temporal loading of emissions have been suggested as strongly contributing to these observations. Carryover of matured precursors from weekdays to weekends is also suggested as a contributing factor.



*The term station-days represents the total number of days the standard was exceeded at any monitoring station in the Basin.

FIGURE 2-6
Ozone
Day-of-Week Variation, 2005
Exceedances of the Federal Standard by Day of Week

SUSPENDED PARTICULATE MATTER

Total suspended particulate (TSP) is the name applied to the complex mixture of solid material suspended in the atmosphere. TSP is collected on a glass fiber filter by means of a high volume sampler. Samples are collected for a 24-hour period every sixth day, and then returned to the District laboratory for chemical analysis to determine the relative concentrations of sulfate, nitrate, and lead. The federal and state standards for lead and sulfate are based on analyses of TSP samples. In 2005, TSP samples were collected by the District at 12 sites. These samples were analyzed for sulfate, nitrate, and lead concentrations.

The fine fraction of TSP has greater effects on health and visibility than the coarse fraction. In 1987 U.S. EPA adopted PM10 standards, which replaced the earlier TSP standards. PM10 samples are collected on quartz filters with a size selective inlet high volume sampler. The District began PM10 monitoring in late 1984.

In 1997, the U.S. EPA adopted new federal air quality standards for a subset of fine particulate matter, PM2.5, to complement existing PM10 standards that target the full range of inhalable particulate matter. In compliance with the adopted standard, the District monitored PM2.5 concentrations at 19 sites in 2005.

PARTICULATE MATTER (PM10)

Properties

Of greatest concern to public health are the particles small enough to be inhaled into the deepest parts of the lung. Respirable particles (particulate matter less than about 10 micrometers in diameter) can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis, and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to PM10.

PM10 particles are both directly emitted or formed from diverse emission sources. Major sources of directly emitted (primary) PM10 include re-suspended road dust or soil entrained into the atmosphere by wind or activities such as construction and agriculture. Other components of PM10 form in the atmosphere (secondary PM10) from precursor emissions of the gaseous pollutants.

State PM10 Standard

CARB has revised the state annual PM10 standard effective July 2003. The new standard is an annual arithmetic mean of 20 $\mu g/m^3$ (changed from annual geometric mean of 30 $\mu g/m^3$).

Current PM10 Air Quality

In 2005, the District measured PM10 concentrations at 20 locations throughout the South Coast and Salton Sea Air Basins. Figure 2-7 shows the contour map of the annual average (arithmetic mean) PM10 concentrations distribution in the Basin in 2005. The areas with the highest annual average PM10 concentrations were located in Riverside and San Bernardino counties close to Metropolitan Riverside county. The maximum annual average recorded (52.0 µg/m^3 in the Metropolitan Riverside county area) was 103 percent of the federal standard.

The federal 24-hour standard was not exceeded anywhere in the District in 2005. The maximum 24-hour average concentration (131.0 µg/m^3 recorded in South Coastal Los Angeles County area) was 87 percent of the federal 24-hour standard.

The more stringent state annual standard was exceeded in a much larger area than the federal annual standard, with almost all of the Basin and all of the Riverside county SSAB recording annual average concentrations above the standard. The state 24-hour PM10 standard was also exceeded at most locations monitored in the District. The standard was exceeded most frequently in the Basin's inland valleys, centered on Metropolitan Riverside county.

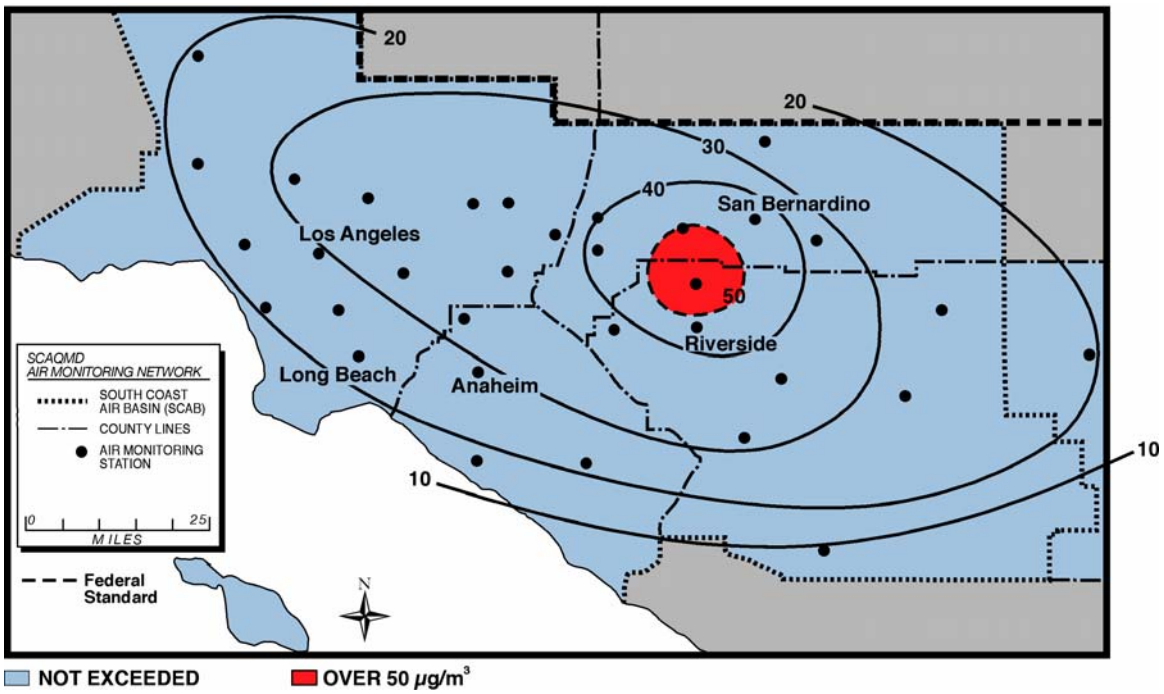


FIGURE 2-7
Particulate Matter (PM10) - 2005
Annual Arithmetic Mean, µg/m^3

The annual arithmetic mean, the percent of days exceeding state and federal standards, and the maximum 24-hour average concentration for the years 1990 - 2005 are given in Tables A-8 to A-10 in the Attachment.

Seasonal and Day-of-Week Variation in PM10

PM10 samples are only collected every sixth day (or third day at sites where an intensive monitoring schedule has been adopted) and exceedances of the federal standard are relatively infrequent in recent years. As a consequence, seasonal and day-of-week variations in exceedances of the federal standard for the last few years cannot be determined accurately. However, if exceedances of the state standard are considered, seasonal and day-of-week patterns do emerge.

Previous analyses of seasonal variations in PM10 show that the monthly average PM10 concentration and the monthly average number of days exceeding the state standard tend to peak in summer and fall in the inland valley area of the Basin where PM10 concentrations are highest. However, in the South Coastal Los Angeles county area, monthly average PM10 concentrations and the average number of days exceeding the state standard are highest in late fall and winter months.

Figure 2-8 shows the average number of days in each month exceeding the state standard at one or more Basin locations over the period 2003-2005. The greatest number of exceedances of the state standard occurred in the summer months. Due to the higher number of exceedances in the inland valleys, the pattern for the Basin is more similar to those for individual sites in the inland valley areas. Figure 2-9 shows the monthly average PM10 concentrations for the two sites, Metropolitan Riverside County in inland valleys and South Coastal Los Angeles county. In the inland valley areas, PM10 concentrations are higher in the summer and fall months while in the coastal areas higher concentrations are recorded in the late fall and winter months.

Day-of-week variations have also been examined, and it was found that the average weekend concentrations were lower than the weekday average at all sites monitored in the Basin and SSAB locations. Figure 2-10 shows the average PM10 concentrations by day of week at two representative monitoring sites in the Basin for the period 2003-2005, based on the Beta Attenuation Monitor (BAM) and Tapered Element Oscillating Microbalance (TEOM) data.

Figure 2-11 shows average PM10 concentrations for each hour of the day for the year 2005. On average, PM10 concentrations show a peak around 7-8 a.m., the time of the heaviest morning traffic rush-hour.

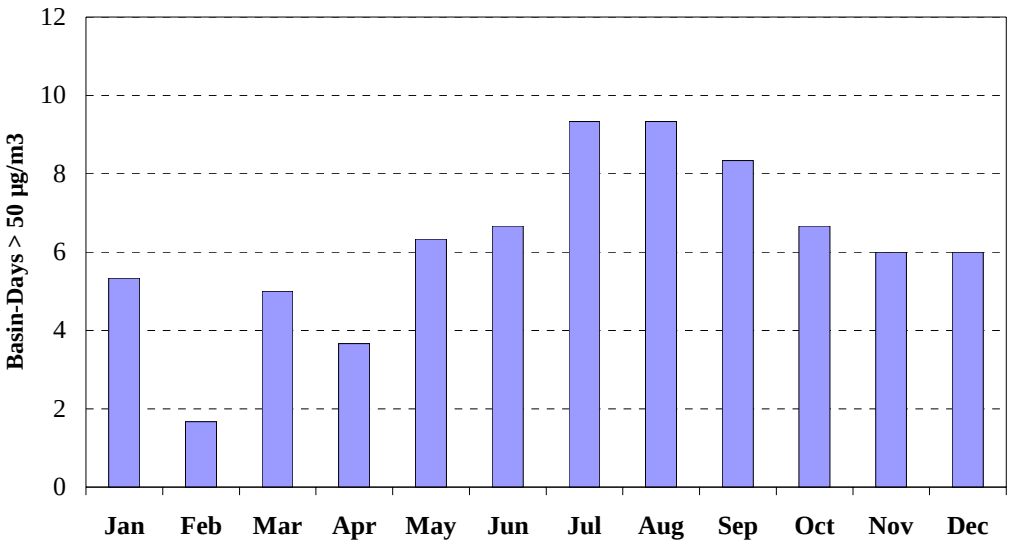


FIGURE 2-8
Basin-Days Exceeding State PM10 Standard by Month, 2003-2005

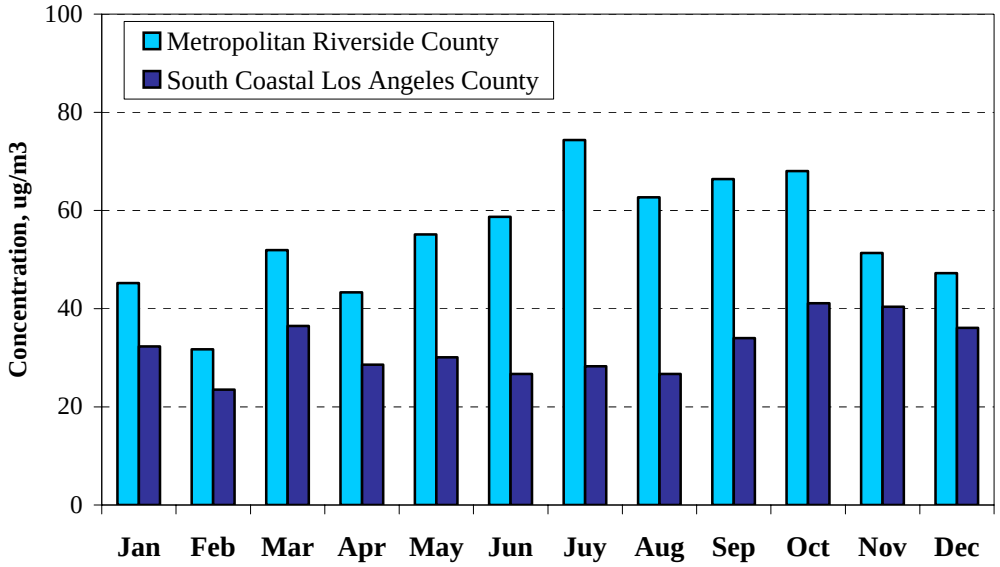


FIGURE 2-9
Monthly Average PM10 Concentration, 2003-2005

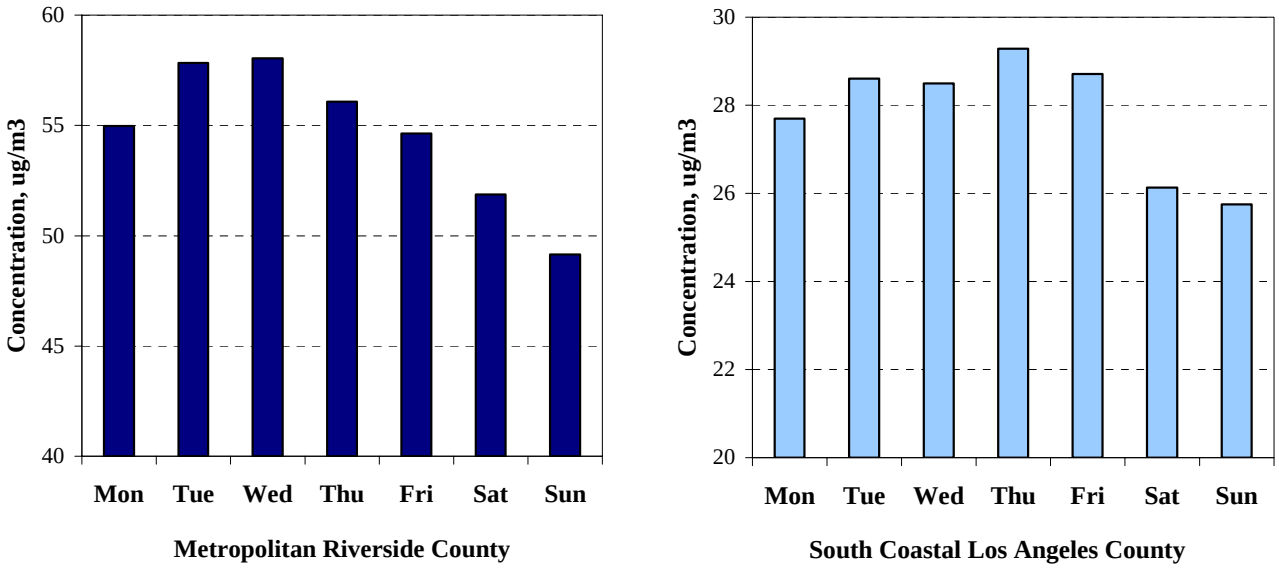


FIGURE 2-10

Day-of-Week Variation, 2003-2005
Average PM10 Concentration by Day of Week

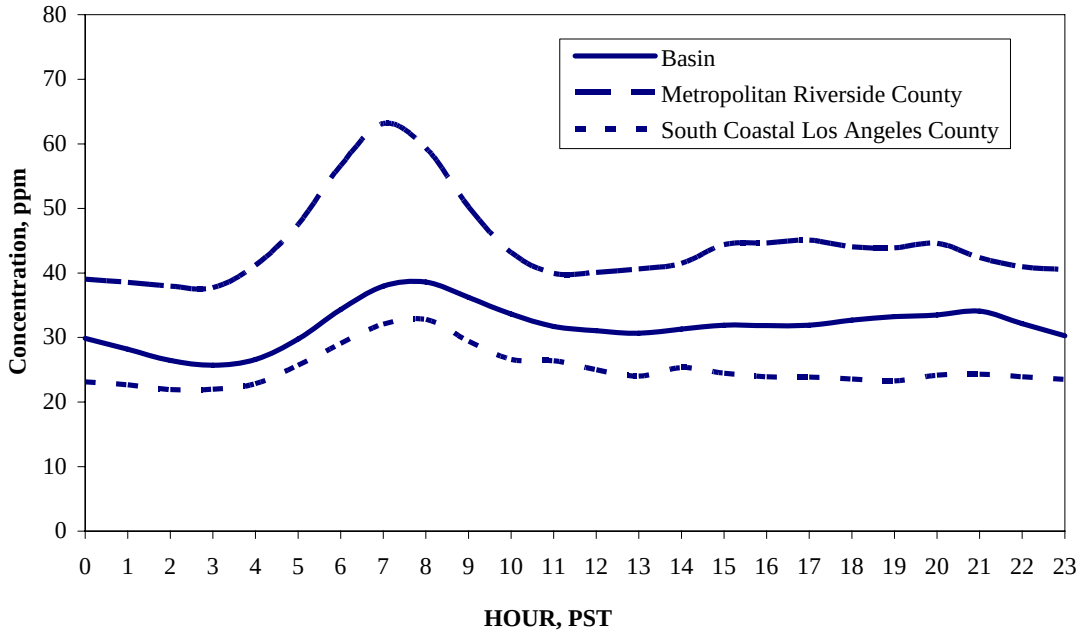


FIGURE 2-11

Diurnal Variation, 2005
Average PM10 Concentration for Each Hour of the Day

FINE PARTICULATE MATTER (PM2.5)

Properties

PM2.5, the fine sized particles less than 2.5 micrometers in diameter, are small enough to penetrate the defenses of the human respiratory system and lodge in the deepest recesses of the lung, causing potential adverse health impacts. The health effects include increased respiratory symptoms and diseases such as ashma, bronchitis, acute and chronic respiratory problems like shortness of breath and painful breathing (in children, the elderly and sensitive people), and premature deaths (mainly in the elderly due to weaker immune systems). Sources of PM2.5 include diesel-powered vehicles such as buses and trucks, fuel combustion from automobiles, power plants, industrial processes, and wood burning.

In the Basin, much of the PM10 fraction is actually finer in size than 2.5 micrometers, a condition which has major implications for both health and atmospheric visibility. Reducing PM2.5 concentrations will therefore not only reduce the threat to the health of the Basin's population, but will also improve visual air quality in this region.

The District began monitoring PM2.5 regularly in 1999. In 2005, the District measured PM2.5 concentrations at 19 locations. Samples are collected for a 24-hour period every 3 days at most locations except for a few sites with high PM2.5 levels where samples are taken every day.

Current PM2.5 Air Quality

Figure 2-12 shows 2005 annual average arithmetic mean PM2.5 concentrations in different areas of the Basin. Like PM10, PM2.5 concentrations were higher in the inland valley areas of Metropolitan Riverside county. However, PM2.5 concentrations were also high in the metropolitan areas of Los Angeles county, mainly due to the secondary formation of smaller-sized particulate resulting from mobile and stationary source activities. The maximum annual average recorded (21.0 $\mu g/m^3$ in the Metropolitan Riverside county area) was 139 percent of the federal standard. In 2005, the federal annual PM2.5 standard was exceeded at approximately 60 percent of the locations monitored in the District. The standard was not exceeded at the coastal areas of Los Angeles and Orange counties and the San Bernardino Mountain area in the Basin and Coachella Valley area in SSAB.

The federal 24-hour PM2.5 standard was exceeded at some locations monitored in the Basin in 2005. The maximum 24-hour average concentration (132.7 $\mu g/m^3$ in East San Gabriel Valley) was 203 percent of the federal 24-hour standard.

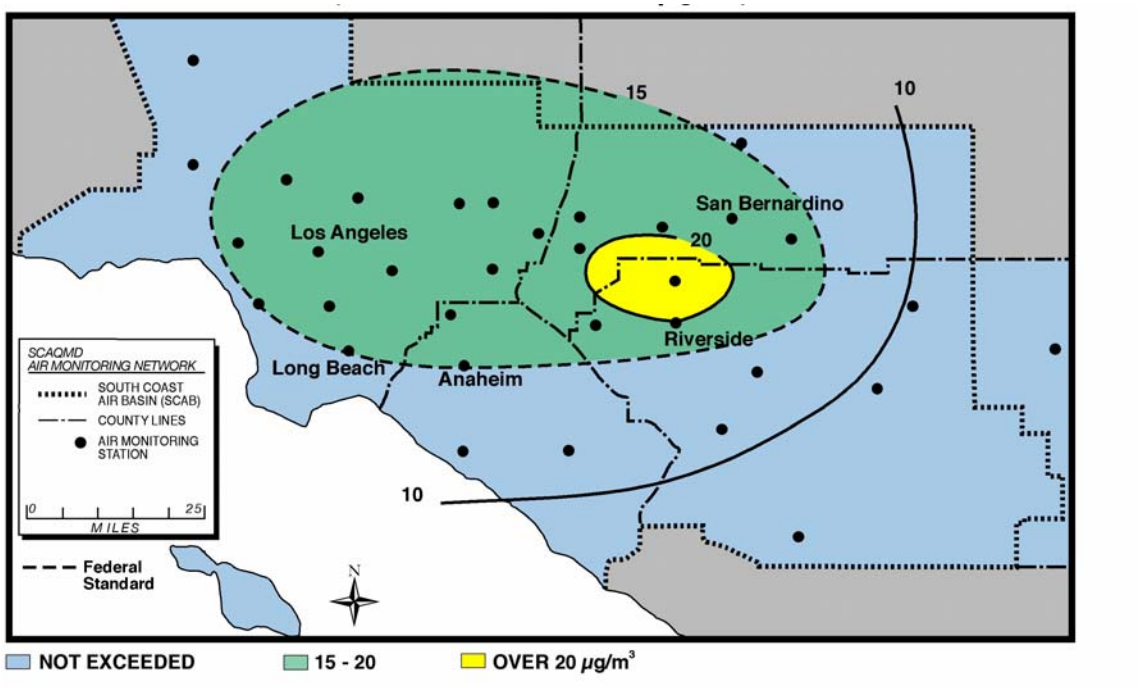


Figure 2-12

Fine Particulate Matter (PM2.5) - 2005
Annual Arithmetic Mean, µg/m^3

The annual arithmetic mean, the percent of days exceeding the federal standards, the maximum 24-hour average concentration, and the 98th percentile concentration for the years 1999 - 2005 are given in Tables A-11 to A-15 in the Attachment.

Seasonal and Day of Week Variation in PM2.5

Seasonal and day-of-week variations in PM2.5 concentrations are complex and location dependant, and require further analysis to determine the reasons for the variation. Preliminary analysis shows that the PM2.5 concentrations tend to be higher in fall. Figure 2-13 shows the average PM2.5 concentration for each month in the Basin for the year 2005.

Preliminary analysis of daily variation shows no specific day-of-week pattern in PM2.5 concentrations in the Basin. Figure 2-14 shows the total number of days exceeding the federal standard in the Basin by day of week for the three-year period 2003-2005.

Figure 2-15 shows average PM2.5 concentration for each hour of the day for the period 2003-2005 at two monitoring sites in the Basin. On average, PM2.5 concentrations show a peak around 8-9 a.m.

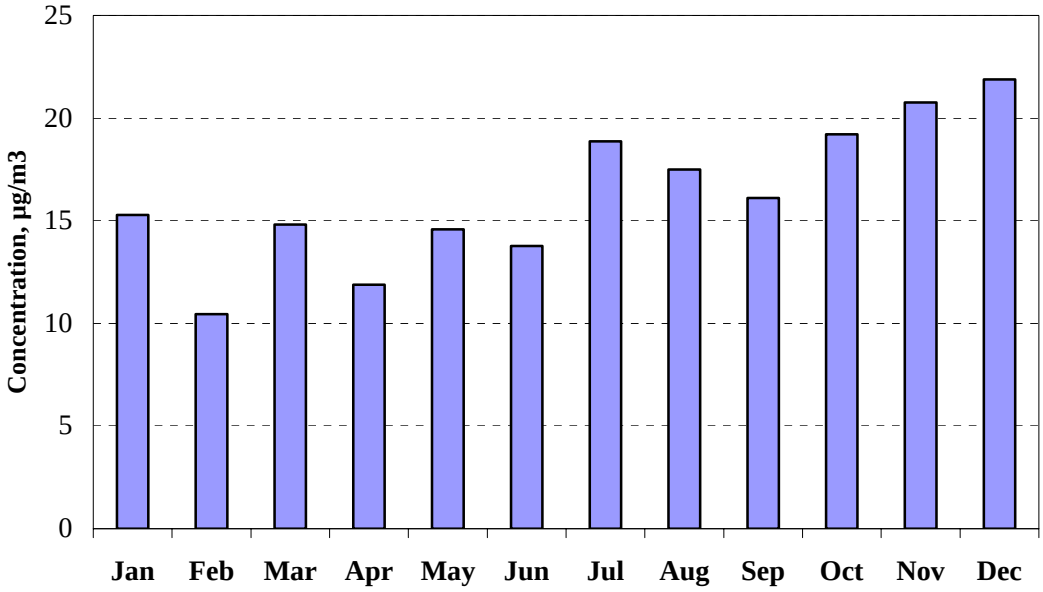


FIGURE 2-13
PM2.5 Seasonal Variation, 2005
Monthly Average Concentration in the Basin, ug/m3

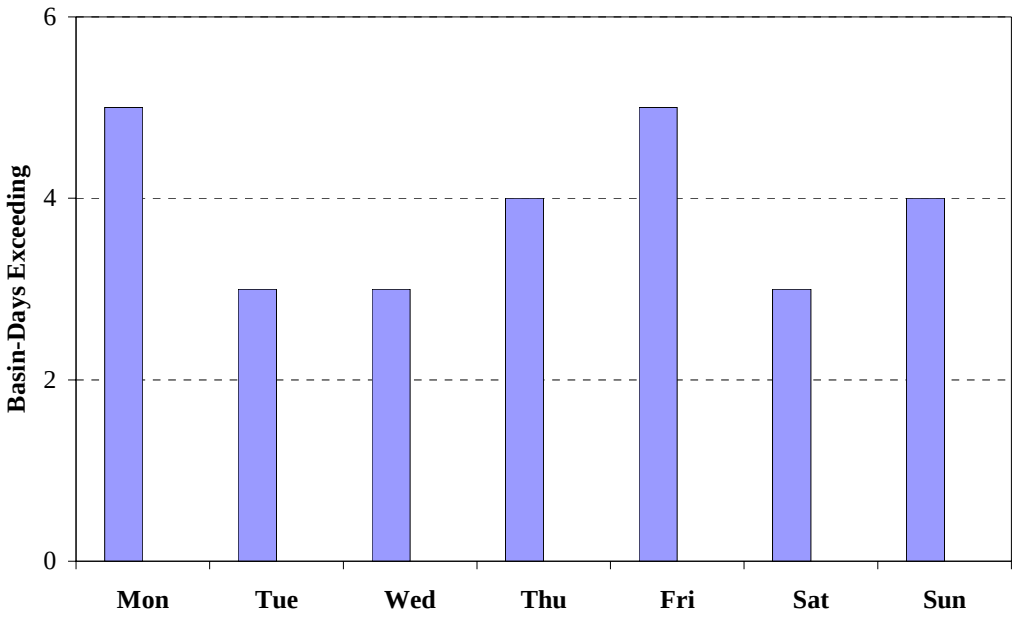


FIGURE 2-14
PM2.5 Day-of-Week Variation, 2003-2005
Basin-Days Exceeding the Federal Standard by Day of Week

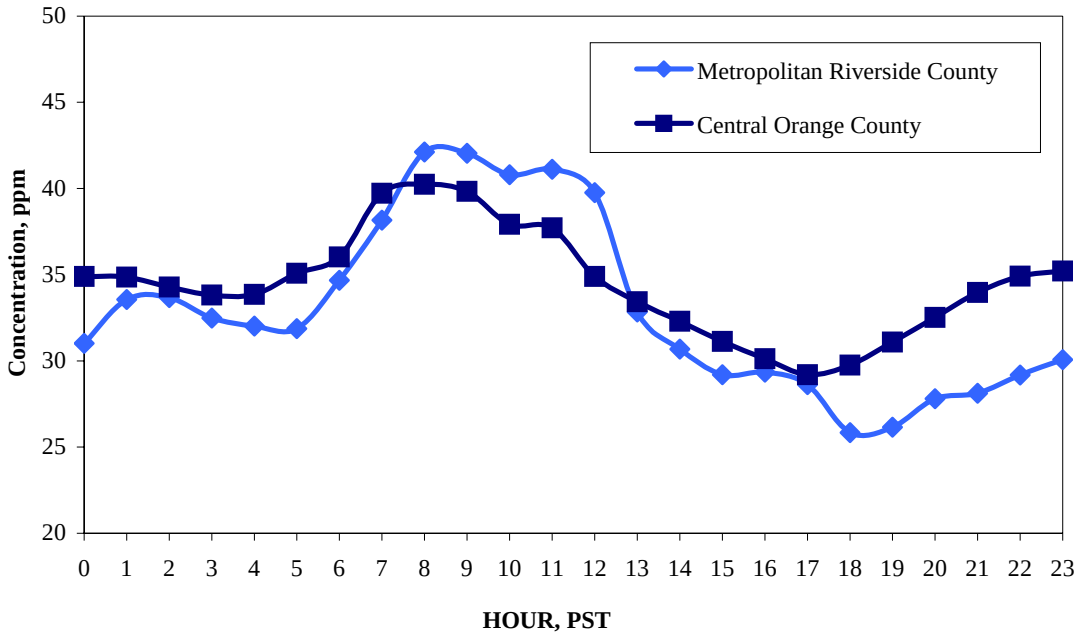


FIGURE 2-15
Diurnal Variation, 2003-2005
Average PM2.5 Concentration for Each Hour of the Day

CARBON MONOXIDE (CO)

Properties

Carbon monoxide (CO) is a colorless, odorless, relatively inert gas. It is a trace constituent in the unpolluted troposphere, and is produced by both natural processes and human activities. In remote areas far from human habitation, carbon monoxide occurs in air at an average background concentration of 0.04 ppm, primarily as a result of natural processes such as forest fires and the oxidation of methane. Global atmospheric mixing of CO from urban and industrial sources creates higher background concentrations (up to 0.20 ppm) near urban areas. The major source of CO in urban areas is incomplete combustion of carbon-containing fuels, mainly gasoline. In 2000, 98 percent of the CO emitted into the Basin's atmosphere was from mobile sources. Consequently, CO concentrations are generally highest in the vicinity of major concentrations of vehicular traffic.

Carbon monoxide is a primary pollutant, meaning that it is directly emitted into the air, not formed in the atmosphere by chemical reaction of precursors, as is the case with ozone and other secondary pollutants. Ambient concentrations of CO in the Basin exhibit large spatial and temporal variations, due to variations in the rate at which CO is emitted, and in the meteorological conditions that govern transport and dilution. Unlike ozone, CO tends to reach high concentrations in the fall and winter months. The highest

concentrations frequently occur on weekdays at times consistent with rush hour traffic and late at night during the coolest, most stable portion of the 24-hour day.

When carbon monoxide is inhaled in sufficient concentration, it can displace oxygen and bind with the hemoglobin in the blood, reducing the capacity of the blood to carry oxygen. Individuals most at risk from the effects of CO include heart patients, fetuses (unborn babies), smokers, and people who exercise heavily. Normal healthy individuals are affected at higher concentrations, which may cause impairment of manual dexterity, vision, learning ability, and performance of work. The results of studies concerning the combined effects of CO and other pollutants in animals have shown a synergistic adverse effect after exposure to CO and ozone.

Current Carbon Monoxide Air Quality

The District currently monitors carbon monoxide air quality at 25 of its 34 air monitoring stations. The highest CO concentrations are found in coastal and central Los Angeles county. The highest 8-hour average CO concentration in 2005 (5.9 ppm) was recorded in South Central Los Angeles county and was 62 percent of the federal standard and 65 percent of the state standard. This was the lowest concentration recorded in the Basin since carbon monoxide monitoring began in this region. The highest 1-hour average concentration in 2005 (7 ppm) was 19 percent of the federal and 33 percent of the state 1-hour standards. Concentrations in the less urbanized areas of the Basin and in the SSAB were well below the standards.

In 2005, carbon monoxide standards continued to remain below the standards at all locations monitored for the third consecutive year. Highest concentrations were recorded in Los Angeles county areas, in the areas of South Central Los Angeles County. There have been no exceedances of the stage 1 episode (federal alert) level (8-hour average CO greater than or equal to 15 ppm) since 1997. Table 1 below shows the 2005 maximum 8-hour average carbon monoxide concentrations by Basin and county.

The annual number of days exceeding the federal carbon monoxide standard at all monitoring sites during the period 1990-2005 is given in Table A-16 in the Attachment. Tables A-17 and A-18 list the annual number of federal alerts and maximum CO concentrations for all sites for the years 1990-2005.

The District has requested redesignation to attainment for CO, which is pending at the time of publication of this report.

TABLE 1
2005 Maximum 8-Hour Average Carbon Monoxide Concentrations*

Basin/County	Maximum 8-Hour ppm	Percent Federal Standard	Area
South Coast Air Basin			
Los Angeles	5.9	62%	South Central Los Angeles County
Orange	3.3	35%	Central Orange County
Riverside	2.5	26%	Metropolitan Riverside County
San Bernardino	2.4	25%	Central San Bernardino Valley
Salton Sea Air Basin			
Riverside	0.8	8%	Coachella Valley

* Federal standard = 9 ppm

NITROGEN DIOXIDE (NO_2)

Properties

Nitrogen dioxide (NO_2) is a reddish-brown gas with a bleach-like odor. Nitric oxide (NO) is a colorless gas, formed from the nitrogen (N_2) and oxygen (O_2) in air under conditions of high temperature and pressure which are generally present during combustion of fuels; NO reacts rapidly with the oxygen in air to give nitrogen dioxide (NO_2). NO_2 is responsible for the brownish tinge of polluted urban air. The two gases, nitric oxide and nitrogen dioxide, are referred to collectively as oxides of nitrogen (NO_x). In the presence of sunlight, nitrogen dioxide reacts to give nitric oxide and an oxygen atom. The oxygen atom can react further to give ozone, via a complex series of chemical reactions involving hydrocarbons (VOCs). Nitrogen dioxide may also react to give nitric acid (HNO_3) which reacts further to give nitrates, which are a component of PM10.

Nitrogen dioxide is a respiratory irritant and reduces resistance to respiratory infection. Children and people with respiratory disease are most susceptible to its effects.

Current Nitrogen Dioxide Air Quality

In 2005, the District monitored nitrogen dioxide concentrations at 24 locations. Federal and state standards for nitrogen dioxide were not exceeded at any location. The federal standard has not been exceeded in the Basin since 1991.

Table 2 shows the 2005 maximum annual average nitrogen dioxide concentrations by Basin and county. The maximum annual average nitrogen dioxide concentration (0.0313 ppm recorded in the Northwest San Bernardino Valley) was 59 percent of the federal standard. Concentrations in the downwind SSAB areas were much lower. The maximum 1-hour average concentration in the Basin (0.14 ppm in South Coastal Los Angeles County) was 56 percent of the state standard.

The annual averages, number of days exceeding the state standard, and maximum 1-hour average concentrations for each individual area of the District for the years 1990-2005 are given in Tables A-19 to A-21 in Attachment.

Though the state and federal standards were not exceeded in 2005, nitrogen dioxide is still a concern since it is a precursor to both ozone and particulate matter. Further control of oxides of nitrogen will be required to attain the ozone and particulate standards.

TABLE 2
2005 Maximum Annual Average Nitrogen Dioxide Concentrations*

Basin/County	Maximum Annual Avg. ppm	Percent Federal Standard	Area
South Coast Air Basin			
Los Angeles	0.0312	58%	South Central Los Angeles County; Ponoma/Walnut Valley
Orange	0.0249	47%	North Orange County
Riverside	0.0222	41%	Metropolitan Riverside County
San Bernardino	0.0313	59%	Northwest San Bernardino Valley
Salton Sea Air Basin			
Riverside	0.0120	22%	Coachella Valley

* Federal standard = 0.0534 ppm

SULFUR DIOXIDE (SO_2)

Properties

Sulfur dioxide (SO_2) is a colorless gas with a sharp odor. It reacts in the air to form sulfuric acid (H_2SO_4), which contributes to acid precipitation, and sulfates, which is a component of PM10 and PM2.5. Most of the SO_2 emitted into the atmosphere is produced by the burning of sulfur-containing fuels.

At sufficiently high concentrations, sulfur dioxide affects breathing and the lungs' defenses, and can aggravate respiratory and cardiovascular diseases. Asthmatics and people with chronic lung disease or cardiovascular disease are most sensitive to its effects. Sulfur dioxide also causes plant damage, damage to materials, and acidification of lakes and streams.

Current Sulfur Dioxide Air Quality

In 2005, sulfur dioxide was measured at seven Basin locations. No violations of federal or state standards occurred. The federal standards were last exceeded in the 1960's and the state standard was last exceeded in 1990.

The maximum 24-hour average SO_2 concentrations recorded in the District in 2005 are shown in Table 3. The highest 24-hour average SO_2 concentration (0.012 ppm in East San Fernando Valley) was 9 percent of the federal 24-hour standard. The highest 1-hour average (0.07 ppm in Central Los Angeles) was 29 percent of the state standard.

Detailed statistics including annual average and maximum 1-hour average SO_2 concentrations for each location monitored for the years 1990-2005 are given in Tables A-22 and A-23 in the Attachment.

While sulfur dioxide concentrations in the Basin no longer exceed standards, SO_2 is a precursor of PM10 and sulfate.

TABLE 3
2005 Maximum 24-Hour Average Sulfur Dioxide Concentrations*

Basin/County	Maximum 24-hr Avg. ppm	Percent Federal Standard	Area
South Coast Air Basin			
Los Angeles	0.012	9%	Southwest Coastal LA County
Orange	0.008	6%	North Coastal Orange County
Riverside	0.011	8%	Metropolitan Riverside County
San Bernardino	0.004	3%	Central San Bernardino Valley
Salton Sea Air Basin			
Riverside	N.D.		

N.D. = No Data. Historical measurements indicate concentrations are below standard.
* Federal standard = 0.14 ppm

SULFATE ($SO_4^{=}$)

Properties

Sulfates are chemical compounds which contain the sulfate ion ($SO_4^{=}$), and are part of the mixture of solid materials which make up PM10 and TSP. Most of the sulfates in the atmosphere are produced by oxidation of sulfur dioxide. Oxidation of sulfur dioxide yields sulfur trioxide (SO_3) which reacts with water to give sulfuric acid (H_2SO_4), which contributes to acid precipitation. The reaction of sulfuric acid with basic substances such as ammonia yields sulfates, a component of PM10.

Current Sulfate Air Quality

In 2005 sulfate concentrations were measured at 12 Basin locations. Table 4 shows the 2005 maximum 24-hour average concentrations in the District by Basin and county. The maximum sulfate concentration (17.3 µg/m^3) recorded in the District was 69 percent of the state standard.

The percent of days exceeding the standard and the maximum 24-hour average concentration at each monitoring location for the years 1990-2005 are given in Tables A-24 and A-25 in the Attachment.

TABLE 4
2005 Maximum 24-Hour Average Sulfate Concentrations

Basin/County	Maximum 24-hr. Avg. µg/m^3	Percent State Standard	Area
South Coast Air Basin			
Los Angeles	17.3	69%	South Central LA County
Orange	N.D.		
Riverside	10.3	41%	Metropolitan Riverside County
San Bernardino	10.9	44%	Central San Bernardino Valley
Salton Sea Air Basin			
Riverside	N.D.		

N.D. = No Data. Historical measurements indicated concentrations were well below the standard.
* State standard = 25 µg/m3

LEAD (Pb)

Properties

Lead in the atmosphere is present as a mixture of a number of lead compounds. Leaded gasoline and lead smelters have been the main Basin sources of lead emitted into the air. Due to the phasing out of leaded gasoline, there has been a dramatic reduction in atmospheric lead in the Basin over the past two decades.

Current Lead Air Quality

In 2005 lead concentrations were measured at eight Basin air monitoring stations, and they were all well below the standards. Table 5 shows the maximum quarterly average lead concentrations in the District by Basin and county in 2005. The maximum quarterly average lead concentration (0.03 $\mu g/m^3$) was 2 percent of the federal standard.

TABLE 5
2005 Maximum Quarterly Average Lead Concentrations

Basin/County	Maximum Qtr. Avg.* $\mu g/m^3$	Percent Federal Standard	Area
South Coast Air Basin			
Los Angeles	0.03	2%	South Central LA County
Orange	N.D.		
Riverside	0.02	1%	Metropolitan Riverside County
San Bernardino	0.02	1%	Northwest San Bernardino Valley
Salton Sea Air Basin			
Riverside	N.D.		

N.D. = No Data. Historical measurements indicated concentrations were well below the standard.
* Higher concentrations (0.44 µg/m3) were measured in localized areas near sources known to emit lead

In addition to lead measurements at District air monitoring stations, special monitoring was done in the immediate vicinity of several stationary sources of lead. Data from the special monitoring sites showed that higher concentrations were reached in very localized areas near sources, with a maximum quarterly average (0.34 $\mu g/m^3$) 23 percent of the federal standard, and a maximum monthly average (0.44 $\mu g/m^3$) 29 percent of the state standard.

Maximum quarterly average and monthly average lead concentrations at each of the regular monitoring sites for the years 1990-2005 are given in Tables A-26 and A-27 in the Attachment.

CHAPTER 3

AIR QUALITY IN THE RIVERSIDE COUNTY SSAB

Ozone (O_3)
Particulate Matter (PM10)
Fine Particulate Matter (PM2.5)
Carbon Monoxide (CO)
Nitrogen Dioxide (NO_2)
Sulfur Dioxide (SO_2)
Sulfate ($SO_4^{=}$)
Lead (Pb)

AIR QUALITY IN THE RIVERSIDE COUNTY SSAB

In 2005, the District monitored air quality at two locations in the Riverside county portion of the Salton Sea Desert Air Basin (SSAB), both in the Coachella Valley. One monitoring station was located immediately downwind of the densely populated Basin, and the other was located further downwind in the Coachella Valley. The maximum concentrations recorded at these locations in 2005 are shown in Figure 3-1. Data is provided in the tables attached to this appendix.

In 2005, pollutant concentrations in the Riverside county SSAB exceeded state and federal standards for ozone and state standard for PM10. The maximum 1-hour average ozone concentration (0.139 ppm) was 139 percent and 111 percent of the state and federal standards, respectively. The maximum 8-hour average ozone concentration (0.116 ppm) was 155 percent and 136 percent of the 8-hour state and federal ozone standards. The maximum annual average PM10 concentration (45.7 µg/m^3) was 223 percent and 91 percent of the state and federal annual PM10 standards, respectively.

Federal and state standards for PM2.5, carbon monoxide and nitrogen dioxide were not exceeded. The maximum annual average PM2.5 concentration (10.5 µg/m^3) was 69 percent of

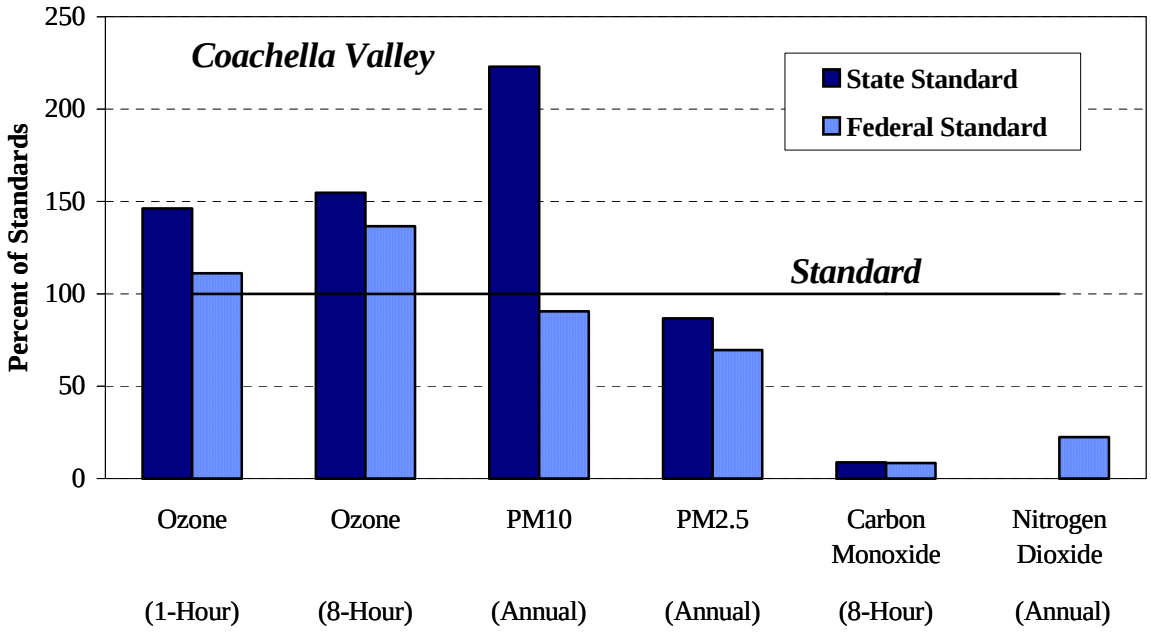


FIGURE 3-1
2005 Maximum Pollutant Concentrations as Percent of Standards
Riverside County SSAB

the federal standard. The highest 8-hour average carbon monoxide concentration (0.8 ppm) was 8 percent of the federal standard. The maximum annual average NO_2concentration recorded (0.0120 ppm) was 22 percent of the federal NO_2 standard. No measurements of SO_2, sulfate or lead were made in the Riverside county SSAB area of the District in 2005. Historical measurements in this area showed concentrations of these pollutants to be well below the state and federal standards and monitoring was discontinued.

OZONE (O_3)

Ozone in the atmosphere of the Riverside county portion of SSAB is both directly transported from the Basin and formed principally from precursors emitted upwind. These precursors are emitted in greatest quantity in the coastal and central Los Angeles county areas of the Basin. The Basin's prevailing sea breeze causes polluted air to be transported inland. As the air is being transported inland, ozone is formed, with peak concentrations occurring in the inland valleys of the Basin in an area extending from eastern San Fernando Valley through the San Gabriel Valley into the Riverside-San Bernardino area and the adjacent mountains. As the air is transported still further inland into the desert areas, ozone concentrations decrease due to dilution.

The 1-hour federal ozone standard level was exceeded on four days in Coachella Valley in 2005. The more stringent 8-hour federal standard was exceeded on 39 days. Ozone concentrations and the number of days exceeding the federal ozone standard are greatest in summer. There are typically no exceedances during the winter months.

The 1-hour and 8-hour state ozone standards were exceeded on 43 days and 69 days, respectively, in the Coachella Valley in 2005. The health advisory level has not been exceeded in the Coachella Valley area since 1999. No stage 1 episode level has been recorded in the Riverside county SSAB area since 1989.

Figure 3-2 shows the total number of days exceeding federal ozone standards at Coachella Valley monitoring sites for the years 1990-2005.

Number of days exceeding the 1-hour and 8-hour federal ozone standards and episode levels and the maximum 1-hour ozone concentrations for the years 1990-2005 are given in Tables A-4 through A-7 in the Attachment.

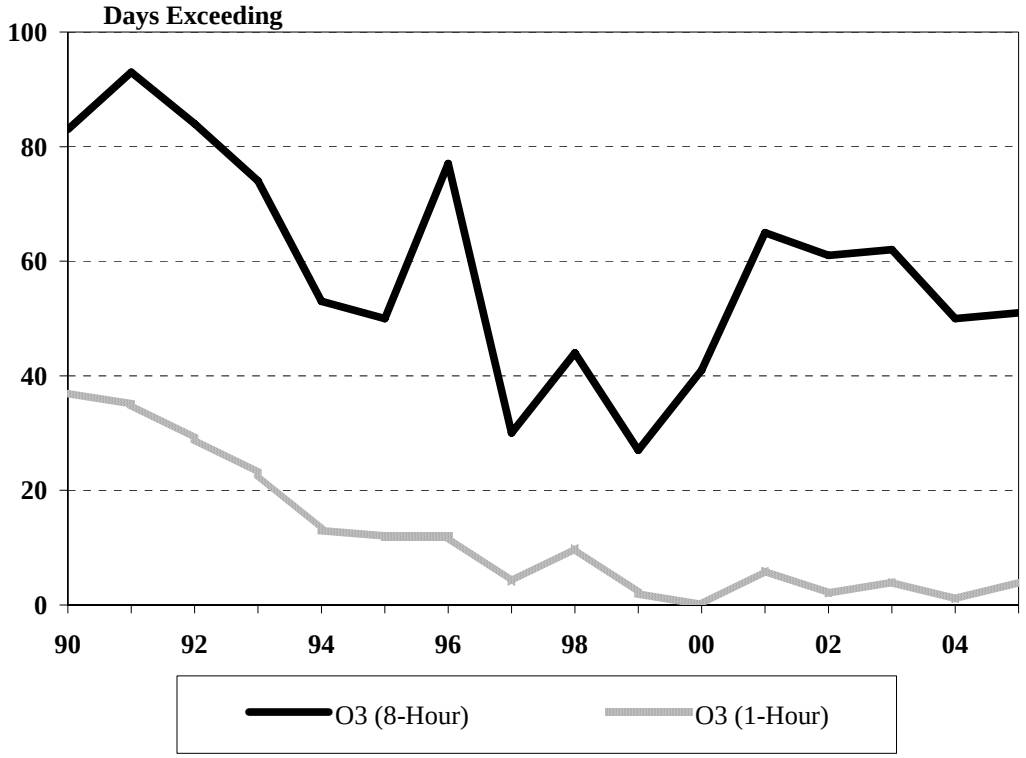


FIGURE 3-2
Ozone, 1990-2005
Number of Days Exceeding Federal Standards in Riverside County SSAB

PARTICULATE MATTER (PM10)

Although exceedances of the ozone standard in the Coachella Valley area are due to the transport of ozone from the densely populated areas of the Basin upwind, the same cannot be said for PM10 exceedances. PM10 exceedances in the Coachella Valley are primarily due to locally generated sources of fugitive dust (e.g. construction activities, re-entrained dust from paved road travel, and natural wind-blown sources) and not as a result of secondary PM10 generated from precursor gaseous emissions. In addition, the Riverside county SSAB is subject to frequent high winds which generate wind-blown sand and dust, especially from disturbed soil, that can cause high levels of PM10. PM10 is the only pollutant which has sometimes reached higher concentrations in SSAB than in the Basin.

The federal 24-hour and annual PM10 standard levels were not exceeded in the Riverside county part of SSAB in 2005. The maximum 24-hour and annual average PM10 concentrations (106 $\mu g/m^3$ and 50.2 $\mu g/m^3$) were 70 percent and 90 percent of the standard.

The maximum annual average PM10 concentrations in the western portion of the Coachella Valley area, as well as the San Gorgonio Pass area at the eastern edge of the Basin, remained well below the federal PM10 standards in 2005.

In 2005, the state 24-hour PM10 standard was exceeded on a maximum of 39 days (34 percent of sampling days) in the Coachella Valley. The state annual standard was also exceeded. The maximum annual average concentration was 223 percent of the state standard.

Annual average, percent number of days exceeding standards, and maximum 24-hour average concentrations for the years 1985-2005 for the Riverside county SSAB and other District air monitoring stations are presented in the Attachment, in Tables A-8 to A-10.

FINE PARTICULATE MATTER (PM2.5)

PM2.5 has been measured in Coachella Valley since 1999 when the District began PM2.5 monitoring. In 2005, federal PM2.5 standards were not exceeded at either of the two Riverside county SSAB air monitoring sites. The maximum 24-hour average and annual average concentrations recorded in 2005 (25.0 $\mu g/m^3$ and 10.5 $\mu g/m^3$) were, respectively, 38 percent and 70 percent of the federal 24-hour and annual standards.

CARBON MONOXIDE (CO)

Carbon monoxide was measured at one of the Riverside county SSAB air monitoring stations in 2005. Neither the federal nor state standards were exceeded. The maximum 8-hour average CO recorded in 2005 (0.8 ppm) was 9 percent of the federal and 8 percent of the state standards. Historical carbon monoxide air quality and trends in the Riverside county SSAB area shows that the area has not exceeded the federal standard over the last two decades.

Summary statistics for carbon monoxide in the Riverside county SSAB as well as other District areas are in Tables A-11 to A-12. Table 1 (Chapter 2) shows summary statistics for the Basin and SSAB in 2005.

NITROGEN DIOXIDE (NO_2)

Nitrogen dioxide was measured at one of the stations in the Riverside county SSAB in 2005. The maximum annual average nitrogen dioxide concentration (0.0120 ppm) was 22 percent of the federal standard and the maximum 1-hour average (0.10 ppm) was 38 percent of the state 1-hour standard.

Table 1 (Chapter 2) and Tables A-14 to A-16 in the Attachment contain NO_2 summary statistics for the Riverside county SSAB and other District monitoring stations for the year 2005 and earlier years.

SULFUR DIOXIDE (SO_2)

Sulfur dioxide concentrations were not measured in the Riverside county SSAB in 2005. Measurements in past years have shown concentrations to be well below the state and federal standards.

Tables A-17 and A-18 in the Attachment contain annual average and maximum 1-hour averages for available years for the period 1990-2005 at Riverside county SSAB and other District monitoring stations.

SULFATE ($SO_4^=$)

No measurements of sulfate concentrations were made in 2005 at the two monitoring stations in the Riverside county SSAB. Historical monitoring has shown concentrations to be less than the state standard.

The percent of days exceeding the standard, and the maximum 24-hour average and annual average sulfate concentrations at each monitoring location for past years are presented in the Attachment, in Tables A-19 to A-20.

LEAD (Pb)

Lead concentrations were not measured at the two Riverside county SSAB stations in 2005. Measurements in past years have shown concentrations to be less than the state and federal standards.

Maximum quarterly average and monthly average concentrations for past years are given in Tables A-21 and A-22 in the Attachment.

ATTACHMENT

TABLE A-1

AMBIENT AIR QUALITY STANDARDS

	CALIFORNIA	FEDERAL			
AIR POLLUTANT	**CONCENTRATION**	**DISTRICT METHOD**	**PRIMARY (>)**	**SECONDARY (>)**	**METHOD [a)]**
Ozone [b,c)]	0.09 ppm, 1-hour average > 0.07 ppm, 8-hour average > [b)]	U.V. Photometry	0.12 ppm, 1-hour average 0.08 ppm, 8-hour average[c)]	Same as Primary Standrd	Chemiluminescence
Carbon Monoxide	9.0 ppm, 8-hour average > 20 ppm, 1-hour average >	Gas Correlation	9 ppm, 8-hour average 35 ppm, 1-hour average	None	Non-dispersive Infra-Red Spectrophotometry
Nitrogen Dioxide	0.25 ppm, 1-hour average >	Gas Phase Chemiluminescence	0.053 ppm, annual average	Same as Primary Standrd	Gas Phase Chemiluminescence
Sulfur Dioxide	0.04 ppm, 24-hour average > 0.25 ppm, 1-hour average >	Ultraviolet PulseFluorescence	0.03 ppm, annual average 0.14 ppm, 24-hour average	0.50 ppm, 3-hour average	Para-rosaniline
Particulate Matter (PM10)	20 $\mu g/m^3$, annual arithmetic mean > [d)] 50 $\mu g/m^3$, 24-hour average >	Size Segregation Inlet High Volume Sampling	50 $\mu g/m^3$, annual arithmetic mean 150 $\mu g/m^3$, 24-hour average	Same as Primary Standrd	Inertial Separation and Gravimetric Analysis
Fine Particulate Matter (PM2.5)	12 $\mu g/m^3$, annual arithmetic mean[e)]	Inertial Separation and Gravimetric Analysis	15 $\mu g/m^3$, annual arithmetic mean [f)] 65 $\mu g/m^3$, 24-hour average [f)]*	Same as Primary Standrd	Inertial Separation and Gravimetric Analysis
Lead	1.5 $\mu g/m^3$, 30-day average >=	High Vol. Sampling Atomic Absorption	1.5 $\mu g/m^3$, calendar quarter	Same as Primary Standrd	High Vol. Sampling Atomic Absorption
Sulfates	25 $\mu g/m^3$, 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) .	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) Effective May 17, 2006,new state 8-hour average standard was established.
c) Effective September 16, 1997, new federal 8-hour average standard was established.
d) Effective July 5, 2003, standard changed from AGM 30 µg/m3 to AAM 20 µg/m3.
e) Effective July 5, 2003, new state standard was established. There was no previous state standard for PM2.5.
f) Effective September 16, 1997, new federal standards were established. There were no previous standards for PM2.5.
* U.S. EPA has recently revised the federal 24-hour PM2.5 standard from 65 $\mu g/m^3$ to 35 $\mu g/m^3$. The standard is expected to become effective in December 2006.

Revised September 2006

TABLE A-2

Episode Criteria

	SCAQMD AND CALIFORNIA				FEDERAL		
AIR POLLUTANT	HEALTH ADVISORY (≥)	STAGE I (≥)	STAGE II (≥)	STAGE III (≥)	STAGE I (≥) (ALERT)	STAGE II (≥) (WARNING)	STAGE III (≥) (EMERGENCY)
Ozone	0.15 ppm, 1-hr. avg.	0.20 ppm, 1-hr. avg.	0.35 ppm, 1-hr. avg.	0.50 ppm, 1-hr. avg.	0.2 ppm, 1-hr. avg.	0.4 ppm, 1-hr. avg.	0.5 ppm, 1-hr. avg.
Carbon Monoxide		40 ppm, 1-hr. avg. 20 ppm, 12-hr. avg.	75 ppm, 1-hr. avg. 35 ppm, 12-hr. avg.	100 ppm, 1-hr. avg. 50 ppm, 12-hr. avg.	15 ppm, 8-hr. avg.	30 ppm, 8-hr. avg.	40 ppm, 8-hr. avg.
Nitrogen Dioxide					0.6 ppm, 1-hr. avg. 0.15 ppm, 24-hr. avg	1.2 ppm, 1-hr. avg. 0.30 ppm, 24-hr. avg.	1.6 ppm, 1-hr. avg. 0.40 ppm, 24-hr. avg.
Sulfur Dioxide		0.50 ppm, 1-hr. avg. 0.20 ppm, 24-hr. avg.	1.00 ppm, 1-hr. avg. 0.70 ppm, 24-hr. avg.	2.00 ppm, 1-hr. avg. 0.90 ppm, 24-hr. avg.	0.3 ppm, 24-hr. avg.	0.6 ppm, 24-hr. avg.	0.8 ppm, 24-hr. avg.
Particulate Matter (PM_{10})					350 $\mu g/m^3$, 24-hr. avg.	420 $\mu g/m^3$, 24-hr. avg.	500 $\mu g/m^3$, 24-hr. avg.
Fine Particulate Matter ($PM_{2.5}$)							
Sulfates*	25 $\mu g/m^3$, 24-hr. avg. combined with ozone > 0.20 ppm, 1-hr. avg.						
Actions to be Taken**	Health Advisory to a) Persons with respiratory and coronary disease, b) School officials in order to curtail students' participation in strenuous activities.	First steps in abatement plans. Health Advisory to a) Persons with respiratory and coronary disease, b) School officials in order to curtail students' participation in strenuous activities.	Intermediate Steps. Abatement actions taken to reduce concentration of pollutant at issue.	Mandatory abatement measures. Extensive actions taken to prevent exposure at indicated levels. State can take action if local efforts failed.	Open burning prohibited. Reduction in vehicle operation requested. Industrial curtailment.	Incinerator use prohibited. Reduction in vehicle operation required. Further industrial curtailment.	Vehicle use prohibited. Industry shut down or curtailment. Public activities ceased.

* Episodes based upon these criteria are not classified according to stages.

** For ozone, actions a) and b) are taken at Health Advisory level. For all other pollutants, these actions are taken at Stage I Episode level.

TABLE A-3

Air Monitoring Stations and Source/Receptor Areas

AREA #	SOURCE/RECEPTOR AREA*	STN #
LOS ANGELES COUNTY		
1	Central LA	087
2	Northwest Coastal LA County	091
3	Southwest Coastal LA County	820
4	South Coastal LA County 1	072
4	South Coastal LA County 2	077
6	West San Fernando Valley	074
7	East San Fernando Valley	069
8	West San Gabriel Valley	088
9	East San Gabriel Valley 1	060
9	East San Gabriel Valley 2	591
10	Pomona/Walnut Valley	075
11	South San Gabriel Valley	085
12	South Central LA County 1	084
12	South Central LA County 2	801
13	Santa Clarita Valley	090
ORANGE COUNTY		
16	North Orange County	3177
17	Central Orange County	3176
18	North Coastal Orange County	3195
19	Saddleback Valley 1	3186
19	Saddleback Valley 2	3812
RIVERSIDE COUNTY		
22	Norco/Corona	4155
23	Metropolitan Riverside County 1	4144
23	Metropolitan Riverside County 2	4146
23	Mira Loma	5212
24	Perris Valley	4149
25	Lake Elsinore Area	4158
29	Banning Airport	4164
30	Coachella Valley 1**	4137
30	Coachella Valley 2**	4157
SAN BERNARDINO COUNTY		
32	Northwest San Bernardino Valley	5175
33	Southwest San Bernardino Valley	5817
34	Central San Bernardino Valley 1	5197
34	Central San Bernardino Valley 2	5203
35	East San Bernardino Valley	5204
37	Central San Bernardino Mountains	5181
38	East San Bernardino Mountains	5818

* Source/Receptor areas and numbers are shown in detail on the map "South Coast Air Quality Management District and Air Monitoring Areas" which is available from SCAQMD Public Information.

**Salton Sea Air Basin.

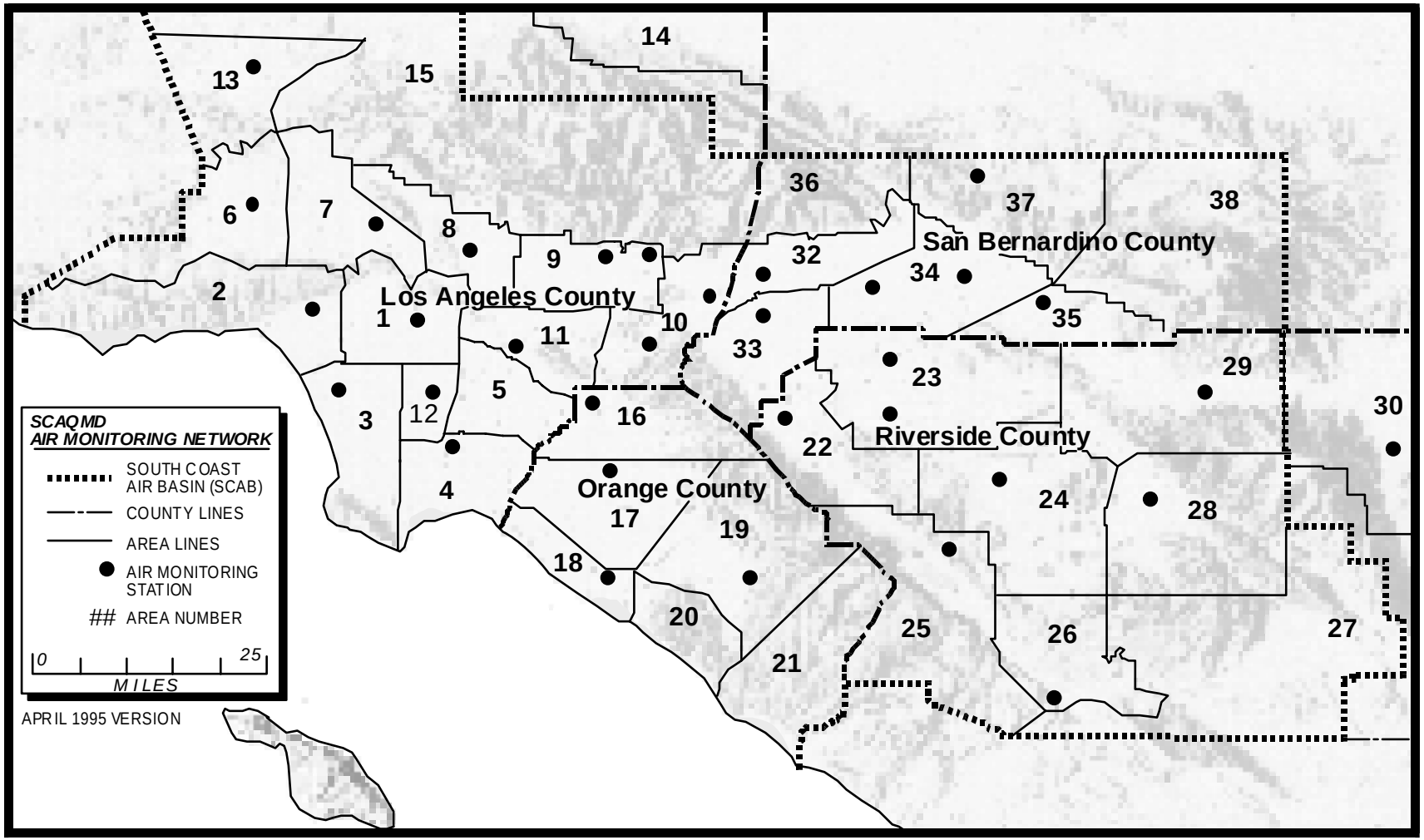


FIGURE A-1
South Coast Air Basin and Adjoining Areas of Salton Sea Air Basin

TABLE A-4

Ozone - Number of Days Exceeding the Federal Standard ***

(0.08 ppm, 8-Hour Average)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	89	71	95	90	82	71	39	18	23	9	16	18	12	21	10	6
069	East San Fernando Valley	50	58	67	21	23	31	11	6	14	3	11	5	6	20	7	2
072	South Coastal Los Angeles County	0	1	8	1	2	0	1	0	0	0	0	0	0	0	0	0
074	West San Fernando Valley	76	75	52	47	35	22	29	3	13	1	0	7	27	49	29	12
075	Pomona/Walnut Valley 1	61	62	61	57	60	56	23	10	21	10	5	3	15	24	13	11
084	South Central Los Angeles County 1	1	3	5	0	1	0	0	0	0	0	0	0	0	0	0	0
085	South San Gabriel Valley										2	4	2	0	2	0	--
087	Central Los Angeles	35	26	27	11	23	10	7	3	9	2	4	1	0	2	1	1
088	West San Gabriel Valley	80	76	81	62	67	55	27	16	17	4	14	9	10	28	9	5
090	Santa Clarita Valley	84	92	100	59	96	50	46	27	35	13	15	27	56	69	52	47
091	Northwest Coastal Los Angeles County	10	14	10	9	5	1	4	2	0	0	0	0	0	1	1	1
094	Southwest Coastal Los Angeles County 1										1	0	0	0	0	0*	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4*	0
591	East San Gabriel Valley 2	107	100	125	104	104	87	53	26	38	8	22	31	23	41	16	13
ORANGE COUNTY:																	
3176	Central Orange County 1	8	13	23	7	7	1	1	1	4	0	1	0	0	1	6	0
3177	North Orange County	37	34	33	22	15	9	6	3	4	1	4	2	0	2	0	0
3186	Saddleback Valley 1										0	2*	--	--	--	--	--
3195	North Coastal Orange County	5	5	6	1	0	0	0	0	0	0	2	0	0	1	1	0
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	--	8*	2	2	8	2	1
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**										21	33	42	48	44	31	35
4141	Hemet/San Jacinty Valley								--	--	--	--	--	--	--	--	--
4144	Metropolitan Riverside County	112	109	115	102	114	83	74	55	57	27	28	34	38	62	35	33
4149	Perris Valley	85	97	118	106	101	76	68	41	28	7	40	58	41	47	19	3
4150	Banning/San Gorgonio Pass	55	42	29	16	34	19	18	7	2	a)	--	--	--	--	--	--
4155	Norco/Corona								--	--	--	--	--	--	--	--	--
4157	Coachella Valley 2**										7	9	17	16	19	18	18
4158	Lake Elsinore	61	66	60	56	84	54	43	39	44	37	30	46	44	35	21	15
4163	Temecula Valley	--	--							--	--	--	--	--	--	--	--
4164	Banning Airport	--	--	--	--	--	--	--	--	--	33	39	49	52	63	40	39
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	71	70	102	74	91	82	57	30	40	17	18	33	19	35	18	15
5181	Central San Bernardino Mountains	132	131	148	133	136	93	98	71	90	87	66	74	82	74	66	69
5197	Central San Bernardino Valley 1	105	90	117	84	104	73	62	33	43	16	15	31	22	48	28	23
5203	Central San Bernardino Valley 2	103	97	119	88	118	87	89	65	50	31	26	39	30	45	38	31
5204	East San Bernardino Valley 1	106	125	138	142	121	96	91	79	60	39	50	52	47	72	53	24
	District Maximum	132	131	148	142	136	96	98	79	90	87	66	74	82	74	66	69

* Less than 12 full months of data

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-5

Ozone - Number of Days Exceeding the Federal Standard ***

(0.12 ppm, 1-Hour Average)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	84	73	91	79	72	63	26	11	19	2*	11	9	5	11	2	4
069	East San Fernando Valley	40	55	47	16	18	20	6	2	7	0	3	2	1	4	2	2
072	South Coastal Los Angeles County	0	0	6	1	1	0	0	0*	0	1	0	0	0	0	0	0
074	West San Fernando Valley	41	53	25	32	7	8	11	0	7	0	0	2	9	14	2	2
075	Pomona/Walnut Valley 1	60	60	56	45	47	47	16	7	18	2	3	1	5	13	4	3
084	South Central Los Angeles County 1	3	1	4	0	0	0	1	0	0	0	0	0	0	0	0	0
085	South San Gabriel Valley	43	48	45	33	21	20	32	6	10	0	2	1	0	1	0	--
087	Central Los Angeles	32	23	23	8	14	5	24	0	5	1	1	0	0	1	0	0
088	West San Gabriel Valley	69	70	71	53	61	44	54	5	14	0	7	1	3	7	1	2
090	Santa Clarita Valley	62	65	71	44	66	26	68	13	16	0	1	9	32	35	13	11
091	Northwest Coastal Los Angeles County	8	9	12	7	2	1	13	0	1	0	0	0	0	1	0	0
094	Southwest Coastal Los Angeles County 1	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0*	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0*	0
591	East San Gabriel Valley 2	103	91	118	96	88	73	49	18	28	3	11	13	12	22	5	8
ORANGE COUNTY:																	
3176	Central Orange County 1	11	11	22	3	5	2	1	0	2	0*	1	0*	0	2	0	0
3177	North Orange County	35	28	31	13	9	4	5	1	5	0	1	0	0	1	0	0
3186	Saddleback Valley 1	11	10	9	7	5	1	2	2	2	0	1*	--	--	--	--	--
3195	North Coastal Orange County	3	5	3	1	0	0	1	0	0	0	0	0	0	0	0	0
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	--	2*	1	2	4	0	1
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	27	22	21*	20	13	9	12	4*	8	1	0	6	2	4	1	4
4141	Hemet/San Jacinty Valley	20	23	5	8	13	2	0*	--	--	--	--	--	--	--	--	--
4144	Metropolitan Riverside County	90	79	75	71	77	52	36	13*	32	3	3	7	12	18	8	3
4149	Perris Valley	62	71	83	73	59	36	31	6	8	0	15	19	4	7	2	1
4150	Banning/San Gorgonio Pass	43	31	19	8	25	15	11	2	0*	a)	--	--	--	--	--	--
4155	Norco/Corona	13	54	16	17	14	23	2*	--	--	--	--	--	--	--	--	--
4157	Coachella Valley 2**	10	13	8	3	0	3	0	0	2	1	0	0	0	0	0	0
4158	Lake Elsinore	36	45	24	27	27	23	17	4	22	5	1	12	6	7	2	3
4163	Temecula Valley	--	--	2	1	0*	0	0*	0*	--	--	--	--	--	--	--	--
4164	Banning Airport	--	--	--	--	--	--	--	--	25	5	4	16	13	27	7	10
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	64	67	81	55	79	67	35	12	30	4	10	14	5	15	3	8
5181	Central San Bernardino Mountains	103	90	103	88	107	65	62	29	57	30	17	26	22	34	9	18
5197	Central San Bernardino Valley 1	92	74	88	65	91	57	38	10	32	4	7	13	8	26	7	9
5203	Central San Bernardino Valley 2	78	79	85	65	96	61	63	32	39	14	7	18	6	19	6	9
5204	East San Bernardino Valley 1	81	91	103	95	98	69	65	35	43	12	11	21*	23	38	12	6
	District Maximum	103	91	118	96	107	73	68	35	57	30	17	26	32	38	13	18

* Less than 12 full months of data

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-6

Ozone - Number of Days of First/Second Stage Episodes ***

(Days Maximum 1-Hour Average Ozone ≥ 0.20 ppm/≥ 0.35 ppm)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
060	East San Gabriel Valley 1	13/0	12/0	16/0	11/0	2/0	3/0	1/0	0/0	1/0	0/0*	0/0	0/0	0/0	0/0	0/0	0/0
069	East San Fernando Valley	1/0	4/0	8/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
072	South Coastal Los Angeles County	0/0	0/0	0/0	0/0	0/0	0/0	0/0*	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
074	West San Fernando Valley	0/0	2/0	0/0	0/0	0/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
075	Pomona/Walnut Valley 1	12/0	8/0	10/0	6/0	3/0	2/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
084	South Central Los Angeles County	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
085	South San Gabriel Valley	0/0	6/0	5/0	0/0	2/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	--
087	Central Los Angeles	2/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
088	West San Gabriel Valley	7/0	10/0	10/0	5/0	2/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
090	Santa Clarita Valley	6/0	8/0	4/0	3/0	6/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
091	Northwest Coastal Los Angeles County	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
094	Southwest Coastal Los Angeles County 1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0*	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0/0*	0/0
591	East San Gabriel Valley 2	29/0	34/0	30/0	19/0	10/0	9/0	2/0	0/0	3/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
3176	Central Orange County 1	0/0	2/0	1/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0*	0/0	0/0*	0/0	0/0	0/0	0/0
3177	North Orange County	4/0	1/0	1/0	0/0	2/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
3186	Saddleback Valley 1	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0*	--	--	--	--	--
3195	North Coastal Orange County	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	--						
4137	Coachella Valley 1**	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0*	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
4141	Hemet/San Jacinty Valley	1/0	0/0	0/0	0/0	0/0	0/0	0/0*	--	--	--	--	--	--	--	--	--
4144	Metropolitan Riverside County	15/0	17/0	6/0	5/0	2/0	3/0	1/0	0/0*	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
4149	Perris Valley	0/0	5/0	1/0	3/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
4150	Banning/San Gorgonio Pass	4/0	1/0	0/0	0/0	1/0	0/0	0/0	0/0	0/0*	--	--	--	--	--	--	--
4155	Norco/Corona	0/0	7/0	1/0	0/0	0/0	0/0	0/0	--	--	--	--	--	--	--	--	--
4157	Coachella Valley 2**	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
4158	Lake Elsinore	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
4163	Temecula Valley	--	--	0/0	0/0	0/0*	0/0	0/0*	0/0*	--	--	--	--	--	--	--	--
5175	Northwest San Bernardino Valley	12/0	14/0	15/0	7/0	7/0	6/0	2/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
5181	Central San Bernardino Mountains	16/0	15/0	22/0	5/0	12/0	6/0	4/0	1/0	10/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
5197	Central San Bernardino Valley 1	20/0	16/0	19/0	5/0	9/0	2/0	1/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
5203	Central San Bernardino Valley 2	8/0	9/0	17/0	4/0	7/0	4/0	2/0	1/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
5204	East San Bernardino Valley 1	11/0	16/0	7/0	8/0	8/0	4/0	1/0	1/0	1/0	0/0	0/0	0/0*	0/0	0/0	0/0	0/0

* Less than 12 full months of data

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-7

Ozone - Annual Maximum 1-Hour, ppm***

	LOCATION	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
087	Central Los Angeles	.34	.21	.30	.31/	.29	.32	.40	.26	.29	.30	.22	.22	.21	.25	.20
060	East San Gabriel Valley 1	.38	.32	.40	.45	.41	.35	.36	.39	.31	.36	.31	.30	.30	.33	.23
069	East San Fernando Valley	.35	.31	.30	.39	.35	.27	.25	.31	.26	.30	.28	.23	.24	.20	.20
091	Northwest Coastal Los Angeles County	.28	.18/	.24/	.26	.21	.23	.28	.23	.27/	.27	.20	.28	.24	.25	.16
072	South Coastal Los Angeles County	.16	.15	.19	.21	.20	.23	.22	.30	.27	.23	.18	.17	.16	.16	.12
074	West San Fernando Valley	.27	.34	.27	.33	.38	.25	.22	.26	.26	.25	.22	.22	.25	.23	.19
075	Pomona/Walnut Valley 1	.36	.32	.41	.35	.37	.33	.31	.34	.31	.33	.27	.29	.29	.25	.24
094	Southwest Coastal Los Angeles County	--	--	--	--	--	--	--	--	--	--	.19	.20	.22	.19	.10
820	Southwest Coastal Los Angeles County	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
090	Santa Clarita Valley	.33	.33	.42	.44	.41	.33	.37/	.34	.30	.37	.26	.28	.29	.27	.26
088	West San Gabriel Valley	.34	.32	.32	.32	.36	.29	.26/	.29	.27	.24	.24	.21	.30	.25	.23
084	South Central Los Angeles County 1	.24	.24	.18	.29	.18	.21	.26	.23	.27	.21	.20	.24	.21	.14	.15
085	South San Gabriel Valley	.35	.32	.43	.39	.39	.35	.39	.33	.27	.31	.24	.28	.30	.26	.19
591	East San Gabriel Valley 2	--	--	--	--	.49	.39	.36	.38	.34	.39	.35	.33	.34	.34	.29
3176	Central Orange County 1	.30	.19	.29	.33	.28	.26	.26	.30	.25	.25	.20	.22	.27	.24	.18
3177	North Orange County 1	.30	.25	.35	.38	.31	.27	.32	.27	.32	.34	.25	.24	.29	.26	.21
3195	North Coastal Orange County	.16	.18	.22	.21/	.16	.20	.18	.25	.25	.21	.17	.16	.13	--	.15
3186	Saddleback Valley 1	.23	.20	.34	.32	.34	.33	.27	.29	.30	.28	.23	.20	.21	.23	.19
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4137	Coachella Valley 1**	.22	.21	.20	.24	.21	.19	.19	.19	.20	.24	.18	.17	.20	.19	.17
4157	Coachella Valley 2**	.16	.19	.17	.21	.11	.18	.17	.18	.19	.20	--	.16	--	.16	.16
4155	Norco/Corona	.33	.36	.40	.33/	.34	.37	.35	.35	.30	.35	.27	.24	.25	.23	.17
4141	Hemet/San Jacinto Valley	.19	.25	.27	--	--	--	--	--	.18*	.23	.18	.18	.18	.19	.22
4144	Metropolitan Riverside County 1	.36	.35	.39	.34	.37	.30	.31	.36	.32	.35	.25	.29	.28	.27	.29
4149	Perris Valley	.22	.28	.32	.25	.29	.24	.28	.26	.22	.29	.22	.20	.23	.21	.19
4150	San Gorgonio Pass	.28	.27	.30	.27	.26	.23	.24	.26	.25	.29	.22	.21	.26	.23	.22
4164	BanningAirport	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4163	Temecula Valley	.21	.17	.23	--	--	--	--	--	--	--	--	--	--	--	--
4158	Lake Elsinore	.20	.23	.30	--	--	--	--	--	--	--	--	--	--	.24	.19
5203	Central San Bernardino Valley 2	.32	.37	.36	.34	.36	.36/	.30	.32	.30	.27/	.30	.25	.28	.30	.29
5204	East San Bernardino Valley	.35	.33	.39	.34/	.32	.24	.29	.30	.29	.33/	.29	.24	.29	.27	.30
5175	Northwest San Bernardino Valley	--	--	--	--	--	--	--	.36	.32	.33	.29	.28	.35	.32	.29
5197	Central San Bernardino Valley 1	.38	.39	.42	.42	.42	.35/	.31	.32	.32	.34	.31	.29	.29	.32	.27
5181	Central San Bernardino Mountains 1	.23	.32	.33	.40	.31	.35	.32	.28	.34	.30	.26	.29	.29	.27	.33
	District Maximum	.38	.39	.43	.45	.49	.39	.40	.39	.34	.39	.35	.33	.35	.34	.33

* Less than 12 full months of data. / Station location change

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1955 to 1975 data

TABLE A-7 (continued)
Ozone - Annual Maximum 1-Hour, ppm***

LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
087 Central Los Angeles	.20	.19	.20	.16	.19	.17	.14	.12	.15	.13	.14	.12	0.12	0.15	0.11	0.12
060 East San Gabriel Valley 1	.23	.28	.27	.24	.25	.21	.20	.16	.20	.14	.17	.19	0.14	0.15	0.13	0.15
069 East San Fernando Valley	.20	.22	.22	.18	.17	.17	.14	.13	.18	.12	.15	.13	0.13	0.13	0.14	0.14
091 Northwest Coastal Los Angeles County	.16	.18	.17	.18	.16	.14	.14	.11	.13	.12	.10	.10	0.12	0.13	0.11	0.11
072 South Coastal Los Angeles County	.12	.11	.15	.14	.16	.11	.11	.10	.12	.13	.12	.09	0.08	0.10	0.09	0.09
074 West San Fernando Valley	.19	.22	.17	.19	.14	.15	.21	.12	.16	.10	.11	.14	0.15	0.18	0.13	0.14
075 Pomona/Walnut Valley 1	.24	.24	.26	.21	.24	.22	.19	.16	.18	.14	.15	.14	0.15	0.16	0.13	0.14
094 Southwest Coastal Los Angeles County	.10	.11	.15	.13	.11	.12	.13	.11	.09	.15	.10	.10	.09	.11	.07*	--
820 Southwest Coastal Los Angeles County	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.12*	.09
088 West San Gabriel Valley	.26	.23	.27	.22	.26	.21	.17	.14	.17	.12	.16	.16	0.17	0.19	0.16	0.17
090 Santa Clarita Valley	.23	.24	.22	.22	.26	.21	.17	.16	.18	.12	.13/	.18	0.14	0.15	0.13	0.15
084 South Central Los Angeles County 1	.15	.16	.17	.12	.12	.09	.10	.08	.09	.12	.09	.08	0.07	0.08	0.08	0.11
085 South San Gabriel Valley	.19	.26	.26	.19	.22	.18	.14	.13	.18	.12	.14	.13	0.11	0.13	0.10	0.08
591 East San Gabriel Valley 2	.29	.32	.30	.28	.30	.22	.21	.17	.22	.14	.17	.19	0.15	0.16	0.13	0.16
3176 Central Orange County 1	.18	.25	.22	.17	.21	.13	.13	.10	.11	.10*	.13	.11	0.10	0.14	0.12	0.10
3177 North Orange County 1	.21	.21	.21	.19	.25	.16	.15	.13	.18	.12	.14	.11	0.12	0.17	0.10	0.09
3195 North Coastal Orange County	.15	.17	.15	.13	.12	.11	.10	.10	.12	.10	.10	.10	0.09	0.11	0.10	0.09
3186 Saddleback Valley 1	.19	.24	.16	.16	.18	.15	.14	.13	.16	.10	.13	--	--	--	--	--
3812 Saddleback Valley 2	--	--	--	--	--	--	--	--	--	--	.15	.13	0.14	0.15	0.12	0.13
4137 Coachella Valley 1**	.17	.18	.15*	.17	.17	.16	.16	.16	.17	.13	.12	.14	0.14	0.14	0.13	0.14
4157 Coachella Valley 2 **	.16	.18	.14	.16	.12	.14	.12	.11	.13	.13	.11	.11	0.11	0.12	0.11	0.11
4155 Norco/Corona	.17	.22	.23	.16	.17	.19	.16	--	--	--	--	--	--	--	--	--
4141 Hemet/San Jacinto Valley	.22	.19	.15	.18	.16	.15	.12	--	--	--	--	--	--	--	--	--
4144 Metropolitan Riverside County	.29	.24	.26	.26	.25	.21	.20	.19	.20	.14	.14	.14	0.16	0.17	0.14	0.14
4149 Perris Valley	.19	.20	.21	.20	.18	.20	.18	.14	.15	.11	.16	.15	0.15	0.16	0.13	0.13
4150 San Gorgonio Pass	.22	.20	.16	.16	.20	.18	.19	.13	.12/	--	--	--	--	--	--	--
4164 Banning Airport	--	--	--	--	--	--	--	--	.17	.14	.14	.15	0.16	0.17	0.16	0.14
4163 Temecula Valley	--	.17*	.13	.13	.10*	.11	.10	.10*	--	--	--	--	--	--	--	--
4158 Lake Elsinore	.19	.20	.17	.19	.19	.19	.15	.16	.17	.14	.13	.15	0.14	0.15	0.13	0.15
5203 Central San Bernardino Valley 2	.29	.25	.28	.21	.25	.20	.24	.20	.21	.16	.15	.18	0.15	0.16	0.16	0.16
5204 East San Bernardino Valley	.30	.25	.27	.27	.23	.24	.22	.20	.22	.15	.15	.17*	0.16	0.17	0.16	0.15
5175 Northwest San Bernardino Valley	.29	.27	.28	.24	.25	.24	.22	.19	.21	.15	.18	.17	0.14	0.16	0.14	0.15
5197 Central San Bernardino Valley 1	.27	.29	.28	.24	.25	.22	.22	.17	.20	.14	.17	.17	0.16	0.18	0.15	0.15
5181 Central San Bernardino Mountains 1	.33	.27	.28	.24	.27	.26	.20	.21	.24	.17	.18	.17	0.16	0.16	0.16	0.20
District Maximum	.33	.32	.30	.28	.30	.26	.24	.21	.24	.17	.18	.19	0.17	0.19	0.16	0.20

* Less than 12 full months of data. / Station location change

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1955 to 1975 data

TABLE A-8

Particulate Matter (PM_{10})

Annual Arithmetic Mean, $\mu g/m^3$***

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	55	66	47	43	44	49	45	46	41	56	46	45	46	44	35	35
069	East San Fernando Valley	52	55	49	45	38	42	42	45	36	44	39	41	38	38*	38	34
072	South Coast Los Angeles County 1	44	40	39	37	40	39	35	41	32	39	38	37	36	33	33	30
077	South Coast Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	38	43
087	Central Los Angeles	53	57	48	47	45	43	41	43	37	45	40	44	39	35	33	30
090	Santa Clarita Valley	43	47	35	33	36	37	33	33	30	38	33	32	33	32	28	26
094	Southwest Coastal Los Angeles County 1	41	39	33	37	36	36	33	36	33	36	36	37	37	30	31*	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25	23
ORANGE COUNTY:																	
3176	Central Orange County 1	49	45	40	38	37	44	35	39	36	49	40	36	34	33	34	28
3186	Saddleback Valley 1	43	37	34	34	33	38	30	35	31	37	29	--	--	--	--	--
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	29	28	26	31	27	24	19
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	35	43	30	27	28	27	29	26	26	29	24	27	27	27	26	26
4144	Metropolitan Riverside County 1	78	76	63	72	66	69	61	65	56	72	60	63	59	57	56	52
4149	Perris Valley	59	49	45	50	45	47	40	45	38	50	41	41	45	44	41	39
4150	San Gorgonio Pass	35	38	34	33	35	30	34	38	28	--	--	--	--	--	--	--
4155	Norco/Corona	--	--	--	53	53	54	44	50	47	55	49	--	45	41	38	32
4157	Coachella Valley 2**	79	69	43	46	49	52	51	49	48	53	52	50	51	50	39	46
4163	Temecula Valley	--	38	31	27	22	--	--	--	--	--	--	--	--	--	--	--
4164	Banning Airport	--	--	--	--	--	--	--	--	27	35	29	35	28	29	29	27
SAN BERNARDINO COUNTY:																	
5171	Southwest San Bernardino Valley 1	72	68	79	58	50	54	51	51	47	55	--	--	--	--	--	--
5181	Central San Bernardino Mountains	37	39	33	31	26	20	24	24	25	27	24	--	37*	26*	26	26
5197	Central San Bernardino Valley 1	78	63	56	57	60	61	55	54	50	60	53	51	50	47*	48	50
5203	Central San Bernardino Valley 2	65	61	57	56	54	57	53	51	46	57	50	52	50	45	49	42
5204	East San Bernardino Valley	--	--	--	45	47	48	46	43	41	47	46	47	41	37	39	33
5817	Southwest San Bernardino Valley 2	--	--	--	--	--	--	--	--	--	66	50	52	45	43	43	41
	District Maximum	79	76	79	72	66	69	61	65	56	72	60	63	59	57	56	52

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1985 to 1989 data

TABLE A-9

Particulate Matter (PM_{10}) - Percent of Sampling Days
Exceeding State Standard (50 µg/m^3)
And Federal Standard (150 µg/m^3)***

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	50/0	68/0	39/0	32/0	40/0	40/2	41/0	40/0	28/0	58/0	42/0	38/0	40/0	35/0	15/0	22/0
069	East San Fernando Valley	47/2	50/0	31/3	36/0	18/0	25/0	25/0	30/0	15/0	35/0	23/0	23/0	12/0	14/0*	12/0	8/0
072	South Coast Los Angeles County 1	24/0	24/0	19/0	20/0	18/0	19/0	15/0	18/0	10/0	22/0	21/0	17/0	9/0	7/0	7/0	9/0
077	South Coast Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20/0	31/0
087	Central Los Angeles	52/2	54/2	36/0	43/0	33/0	23/0	18/0	25/0	17/0	33/0	25/0	33/0	15/0	10/0	8/0	7/0
090	Santa Clarita Valley	28/0	23/0	9/0	15/0	18/0	14/0	9/0	9/0	6/0	21/0	7/0	7/0	12/0	16/0	3/0	2/0
094	Southwest Coastal Los Angeles County 1	26/0	42/0	13/0	15/0	22/0	21/0	8/0	7/0	12/0	10/0	16/0	14/0	20/0	5/0	13/0*	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0/0*	0/0
ORANGE COUNTY:																	
3176	Central Orange County 1	34/2	24/0	20/0	21/0	18/0	23/2	10/0	18/0	20/0	39/0	13/0	20/0	8/0	10/0	12/0	5/0
3186	Saddleback Valley 1	29/0	15/0	8/0	12/0	12/0	18/0	7/0	7/0	10/0	10/0	3/0	--	--	--	--	--
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	3/0	3/0	5/0	8/0	4/0	0/0	0/0
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	15/0	25/2	7/2	2/0	3/0	4/0	3/0	2/0	5/0	5/0	0/0	2/0	5/0	7/0	3/0	3/0
4144	Metropolitan Riverside County 1	75/5	68/3	64/0	69/7	67/2	62/7	68/2	70/2	54/0	72/2	70/0	67/0	69/0	57/2	61/0	56/0
4149	Perris Valley	53/5	43/0	41/0	45/0	43/0	38/0	33/0	32/0	26/0	50/0	22/0	27/0	39/0	33/0	25/0	32/0
4150	San Gorgonio Pass	20/0	30/0	17/0	18/0	23/0	12/0	19/0	25/0	9/0	--	--	--	--	--	--	--
4155	Norco/Corona	--	--	--	51/2	58/0	47/3	33/0	42/2	40/0	55/0	48/0	33/0	34/0	26/0	19/0	9/0
4157	Coachella Valley 2**	70/7	63/5	31/0	41/0	38/0	44/2	50/0	43/0	40/0	54/0	50/0	45/0	45/0*	42/0	20/0*	34/0
4163	Temecula Valley	--	21/0	4/0	3/0	0/0	--	--	--	--	--	--	--	--	--	--	--
4164	Banning Airport	--	--	--	--	--	--	--	--	4/0	12/0	8/0	13/2	11/0	15/0	12/0	3/0
SAN BERNARDINO COUNTY:																	
5171	Southwest San Bernardino Valley 1	63/7	67/2	66/3	62/0	44/0	51/5	53/0	36/2	34/0	56/0	--	--	--	--	--	--
5181	Central San Bernardino Mountains	19/0	13/0	8/0	4/0	5/0	2/0	0/0	0/0	0/0	0/0	0/0	--	19/0	0/0*	2/0	0/0
5197	Central San Bernardino Valley 1	73/5	65/0	59/0	57/0	63/0	57/3	57/0	48/0	47/0	61/0	52/0	57/0	53/0	54/0*	48/0	48/0
5203	Central San Bernardino Valley 2	58/3	68/2	60/0	63/0	51/0	53/0	58/0	45/0	38/0	56/0	53/0	52/0	56/0	39/0	48/0	38/0
5204	East San Bernardino Valley	--	--	--	46/0	41/0	41/2	42/0	38/0	32/0	40/0	44/0	45/0	32/0	26/0	33/0	21/0
5817	Southwest San Bernardino Valley 2	--	--	--	--	--	--	--	--	--	67/2	45/0	42/2	41/0	29/0	29/0	32/0

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1985 to 1989 data

TABLE A-10

Particulate Matter (PM_{10})

Annual Maximum 24-Hour Average, $\mu g/m^3$***

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	127	137	107	101	127	157	100	116	87	103	94	106	91	119	83	76
069	East San Fernando Valley	161	133	222	93	114	135	110	92	75	82	74	86	71	81*	74	92
072	South Coast Los Angeles County 1	119	92	67	86	97	146	113	87	69	79	105	91	74	63	72	66
077	South Coast Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	83	131
087	Central Los Angeles	152	151	137	104	122	141	138	102	80	88	80	97	65	81	72	70
090	Santa Clarita Valley	93	81	84	75	66	87	91	67	60	75	64	62	61	72	54	55
094	Southwest Coastal Los Angeles County 1	127	79	67	91	81	136	107	79	66	69	74	75	121	58	52*	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	47*	44
ORANGE COUNTY:																	
3176	Central Orange County 1	158	146	88	92	106	172	101	91	81	122	126	93	69	96	74	65
3186	Saddleback Valley 1	88	94	83	115	91	122	79	86	70	111	60	--	--	--	--	--
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	56	98	60	80	64	47	41
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	83	197	175	58	55	68	130	63	72	104	44	53	75	108	79	66
4144	Metropolitan Riverside County 1	207	179	126	231	161	219	162	163	116	153	139	136	130	164	137	123
4149	Perris Valley	250	113	115	131	112	145	87	139	98	112	87	86	100	142	83	80
4150	San Gorgonio Pass	89	87	89	87	96	138	122	227	76	--	--	--	--	--	--	--
4155	Norco/Corona	--	--	--	164	139	177	94	158	93	136	129	109	78	116	76	79
4157	Coachella Valley 2**	520	340	117	125	97	199	117	144	114	119	114	149	139	124	83	106
4163	Temecula Valley	--	66	88	105	48	--	--	--	--	--	--	--	--	--	--	--
4164	Banning Airport	--	--	--	--	--	--	--	--	62	86	69	219	70	79	82	76
SAN BERNARDINO COUNTY:																	
5171	Southwest San Bernardino Valley 1	185	158	649	138	138	167	129	208	92	112	--	--	--	--	--	--
5181	Central San Bernardino Mountains	88	105	62	73	67	53	45	47	45	47	49	--	52*	47*	52	49
5197	Central San Bernardino Valley 1	475	127	105	143	133	178	130	122	101	116	108	106	102	101*	106	108
5203	Central San Bernardino Valley 2	235	163	136	139	147	148	136	108	114	134	108	106	94	98	118	72
5204	East San Bernardino Valley	--	--	--	109	138	172	128	103	97	92	109	102	83	92	88	61
5817	Southwest San Bernardino Valley 2	--	--	--	--	--	--	--	--	--	--	124	166	91	149	93	74
	District Maximum	520	340	649	231	161	219	162	227	116	153	139	219	139	164	137	131

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1985 to 1989 data

TABLE A-11

Fine Particulate Matter (PM2.5)
Annual Arithmetic Mean, µg/m^3

STN#	LOCATION	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:								
060	East San Gabriel Valley	25.6	20.1	21.8	20.8	19.2	18.4	17.0*
069	East San Fernando Valley	23.3	23.8*	24.9	24.0	20.9	19.2	17.9
072	South Coastal Los Angeles County 1	21.5	19.2*	21.4	19.5	18.0	17.6	16.0
074	West San Fernando Valley	17.5*	18.1	18.5	18.9	16.4	15.6	13.9
077	South Coastal Los Angeles County 2	--	--	--	--	--	16.6	14.7
084	South Central Los Angeles County	24.2	23.0	24.5	23.3	20.2	18.5	17.5
085	South San Gabriel Valley	25.7	24.1	26.1	23.9	20.6	19.9	17.0*
087	Central Los Angeles	23.1	22.0	22.9	21.8	21.3	19.6	18.1
088	West San Gabriel Valley	20.6*	19.3	20.9	20.3	18.6	16.6	15.1
ORANGE COUNTY:								
3176	Central Orange County	24.4	21.0*	22.4*	18.6	17.3	16.8	14.7
3812	Saddleback Valley	16.8*	14.7	15.8	15.5	13.1	12.1	10.7
RIVERSIDE COUNTY:								
4137	Coachella Valley 1**	--	9.6	10.8	10.0	9.0	9.0	8.4*
4144	Metropolitan Riverside County 1	30.9	28.2*	31.1	27.5	24.9	22.1	21.0
4146	Metropolitan Riverside County 2	26.9	25.5	28.3	27.1	22.6	20.8	18.0
4157	Coachella Valley 2**	12.6*	11.2	12.2	12.0	11.4	10.7	10.5
SAN BERNARDINO COUNTY:								
5197	Central San Bernardino Valley 1	25.9	24.5	24.8	24.3	21.8	20.0	18.9
5203	Central San Bernardino Valley 2	25.7	25.4*	26.2	25.7	22.2	22.0	17.4
5817	Southwest San Bernardino Valley	25.7	24.2	26.2	25.2	23.8	20.9	18.8
5818	East San Bernardino Mountains	10.3	10.6	10.9	11.3	10.5	9.5	12.1
	District Maximum	30.9	28.2	31.1	27.5	24.9	22.1	21.0

* Less than 12 full months of data.

** Salton Sea Air Basin

TABLE A-12

Fine Particulate Matter (PM2.5) - Percent of Sampling Days Exceeding Federal Standard (65 µg/m^3)

STN#	LOCATION	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:								
060	East San Gabriel Valley	2	1.5	1.3	0.3	1.0	0.4	0.3*
069	East San Fernando Valley	1	4.3*	3.4	0	1.1	0	0
072	South Coastal Los Angeles County 1	1	1.3*	0.3	0	0.9	0.3	0
074	West San Fernando Valley	1*	1.9	0.9	0	0	0	0
077	South Coastal Los Angeles County 2	--	--	--	--	--	0	0
084	South Central Los Angeles County	1	1.7	2.6	0	0	0	0
085	South San Gabriel Valley	2	3.4	3.2	0	0.9	0	0*
087	Central Los Angeles	2	3.3	1.2	0.3	1.5	0.6	0.6
088	West San Gabriel Valley	1*	0.9	0.9	0	0.9	0	0
ORANGE COUNTY:								
3176	Central Orange County	2	2.2*	0.4*	0.3	0.9	0	0
3812	Saddleback Valley	0*	0.8	0	0	0	0	0
RIVERSIDE COUNTY:								
4137	Coachella Valley 1**	--	0	0	0	0	0	0*
4144	Metropolitan Riverside County 1	6	3.6*	5.8	2.5	2.3	1.5	1.2
4146	Metropolitan Riverside County 2	2	4.5	4.7	1.7	0.9	1.8	0.9
4157	Coachella Valley 2**	0*	0	0	0	0	0	0
SAN BERNARDINO COUNTY:								
5197	Central San Bernardino Valley 1	3	1.8	3.5	0.9	0.9	1.0	0.9
5203	Central San Bernardino Valley 2	4	2.9*	4.5	2.6	0.8	3.8	0.9
5817	Southwest San Bernardino Valley	2	1.8	1.8	0	2.5	1.8	0.9
5818	East San Bernardino Mountains	0	0	0	0	0	0	0
	District Maximum	6	4.5	5.8	2.6	2.5	3.8	1.2

* Less than 12 full months of data.

** Salton Sea Air Basin

TABLE A-13

Fine Particulate Matter (PM2.5) - Percent of Sampling Days Exceeding the New Federal Standard (35 µg/m^3)***

STN#	LOCATION	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:								
060	East San Gabriel Valley	17	9	14	12	9	8	6*
069	East San Fernando Valley	18	14*	16	19	14	10	8
072	South Coastal Los Angeles County 1	9	11*	14	9	7	7	4
074	West San Fernando Valley	8*	8	7	10	7	4	4
077	South Coastal Los Angeles County 2	--	--	--	--	10	5	2
084	South Central Los Angeles County	18	14	16	18	9	7	7
085	South San Gabriel Valley	20	13	22	19	9	9	9*
087	Central Los Angeles	15	13	15	13	14	7	7
088	West San Gabriel Valley	9*	6	8	11	10	6	4
ORANGE COUNTY:								
3176	Central Orange County	17	14*	16*	9	7	6	4
3812	Saddleback Valley	4*	4	5	3	3	3	0
RIVERSIDE COUNTY:								
4137	Coachella Valley 1**	--	0	1	1	0	0	0*
4144	Metropolitan Riverside County 1	30	26*	33	25	21	15	11
4146	Metropolitan Riverside County 2	25	22	23	24	19	13	5
4157	Coachella Valley 2**	0*	0	0	0	0	0	2
SAN BERNARDINO COUNTY:								
5197	Central San Bernardino Valley 1	17	19	15	19	14	14	6
5203	Central San Bernardino Valley 2	21	21*	23	24	15	15	3
5817	Southwest San Bernardino Valley	22	14	21	18	17	13	7
5818	East San Bernardino Mountains	--	0	0	0	0	0	4
	District Maximum	30	22	33	25	21	15	11

* Less than 12 full months of data.

** Salton Sea Air Basin

***Effective December 17, 2006, U.S. EPA has strengthen the standard level from 65 µg/m^3 to 35 µg/m^3.

TABLE A-14

Fine Particulate Matter (PM2.5)
Annual Maximum 24-Hour Average, µg/m^3

STN#	LOCATION	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:								
060	East San Gabriel Valley	81.3	92.5	79.7	72.4	121.2	75.6	132.7*
069	East San Fernando Valley	79.5	84.4*	94.7	63.0	120.6	60.1	63.2
072	South Coastal Los Angeles County 1	66.9	81.5*	72.9	62.7	115.2	66.6	53.9
074	West San Fernando Valley	79.0*	67.5	71.1	48.8	47.5	56.2	39.6
077	South Coastal Los Angeles County 2	--	--	--	--	--	59.7	50.8
084	South Central Los Angeles County	67.8	82.1	73.1	64.0	54.8	55.8	54.6
085	South San Gabriel Valley	85.6	89.5	77.3	61.0	90.3	60.7	58.2*
087	Central Los Angeles	69.3	87.8	73.4	66.3	83.7	75.0	73.7
088	West San Gabriel Valley	73.0*	66.3	78.1	57.8	89.0	59.4	62.9
ORANGE COUNTY:								
3176	Central Orange County	68.7	113.9*	70.8*	68.6	115.5	58.9	54.7
3812	Saddleback Valley	56.6*	94.7	53.4	58.5	50.6	49.4	35.4
RIVERSIDE COUNTY:								
4137	Coachella Valley 1**	--	28.5	44.7	42.3	21.2	27.1	26.2*
4144	Metropolitan Riverside County 1	111.2	119.6*	98.0	77.6	104.3	91.7	98.7
4146	Metropolitan Riverside County 2	90.0	79.3	74.9	75.5	73.3	93.8	95.0
4157	Coachella Valley 2**	29.6*	28.6	33.5	26.8	26.8	28.5	44.4
SAN BERNARDINO COUNTY:								
5197	Central San Bernardino Valley 1	98.0	72.9	74.8	66.6	98.1	71.4	96.8
5203	Central San Bernardino Valley 2	121.5	89.8*	78.5	82.1	73.9	93.4	106.3
5817	Southwest San Bernardino Valley	85.8	73.4	71.2	64.8	88.9	86.1	87.8
5818	East San Bernardino Mountains	32.1	29.0	34.6	34.1	35.0	28.6	38.8
	District Maximum	121.5	119.6	98.0	82.1	121.2	93.8	132.7

* Less than 12 full months of data.

** Salton Sea Air Basin

TABLE A-15

Fine Particulate Matter (PM2.5)
24-Hour Average 98th Percentile Concentration, µg/m3

STN#	LOCATION	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:								
060	East San Gabriel Valley	64	62	61	51	56	54	53
069	East San Fernando Valley	50	83	69	55	60	49	51
072	South Coastal Los Angeles County 1	51	64	49	47	47	46	41
074	West San Fernando Valley	40	50	57	45	45	53	36
077	South Coastal Los Angeles County 2	--	--	--	--	--	42	38
084	South Central Los Angeles County	53	63	66	53	52	53	48
085	South San Gabriel Valley	60	71	67	58	50	52	54
087	Central Los Angeles	52	73	58	55	61	50	53
088	West San Gabriel Valley	60	54	55	49	48	47	43
ORANGE COUNTY:								
3176	Central Orange County	66	66	59	48	52	48	42
3812	Saddleback Valley	45	37	46	46	38	39	31
RIVERSIDE COUNTY:								
4137	Coachella Valley 1**	--	23	33	23	20	23	25
4144	Metropolitan Riverside County 1	79	77	74	66	77	60	58
4146	Metropolitan Riverside County 2	62	67	66	64	56	54	41
4157	Coachella Valley 2**	30	26	30	22	25	27	25
SAN BERNARDINO COUNTY:								
5197	Central San Bernardino Valley 1	66	65	70	57	54	63	48
5203	Central San Bernardino Valley 2	72	70	68	66	58	72	43
5817	Southwest San Bernardino Valley	86	65	65	57	67	60	50
5818	East San Bernardino Mountains	31	27	30	32	29	23	37
	District Maximum	86	83	74	66	77	72	58

* Less than 12 full months of data.

** Salton Sea Air Basin

TABLE A-16

Carbon Monoxide - Number of Days Maximum 8-Hour Average***
Exceeded the Federal Standard (≥ 9.5 ppm)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
069	East San Fernando Valley	10	8	3	0	5	4	0*	0	0	0	0	0	0	0	0	0
072	South Coastal Los Angeles County	0	0	0	0*	0	0	0*	0	0	0	0	0	0	0	0	0
074	West San Fernando Valley	12	9	1	0	4	2	0	1	0	0	1	0	0	0	0	0
075	Pomona/Walnut Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
084	South Central Los Angeles County 1	42	37	31	22	22	13	20	14	10	8	2	0	1	0	0	0
085	South San Gabriel Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0*
087	Central Los Angeles	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
088	West San Gabriel Valley	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
090	Santa Clarita Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
091	Northwest Coastal Los Angeles County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
094	Southwest Coastal Los Angeles County 1	10	7	7	3	5	0	5	1	0	0	0	0	0	0	0	0
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0
591	East San Gabriel Valley 2	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0
ORANGE COUNTY:																	
3176	Central Orange County	2	0	0	0	0	0	0	0	0	0*	0	0*	0	0	0	0
3177	North Orange County	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3186	Saddleback Valley 1	0	0	0	0	0	0	0	0	0	0	0*	--	--	--	--	--
3195	North Coastal Orange County	4	0	0	0	0	0	0	0	0	0	0*	0	0	0	0	0
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	--	0*	0	0	0	0	0
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	0	0	0*	0	0	0	0	0	0	0	0	0	0	0	0	0
4144	Metropolitan Riverside County 1	0	0	0	0	0	0	0	0*	0	0	0	0	0	0	0	0
4146	Metropolitan Riverside County 2	0	0	0	0	0	0	0	0	0	0*	0	0	0	0	0	0
4150	San Gorgonio Pass	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4155	Norco/Corona	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4158	Lake Elsinore	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	0	0*	--	--	--	--	--	--	--	--	0	0	0	0	0	0
5181	Central San Bernardino Mountains	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5197	Central San Bernardino Valley 1	0	0*	--	--	--	--	--	--	--	--	--	--	--	--	0*	--
5203	Central San Bernardino Valley 2	0	0	0	0	0	0	0	0*	0	0	0*	0	0	0	0	0
5204	East San Bernardino Valley 1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-17

Carbon Monoxide - Number of Days Maximum 8-Hour Average***
Exceeded the Federal Alert Level (> 15 ppm)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
069	East San Fernando Valley	0	0	0	0	0	0	0*	0	0	0	0	0	0	0	0	0
072	South Coastal Los Angeles County	0	0	0	0*	0	0	0*	0	0	0	0	0	0	0	0	0
074	West San Fernando Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
075	Pomona/Walnut Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
084	South Central Los Angeles County 1	4	3	3	0	0	0	1	1	0	0	0	0	0	0	0	0
085	South San Gabriel Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0*
087	Central Los Angeles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
088	West San Gabriel Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
090	Santa Clarita Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
091	Northwest Coastal Los Angeles County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
094	Southwest Coastal Los Angeles County 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0
591	East San Gabriel Valley 2	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0
ORANGE COUNTY:																	
3176	Central Orange County	0	0	0	0	0	0	0	0	0	0*	0	0*	0	0	0	0
3177	North Orange County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3186	Saddleback Valley 1	0	0	0	0	0	0	0	0	0	0	0*	--	--	--	--	--
3195	North Coastal Orange County	0	0	0	0	0	0	0	0	0	0	0*	0	0	0	0	0
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	--	0*	0	0	0	0	0
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	0	0	0*	0*	0	0	0	0	0	0	0	0	0	0	0	0
4144	Metropolitan Riverside County 1	0	0	0	0	0	0	0	0*	0	0	0	0	0	0	0	0
4146	Metropolitan Riverside County 2	0	0	0	0	0	0	0	0	0	0*	0	0	0	0	0	0
4150	San Gorgonio Pass	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4155	Norco/Corona	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4158	Lake Elsinore	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	0	0*	--	--	--	--	--	--	--	--	--	--	0	0	0	0
5181	Central San Bernardino Mountains	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5197	Central San Bernardino Valley 1	0	0*	--	--	--	--	--	--	--	--	--	--	--	--	0*	--
5203	Central San Bernardino Valley 2	0	0	0	0	0	0	0	0*	0	0	0*	0	0	0	0	0
5204	East San Bernardino Valley 1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	District Maximum	4	3	3	0	0	0	1	1	0	0	0	0	0	0	0	0

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-18

Carbon Monoxide

Annual Maximum 8-Hour Average, ppm***

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	5.1	5.9	4.9	4.0	4.5	6.3	4.0	4.3	3.9	3.9	4.9	2.9	2.4	2.6	2	1.7
069	East San Fernando Valley	13.0	10.6	10.5	8.4	10.7	12.0	9.3	7.4	7.5	9.0	6.1	4.9	4.6	4.7*	3.7	3.4
072	South Coastal Los Angeles County	9.1	9.3	8.1	6.9	8.9	6.6	6.9	6.7	6.6	5.4	5.8	4.7	4.6	4.7	3.4	3.5
074	West San Fernando Valley	14.9	13.5	9.9	9.0	10.8	10.3	8.5	9.8	9.3	7.6	9.8	6.0	4.8	4.1	3.5	3.5
075	Pomona/Walnut Valley	7.5	7.1	8.3	5.5	6.8	6.1	5.0	5.0	7.3	6.7	4.9	3.4	3.3	4.4	3.1	2.5
084	South Central Los Angeles County 1	16.8	17.4	18.75	14.63	18.10	13.86	17.3	17.0	13.4	11.0	10.0	7.7	10.1	7.3	6.7	5.9
085	South San Gabriel Valley	9.4	9.1	8.62	6.43	9.29	7.86	8.1	6.2	6.1	5.6	5.3	4.0	4	4	3.6	2.4*
087	Central Los Angeles	9.9	9.0	9.50	6.75	8.43	8.37	8.4	7.9	6.1	6.3	6.0	4.6	4	4.6	3.2	3.1
088	West San Gabriel Valley	10.0	9.5	7.25	6.25	8.50	9.12	7.1	6.0	6.3	6.6	7.4	5.0	4	3.8	3.4	2.8
090	Santa Clarita Valley	4.6	5.1	3.71	3.86	3.86	4.12	3.9	6.8	3.4	3.6	4.9	3.1	1.9	1.7	3.7	1.3
091	Northwest Coastal Los Angeles County	8.0	6.1	5.87	5.43	6.00	5.62	4.5	4.4	4.5	3.8	4.3	3.0	2.7	2.7	2.3	2.1
094	Southwest Coastal Los Angeles County 1	12.7	11.3	12.29	10.71	12.00	8.86	11.6	10.3	9.4	8.4	7.0	5.1	6.1	5	4.4*	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.0*	2.1
591	East San Gabriel Valley 2	--	--	--	--	--	--	--	--	--	--	3.1	2.5--	2.3	2.1	2	1.9
ORANGE COUNTY:																	
3176	Central Orange County	11.7	8.6	9.37	7.71	8.62	8.00	7.5	5.8	5.3	5.3	6.8	4.7	5.4	3.9	4.1	3.3
3177	North Orange County	9.6	8.0	9.14	6.00	8.75	6.62	6.9	6.0	6.1	5.3	6.1	4.7	4.4	4.1	4	3.1
3186	Saddleback Valley 1	5.6	4.8	7.25	4.13	5.37	4.00	4.0	3.6	3.1	2.5	2.3	--	--	--	--	--
3195	North Coastal Orange County	10.7	8.1	9.14	7.33	7.86	6.57	7.3	5.8	7.0	6.4	6.3	4.6	4.3	5.8	4.1	3.2
3812	Saddleback Valley 2	--	--	--	--	--	--	--	--	--	--	3.3	2.4	3.6	1.8	1.6	1.6
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	2.3	2.5	2.4	2.00	1.87	1.50	1.6	1.4	1.6	1.8	1.6	1.5	1.2	1.3*	1	0.8
4144	Metropolitan Riverside County 1	6.3	7.4	5.25	7.13	5.75	5.71	5.0	5.8	4.6	4.4	4.3	3.4	3	3.7	3	2.5
4146	Metropolitan Riverside County 2	7.3	6.9	6.12	6.25	7.25	6.50	5.4	5.0	4.6	4.1	4.3	4.5	3.9	3.4	2.1	2.4
4149	Perris Valley	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4155	Norco/Corona	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4157	Coachella Valley 2**	--	--	--	--	--	--	--	--	--	--	2.1	--	--	--	--	--
4158	Lake Elsinore	--	--	--	--	--	--	--	--	--	--	2.0	2.0	2	1.3*	0.9	1
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	6.6	4.6	--	--	--	--	--	--	--	--	2.6	1.8	1.6	2.9	2.1	1.8
5181	Central San Bernardino Mountains	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5197	Central San Bernardino Valley 1	4.9	4.4	--	--	--	--	--	--	--	--	--	--	--	--	2.1*	2.1
5203	Central San Bernardino Valley 2	6.0	7.0	5.9	6.0	6.5	6.3	4.6	6.0	4.6	4.0	4.3	3.3	3.3	4.6	3.3	2.4
5204	East San Bernardino Valley 1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	District Maximum	16.8	17.4	18.8	14.6	18.1	13.9	17.3	17.0	13.5	11.7	10.0	7.7	10.1	7.3	6.7	5.9

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-19

Nitrogen Dioxide - Annual Average of All Hours, pphm***

(To Be Compared to Federal Standard of 5.34 pphm, Annual Average of All Hours)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	4.10	4.50	4.03	4.00	4.30	4.64	4.15	3.38	3.64	3.90	3.66	3.31	3.36	2.96	2.04	2.51
069	East San Fernando Valley	4.79	4.68	5.01	4.40	4.97	4.54	4.61	4.24	4.16	4.56	4.15	4.19	4.02	3.56*	3.32	2.94
072	South Coastal Los Angeles County	3.93	4.11	3.89	3.57	3.46	3.67	3.42	3.33	3.39	3.42	3.13	3.08	2.98	2.88*	2.80	2.41
074	West San Fernando Valley	3.40	3.99	3.17	3.06	3.39	3.17	3.07	2.60	2.66	2.87	2.85	2.66	2.48	2.6*	2.14	2.02
075	Pomona/Walnut Valley 1	5.55	5.50	5.07	4.99	4.80	4.56	4.26	4.33	4.33	5.03	4.35	3.71	3.65	3.52	3.14	3.12
084	South Central Los Angeles County 1	4.08	4.37	4.55	4.09	4.99	4.63	4.12	4.28	3.93	4.28	3.86	3.69	3.57	3.12	3.01	--
085	South San Gabriel Valley	4.99	4.69	4.43	4.28	4.49	4.56	3.93	3.63	3.69	3.91	3.66	3.52	3.44	3.53	3.05	3.12
087	Central Los Angeles	4.67	4.93	4.04	3.32	4.76	4.50	4.36	4.30	3.98	3.91	4.04	3.78	3.27	3.38	3.28	3.08*
088	West San Gabriel Valley	4.74	5.02	4.23	3.90	4.28	3.75	3.78	3.41	3.51	3.79	2.96	3.45	3.35	3.22	2.70	2.78
090	Santa Clarita Valley	3.16	3.24	2.76	2.89	3.27	3.05	--	--	--	2.84	2.46	2.39	2.00	2.21	2.04	2.41
091	Northwest Coastal Los Angeles County	3.24	2.78	2.84	2.87	2.96	2.78	2.89	2.85	2.71	2.91	2.73	2.51	2.49	2.31	1.98	1.90
094	Southwest Coastal Los Angeles County 1	3.39	2.98	3.20	3.00	3.22	3.05	2.85	2.80	2.95	2.95	2.75	2.50	2.44*	2.38	3.10*	1.78
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.36*	1.34
591	East San Gabriel Valley 2	3.77	4.30	3.53	3.39	3.62	3.80	3.28	3.00	2.76	3.28	2.90	2.74	2.72	2.71	2.40	2.24
ORANGE COUNTY:																	
3176	Central Orange County	4.69	4.48	3.94	3.54	3.80	3.71	3.19	3.32	3.36	3.27	3.00	2.93*	2.44	2.40	1.99	2.11
3177	North Orange County	4.47	4.26	3.79	3.87	4.14	3.91	3.54	3.29	3.44	3.51	3.04	2.75	2.56	2.84	2.52	2.49
3195	North Coastal Orange County	2.72	2.60	2.49	2.20	2.44	2.39	2.06	1.99	2.00	2.09	2.05	1.82	1.87	1.99	1.51	1.31
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	2.06	2.08	2.10	1.95	2.19	2.23	2.10	1.58	1.70	1.95	1.78	1.75	1.72	1.73*	1.30	1.20
4144	Metropolitan Riverside County	3.36	3.51	3.04	2.98	3.20	3.06	2.94	2.62	2.25	2.25	2.36	2.47	2.37	2.17	1.72	2.22
4149	Perris Valley	2.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4157	Coachella Valley 2**	--	--	--	--	--	--	--	--	--	--	0.99	--	--	--	--	--
4158	Lake Elsinore	--	--	--	--	2.12	2.08	1.82	1.65	1.74	2.00	1.75	1.85	1.73	1.82*	1.51	1.42
4164	Banning Airport	--	--	--	--	--	--	--	--	2.15	2.43	2.37	2.11	1.99	1.93*	1.65	1.48
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	4.11	4.28	3.96	4.21	4.15	4.64	3.87	3.41	3.59	3.98	3.80	3.84	3.69	3.49	3.05	3.13
5197	Central San Bernardino Valley 1	3.43	3.77	3.44	3.72	4.03	4.24	3.86	3.65	3.62	3.88	3.64	3.58	3.34*	3.07	2.73	3.10
5203	Central San Bernardino Valley 2	3.93	3.55	3.56	3.76	4.11	4.04	3.84	3.53	3.39	3.58	3.25	3.03	2.96	2.70	2.61	2.59
	District Maximum	5.55	5.50	5.07	4.99	4.99	4.64	4.61	4.33	4.33	5.03	4.35	4.19	4.02	3.56	3.32	3.13

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-20

Nitrogen Dioxide - Number of Days 1-Hour Average
Exceeded the State Standard (> .25 ppm)***

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
069	East San Fernando Valley	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
072	South Coastal Los Angeles County	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
074	West San Fernando Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
075	Pomona/Walnut Valley 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
084	South Central Los Angeles County 1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
085	South San Gabriel Valley	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
087	Central Los Angeles	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
088	West San Gabriel Valley	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
090	Santa Clarita Valley	0	0	0	0	0	0	--	--	--	0	0	0	0	0	0	0
091	Northwest Coastal Los Angeles County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
094	Southwest Coastal Los Angeles County 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0
591	East San Gabriel Valley 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE COUNTY:																	
3176	Central Orange County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3177	North Orange County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3195	North Coastal Orange County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3812	Saddleback Valley																
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4144	Metropolitan Riverside County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4149	Perris Valley	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4157	Coachella Valley 2**	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--
4158	Lake Elsinore	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0
4164	Banning Airport	--	--	--	--	--	--	--	--	1	1	0	0	0	0	0	0
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5197	Central San Bernardino Valley 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5203	Central San Bernardino Valley 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-21

Nitrogen Dioxide

Annual Maximum 1-Hour, ppm***

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	0.21	0.25	0.15	0.17	0.19	0.22	0.15	0.16	0.14	0.16	0.15	0.12	0.12	0.12	0.1	0.09
069	East San Fernando Valley	0.23	0.29	0.19	0.17	0.18	0.18	0.2	0.2	0.14	0.18	0.17	0.25	0.26	0.14	0.12	0.09
072	South Coastal Los Angeles County	0.27	0.28	0.18	0.2	0.2	0.21	0.17	0.2	0.16	0.15	0.14	0.13	0.13	0.14	0.12	0.14
074	West San Fernando Valley	0.19	0.17	0.17	0.15	0.17	0.14	0.16	0.2	0.14	0.12	0.11	0.09	0.09	0.13	0.08	0.09
075	Pomona/Walnut Valley 1	0.21	0.22	0.18	0.2	0.17	0.18	0.18	0.15	0.15	0.16	0.14	0.13	0.11	0.12	0.11	0.08
084	South Central Los Angeles County 1	0.26	0.26	0.25	0.23	0.2	0.21	0.25	0.2	0.16	0.18	0.14	0.15	0.14	0.13	0.1	0.11
085	South San Gabriel Valley	0.27	0.25	0.27	0.26	0.24	0.23	0.17	0.15	0.14	0.16	0.14	0.14	0.12	0.14	0.12	0.09
087	Central Los Angeles	0.28	0.38	0.3	0.21	0.22	0.24	0.25	0.2	0.17	0.21	0.16	0.14	0.14	0.16	0.16	0.13
088	West San Gabriel Valley	0.23	0.32	0.22	0.18	0.18	0.22	0.19	0.17	0.16	0.16	0.17	0.15	0.15	0.14	0.12	0.10
090	Santa Clarita Valley	0.15	0.17	0.11	0.13	0.12	0.16	--	--	--	0.10	0.10	0.10	0.10	0.12	0.09	0.09
091	Northwest Coastal Los Angeles County	0.2	0.25	0.17	0.17	0.16	0.2	0.18	0.14	0.13	0.13	0.16	0.11	0.11	0.12	0.09	0.08
094	Southwest Coastal Los Angeles County 1	0.23	0.21	0.19	0.16	0.22	0.18	0.15	0.17	0.15	0.13	0.13	0.11	0.10	0.12	0.08	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.09*	0.09
591	East San Gabriel Valley 2	0.19	0.23	0.16	0.16	0.19	0.2	0.14	0.13	0.13	0.14	0.13	0.12	0.10	0.12	0.12	0.09
ORANGE COUNTY:																	
3176	Central Orange County	0.21	0.2	0.21	0.2	0.19	0.18	0.15	0.1	0.13	0.12	0.13	0.12	0.10	0.13	0.12	0.09
3177	North Orange County	0.22	0.2	0.17	0.18	0.23	0.2	.16.	0.15	0.13	0.16	0.12	0.13	0.12	0.16	0.12	0.09
3195	North Coastal Orange County	0.22	0.16	0.15	0.14	0.16	0.18	0.14	0.12	0.12	0.12	0.11	0.08	0.11	0.11	0.10	0.09
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	0.09	0.09	0.09	0.15	0.08	0.09	0.08	0.07	0.07	0.07	0.07	0.08	0.10	0.06	0.07	0.10
4144	Metropolitan Riverside County	0.16	0.16	0.23	0.14	0.18	0.15	0.11	0.12	0.1	0.13	0.1	0.15	0.10	0.09	0.09	0.08
4149	Perris Valley	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4157	Coachella Valley 2**	--	--	--	--	--	--	--	--	--	--	0.06	--	--	--	--	--
4158	Lake Elsinore	--	--	--	--	0.11	0.21	0.1	0.11	0.09	0.11	0.08	0.09	0.07	0.08	0.06	0.07
4164	Banning Airport	--	--	--	--	--	--	--	--	0.26	0.31	0.21	0.24	0.15	0.09	0.08	0.07
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	0.19	0.21	0.14	0.16	0.17	0.2	0.15	0.15	0.14	0.13	0.15	0.13	0.12	0.11	0.11	0.10
5197	Central San Bernardino Valley 1	0.2	0.19	0.14	0.16	0.18	0.17	0.17	0.14	0.15	0.15	0.12	0.13	0.12*	0.12	0.06	0.10
5203	Central San Bernardino Valley 2	0.2	0.16	0.13	0.15	0.16	0.16	0.15	0.14	0.11	0.14	0.1	0.11	0.11	0.1	0.12	0.0.08
	District Maximum	0.28	0.38	0.3	0.26	0.22	0.24	0.25	0.2	0.26	0.31	0.21	0.25	0.26	0.16	0.16	0.14

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-22

Sulfur Dioxide - Annual Average, pphm***

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
060	East San Gabriel Valley 1	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
069	East San Fernando Valley	0.18	0.09	0.10	0.12	0.07	0.01	0.04	0.03	0.02	0.01	0.01	0.07	0.05	0.14*	0.26	0.25
072	South Coastal Los Angeles County	0.31	0.43	0.37	0.36	0.31	0.23	0.25	0.24	0.18	0.27	0.15	0.22	0.12	0.23	0.50	0.18
074	West San Fernando Valley	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
084	South Central Los Angeles County 1	0.33	0.30	0.31	0.23	0.26	0.30	--	--	--	--	--	--	--	--	--	--
085	South San Gabriel Valley	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
087	Central Los Angeles	0.17	0.17	0.15	0.03	0.07	0.10	0.15	0.07	0.08	0.23	0.09	0.28	0.21	0.21*	0.24	0.18
088	West San Gabriel Valley	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
090	Santa Clarita Valley	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
091	Northwest Coastal Los Angeles County	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
094	Southwest Coastal Los Angeles County 1	0.35	0.40	0.57	0.31	0.22	0.27	0.25	0.14	0.39	0.40	0.17	0.41	0.08	0.06	0.08*	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.28*	0.56
ORANGE COUNTY:																	
3176	Central Orange County 1	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3177	North Orange County	0.11	0.12	0.06	0.06	0.09	0.09	--	--	--	--	--	--	--	--	--	--
3190	Central Orange County 2	0.19	0.11	0.11	0.08	--	--	--	--	--	--	--	--	--	--	--	--
3195	North Coastal Orange County	0.07	0.07	0.06	0.05	0.07	0.07	0.01	0.03	0.04	0.07	0.05	0.15	0.12	0.10	0.16	0.16
RIVERSIDE COUNTY:																	
4144	Metropolitan Riverside County	0.03	0.02	0.02	0.03	0.02	0.01	0.01	0.03	0.11	0.14	0.08	0.09	0.00	0.21	0.34	0.34
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5197	Central San Bernardino Valley 1	0.01	0.05	0.12	0.00	0.02	0.06	0.01	0.00	0.07	0.18	0.18	0.21	0.22*	0.08	0.10	0.21
5203	Central San Bernardino Valley 2	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	District Maximum	0.43	0.43	0.57	0.36	0.31	0.30	0.25	0.24	0.39	0.40	0.18	0.41	0.22	0.23	0.50	0.56

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-23

Sulfur Dioxide

Annual Maximum 1-Hour Average, ppm***

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
60	East San Gabriel Valley	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
69	East San Fernando Valley	0.02	0.01	0.03	0.02	0.03	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01*	0.02	0.01
72	South Coastal Los Angeles County	0.05	0.14	0.11	0.05	0.04	0.14	0.04	0.04	0.08	0.05	0.05	0.05	0.03	0.03	0.04	0.04
74	West San Fernando Valley	0.02	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--
84	South Central Los Angeles County	0.04	0.05	0.06	0.03	0.02	0.03	--	--	--	--	--	--	--	--	--	--
85	South San Gabriel Valley	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
87	Central Los Angeles	0.02	0.02	0.05	0.01	0.02	0.01	0.01	0.02	0.14	0.05	0.08	0.03	0.02	0.05*	0.08	0.07
88	West San Gabriel Valley	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
90	Santa Clarita Valley	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
91	Northwest Coastal Los Angeles County	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
94	Southwest Coastal Los Angeles County 1	0.31	0.12	0.15	0.07	0.04	0.06	0.06	0.1	0.03	0.09	0.17	0.04	0.07	0.03	0.03*	--
820	Southwest Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02*	0.04
ORANGE COUNTY:																	
3176	Central Orange County 1	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3177	North Orange County	0.03	0.04	0.02	0.02	0.02	0.02	--	--	--	--	--	--	--	--	--	--
3190	Central Orange County 2	0.03	0.03	0.1	0.02	--	--	--	--	--	--	--	--	--	--	--	--
3195	North Coastal Orange County	0.02	0.04	0.02	0.01	0.02	0.02	0.01	0.03	0.02	0.02	0.02	0.01	0.03	0.02	0.03	0.01
RIVERSIDE COUNTY:																	
4144	Metropolitan Riverside County	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.04	0.03	0.03	0.11	0.02	0.02	0.02	0.02	0.02
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5197	Central San Bernardino Valley 1	0.01	0.05	0.02	0.01	0.03	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.03*	0.01	0.01	0.01
5203	Central San Bernardino Valley 2	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	District Maximum	0.31	0.14	0.15	0.07	0.04	0.14	0.06	0.1	0.14	0.09	0.17	0.05	0.07	0.05	0.08	0.07

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-24

Sulfate - Percent of Sampling Days Exceeding the State Standard***

(≥ 25 µg/m^3, 24-hour Average)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
60	East San Gabriel Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	East San Fernando Valley	2	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--
72	South Coastal Los Angeles County	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
84	South Central Los Angeles County	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	South San Gabriel Valley	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0
87	Central Los Angeles	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	West San Gabriel Valley	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	Northwest Coastal Los Angeles County	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
94	Southwest Coastal Los Angeles County	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	--
ORANGE COUNTY:																	
3176	Central Orange County 1	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--
3186	Saddleback Valley	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3190	Central Orange County 2	0	0	0	0	--	--	--	--	--	--	--	--	--	--	--	--
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4144	Metropolitan Riverside County 1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
4146	Metropolitan Riverside County 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4149	Perris Valley	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4150	San Gorgonio Pass	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4157	Coachella Valley 2**	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY:																	
5171	Southwest San Bernardino Valley	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5175	Northwest San Bernardino Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5181	Central San Bernardino Mountains	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5197	Central San Bernardino Valley 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5203	Central San Bernardino Valley 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-25

Sulfate - Maximum 24-Hour Averages***

(To Be Compared to State Standard of 25 µg/m^3, 24-Hour Average)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
60	East San Gabriel Valley	16.0	19.2	16.8	19.1	17.5	12.9	17.1	12.7	10.2	17.8	17.2	14.1	11.3	11.7	10.6	10.2
69	East San Fernando Valley	25.9	18.6	12.9	20.1	18.3	13.7	--	--	--	--	--	--	--	--	--	--
72	South Coastal Los Angeles County	22.6	19.9	22.6	15.6	17.1	16.9	19.9	11.4	14.5	13.7	26.7	15.9	17.8	17.8	15.9	16.8
84	South Central Los Angeles County	28.1	22.4	18.7	13.7	23.1	18.8	16.0	11.4	12.0	15.6	11.4	15.4	15.3	14.9	14.7	17.3
85	South San Gabriel Valley	21.1	21.6	17.0	15.5	26.2	16.3	13.7	13.1	12.0	25.6	13.1	14.5	11.2	14.4	12.4	9.9
87	Central Los Angeles	25.3	23.1	19.4	17.6	21.7	15.5	12.8	14.3	10.6	17.9	16.4	15.9	15.2	14.6	12.7	14.2
88	West San Gabriel Valley	28.4	20.1	11.5	18.8	14.5	13.2	12.0	11.6	9.2	16.4	13.9	13.4	10.5	12.7	11.2	11.2
91	Northwest Coastal Los Angeles County	24.8	20.9	12.3	18.1	26.8	13.3	12.2	14.0	11.2	13.9	14.1	15.6	14.6	14.3	11.4	11.7
94	Southwest Coastal Los Angeles County	24.8	24.7	17.6	20.5	26.7	20.4	18.4	14.4	13.5	18.8	16.2	20.6	15.6	16.4	13.1	--
ORANGE COUNTY:																	
3176	Central Orange County 1	18.3	20.6	16.0	15.3	14.5	12.8	--	--	--	--	--	--	--	--	--	--
3186	Saddleback Valley	13.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3190	Central Orange County 2	16.8	16.9	16.0	14.7	--	--	--	--	--	--	--	--	--	--	--	--
RIVERSIDE COUNTY:																	
4137	Coachella Valley 1**	5.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4144	Metropolitan Riverside County 1	19.9	14.8	12.3	13.7	20.4	26.3	14.9	13.1	10.1	10.7	11.0	10.7	11.7	10.1	9.8	10.3
4146	Metropolitan Riverside County 2	19.3	12.8	12.1	15.1	15.7	22.9	17.0	10.4	12.8	10.6	10.2	9.2	10.5	10	9.1	10.3
4149	Perris Valley	12.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4150	San Gorgonio Pass	8.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4157	Coachella Valley 2**	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY:																	
5171	Southwest San Bernardino Valley	19.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5175	Northwest San Bernardino Valley	18.7	19.0	13.2	17.1	15.8	12.5	13.6	9.7	10.5	11.7	11.5	10.7	11.5	11.8	9.2	8.4
5181	Central San Bernardino Mountains	6.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5197	Central San Bernardino Valley 1	18.3	20.2	13.4	16.7	15.5	13.4	13.6	10.2	10.1	12.4	10.7	10.7	13.5	11.9	10.8	10.4
5203	Central San Bernardino Valley 2	17.3	18.3	12.9	17.2	14.9	12.5	11.2	9.1	11.5	10.9	12.4	12.4	10.8	12.1	9.6	10.9
	District Maximum	28.4	24.7	22.6	20.5	26.8	26.3	19.9	14.4	14.5	25.6	26.7	20.6	17.8	17.8	15.9	17.3

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-26

Lead - Highest Calendar Quarter Mean, µg/m³***

(To Be Compared to Federal Standard of 1.5 µg/m³, Calendar Quarter Average)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
69	East San Fernando Valley	0.07	0.07	0.09	0.05	0.05	0.04	--	--	--	--	--	--	--	--	--	--
72	South Coastal Los Angeles County	0.07	0.07	0.05	0.05	0.04	0.04	0.08	0.03	0.04	0.05	0.04	0.04	0.02	0.05	0.01	0.01
84	South Central Los Angeles County	0.11	0.10	0.08	0.06	0.07	0.06	0.05	0.07	0.04	0.09	0.06	0.12	0.04	0.04	0.03	0.02
85	South San Gabriel Valley	0.11	0.14	0.10	0.11	0.08	0.06	0.06	0.06	0.05	0.09	0.06	0.05	0.05	0.04	0.02	0.03
87	Central Los Angeles	0.09	0.14	0.11	0.07	0.07	0.06	0.06	0.07	0.04	0.07	0.05	0.05	0.03	0.15	0.03	0.02
94	Southwest Coastal Los Angeles County	0.06	0.06	0.05	0.04	0.04	0.04	0.03	0.05	0.04	0.04	0.05	0.04	0.02	0.10	0.01	--
ORANGE COUNTY:																	
3176	Central Orange County	0.06	0.06	0.03	0.04	0.03	0.04	--	--	--	--	--	--	--	--	--	--
RIVERSIDE COUNTY:																	
4144	Metropolitan Riverside County 1	0.05	0.05	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.03	0.02	0.02	0.01	0.02
4146	Metropolitan Riverside County 2	0.05	0.06	0.03	0.04	0.03	0.03	0.03	0.04	0.05	0.04	0.03	0.03	0.02	0.01	0.01	0.01
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	0.05	0.07	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.04	0.02	0.02	0.01	0.02
5203	Central San Bernardino Valley	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.05	0.05	0.04	0.02	0.08	0.01	0.01
	District Maximum	0.11	0.14	0.11	0.11	0.08	0.06	0.08	0.07	0.05	0.09	0.06	0.12	0.05	0.15	0.03	0.03

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data

TABLE A-27

Lead - Highest Monthly Averages, µg/m^3***

(To Be Compared to State Standard of 1.5 µg/m^3, Monthly Average)

STN#	LOCATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
LOS ANGELES COUNTY:																	
69	East San Fernando Valley	0.08	0.10	0.16	0.05	0.06	0.05	--	--	--	--	--	--	--	--	--	--
72	South Coastal Los Angeles County	0.09	0.08	0.07	0.06	0.06	0.05	0.08	0.05	0.07	0.06	0.05	0.05	0.03	0.10	0.02	0.01
84	South Central Los Angeles County	0.14	0.17	0.11	0.08	0.09	0.07	0.09	0.07	0.04	0.17	0.09	0.23	0.04	0.04	0.03	0.03
85	South San Gabriel Valley	0.13	0.19	0.15	0.15	0.10	0.07	0.09	0.08	0.07	0.21	0.09	0.07	0.06	0.05	0.03	0.03
87	Central Los Angeles	0.09	0.21	0.16	0.10	0.11	0.07	0.08	0.07	0.06	0.13	0.06	0.06	0.05	0.15	0.03	0.02
94	Southwest Coastal Los Angeles County	0.08	0.08	0.05	0.05	0.05	0.04	0.04	0.06	0.06	0.05	0.08	0.04	0.02	0.17	0.01	--
ORANGE COUNTY:																	
3176	Central Orange County	0.10	0.08	0.05	0.07	0.06	0.04	--	--	--	--	--	--	--	--	--	--
RIVERSIDE COUNTY:																	
4144	Metropolitan Riverside County 1	0.08	0.06	0.03	0.05	0.06	0.04	0.088	0.07	0.08	0.06	0.06	0.04	0.03	0.02	0.02	0.02
4146	Metropolitan Riverside County 2	0.08	0.08	0.03	0.04	0.04	0.05	0.05	0.07	0.10	0.05	0.04	0.03	0.02	0.02	0.01	0.01
SAN BERNARDINO COUNTY:																	
5175	Northwest San Bernardino Valley	0.07	0.08	0.04	0.05	0.05	0.06	0.04	0.04	0.05	0.07	0.07	0.05	0.02	0.02	0.02	0.02
5203	Central San Bernardino Valley	0.07	0.06	0.05	0.05	0.04	0.05	0.06	0.04	0.05	0.07	0.06	0.05	0.03	0.14	0.02	0.01
	District Maximum	0.14	0.21	0.16	0.15	0.11	0.07	0.09	0.08	0.10	0.21	0.09	0.23	0.06	0.17	0.03	0.03

* Less than 12 full months of data.

** Salton Sea Air Basin

*** Refer to 2003 AQMP for 1976 to 1989 data