



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

DRAFT

**SOUTH COAST AIR QUALITY MANGEMENT DISTRICT
ANNUAL AIR QUALITY MONITORING
NETWORK PLAN**

JUNE 2007

Prepared by

David Sawyer

Principal Air Quality Instrument Specialist

Philip Fine

Atmospheric Measurements Manager

Table of Contents

| | <u>Page</u> |
|--|-------------|
| Introduction | 1 |
| Public Comments | 1 |
| Network Design | 1 |
| Special Programs | 5 |
| Recent or Proposed Modifications to Network | 6 |
| Minimum Monitoring Requirements | 6 |
| Appendix A: Network Depiction Maps | A-1 |
| • Ozone Monitoring Locations | A-2 |
| • PM10 Monitoring Locations | A-3 |
| • Nitrogen Dioxide Monitoring Locations | A-4 |
| • Carbon Monoxide Monitoring Locations | A-5 |
| • Sulfur Dioxide Monitoring Locations | A-6 |
| • Source and Ambient Lead Monitoring Locations | A-7 |
| • PAMS Monitoring Locations | A-8 |
| • PM2.5 Monitoring Locations | A-9 |
| Appendix B: Detailed Site Information | B-1 |

Introduction

An annual review of the Air Quality Monitoring Network is required by Federal Regulations as a means to identify needs for additions, relocations, or terminations of monitoring sites or instrumentation. This report describes the network of ambient air quality monitors in the jurisdiction of and operated by the South Coast Air Quality Management District (SCAQMD). It includes a review of actions taken during the 2006-2007 fiscal year, and plans for action in the year ahead. This draft plan addresses the requirements for an annual network plan as listed in Title 40, Part 58, Section 10 of the Code of Federal Regulations (40 CFR 58.10). The regulations require that the report be submitted to the U.S. Environmental Protection Agency (EPA) by July 1 of each year.

The SCAQMD staff, along with the California Air Resources Board (CARB), conducted an extensive review of the air monitoring sites in the South Coast Air Basin (Basin) in late 1980. National (NAMS) or State and Local (SLAMS) designations, monitoring objectives, and spatial scales of representativeness were assigned to the criteria pollutants monitored by site. Since that time, EPA Region IX staff and CARB staff visited all sites to confirm compliance with applicable siting criteria and related requirements. The most recent site visits occurred in 2000 to evaluate the PM_{2.5} monitoring network. Each year, SCAQMD staff conducts an annual review of its air monitoring network, and submits it to U.S. EPA. The review process focuses on current and future network air monitoring strategies, and all network changes are made in consultation with U.S. EPA and CARB. When re-locations are required, site reports are updated in U.S. EPA's Air Quality System (AQS) to document compliance with established siting criteria for the new locations.

Public Comments

Pursuant to Federal regulations, this draft plan is to be made available for public inspection and comments for at least 30 days prior to submission to U.S. EPA. Hard copies of this document were made available on June 1, 2007 at the SCAQMD Public Information Desk in Diamond Bar, CA. The document was also posted to the public SCAQMD website at www.aqmd.gov on June 1, 2007, with links under the SCAQMD home page titled "Item of Interest!" Links to the document were also provided in the "Air Quality" area of the website. The draft document will also be made available to U.S. EPA during this period for review. This 30-day pre-submittal period is the mechanism by which the public can provide comments and the U.S. EPA will approve any changes to the PM_{2.5} Network or any other Network changes.

Network Design

The SCAQMD operates 35 air monitoring sites in the South Coast Air Basin and a portion of the Salton Sea Air Basin in Coachella Valley. This area includes Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties. The newest permanent site was added in 2005 at Mira Loma. Table 1 provides a list of monitoring locations with the pollutants measured at each site and the U.S. EPA AQS site codes. Table 2 provides the spatial scale and monitoring objective for each monitor at each site.

Table 3 describes the monitoring purpose for each monitor at each site. A new requirement of the annual network plans in 2007, the monitoring purpose is the reason why a certain pollutant is

being measured at a certain site. A list and description of monitoring purposes is provided below, and portions are adapted from the CARB annual network plan for 2007.

Background Level monitoring is used to determine general background levels of air pollutants as they enter the South Coast Air Basin.

High Concentration monitoring is conducted at sites to determine the highest concentration of an air pollutant in an area within the monitoring network. A monitoring network may have multiple high concentration sites (i.e., due to varying meteorology year to year).

Pollutant Transport is the movement of pollutant between air basins or areas within an air basin. Transport monitoring is used to assess and mitigate upwind areas when transported pollutant affects neighboring downwind areas. Also, transport monitoring is used to determine the extent of regional pollutant transport among populated areas and to rural areas.

Population Exposure monitoring is conducted to represent the air pollutant concentrations a populated area is exposed to.

Representative Concentration monitoring is conducted to represent the air quality concentrations for a pollutant expected to be similar throughout a geographical area. These sites do not necessarily indicate the highest concentrations in the area for a particular pollutant.

Source Impact monitoring is used to determine the impact of significant sources or source categories of air quality emissions on ambient air quality. The air pollutant sources may be stationary or mobile.

Trend Analysis monitoring is useful for comparing and analyzing air pollution concentrations over time. Usually, trend analyses show the progress or lack of progress in improving air quality for an area over a period of many years.

Site Comparison monitoring is used to assess the effect on measured pollutant levels of moving a monitoring location a short distance (usually less than two miles). Some monitoring stations become no longer usable due to development, change of lease terms, or eviction. In these cases, attempts are made to conduct concurrent monitoring at the old and new site for a period of at least one year in order to compare pollutant concentrations.

Multiple purposes for measuring a pollutant at a particular site are possible. There is some overlap between monitoring objectives as defined by EPA and given in Table 2, and the monitoring purposes provided in Table 3.

A brief description of the network for each criteria pollutant monitored is provided below:

OZONE

The SCAQMD operates 30 sites where ozone measurements are made as part of the Air Monitoring Network. Figure 1 in Appendix A shows the spatial distribution of these sites.

PM10

Size-selective inlet high volume samplers are operated at 22 sites to meet the requirements for PM10 sampling. At 11 of the sampling sites, PM10 continuous analyzers are also operated. These real-time devices are capable of making hourly particulate concentration measurements. Figure 2 in Appendix A shows the spatial distribution of the sampling sites. Real-time monitors, for the most part, are clustered in the high concentration areas, with two located in the desert area where wind-blown crustal material has caused exceedances of the 24-hour Standard. In downwind areas of the South Coast Air Basin, a large fraction of particulate is formed in the atmosphere. PM10 reaches maximum levels during late summer through early winter months. All PM10 monitors operate on a one day in six schedule.

NITROGEN DIOXIDE

The nitrogen dioxide (NO₂) network consists of 27 sites. These sites are mostly located within areas of highest NO₂ concentration. The spatial distribution of NO₂ monitors is shown in Figure 3 in Appendix A. Review of 1992 through 2006 data indicates that the Federal annual average standard was not exceeded.

CARBON MONOXIDE

Ambient carbon monoxide (CO) monitors measure concentrations at 26 locations. Figure 4, Appendix A, shows the spatial distribution of these sites. Carbon monoxide emissions, primarily from motor vehicles, show a pattern congruent with major freeway arteries.

SULFUR DIOXIDE

Sulfur dioxide (SO₂) monitors are located at seven sites. Figure 5 in appendix A shows the spatial distribution of the sites. Most SO₂ emissions come from federal transportation sources such as marine vessels. The monitors are clustered mostly in the areas where these sources are located. The federal standard has not been exceeded for nearly 30 years.

PARTICULATE LEAD

Particulate lead measurements are collected at eleven sites as part of the network. The spatial distribution of these sites is shown in Figure 6 in Appendix A. The last violation of the federal standard for particulate lead was recorded in 1982. With the phasing out of lead in gasoline, ambient lead levels decreased to the point that a reduction in the network was made—reducing the number of sites from 27 to nine.

In 1990, U.S. EPA requested the SCAQMD to collect ambient air particulate lead samples near several large lead handling (battery recycling) facilities. Long-term source impacted monitoring began in 1991. A facility in the City of Industry exceeded the federal ambient particulate lead standard during the second quarter of Fiscal Year 1991-92. Lead monitoring at a facility in the City of Torrance ended in 1993 when measurements were consistently below the ambient standard. The other four facilities were found to be in compliance after ongoing sampling. These source-related lead sites are also depicted in Figure 6.

PAMS

The PAMS (Photochemical Assessment Monitoring Stations) network was initiated in June 1994 at Pico Rivera and Upland, and in 1995 at Banning and Azusa, to determine speciated hydrocarbon compounds in ambient air. PAMS monitoring at Hawthorne commenced in June 1997, and the Burbank station became a PAMS site in July 1997. In May 2001, the Santa Clarita location was established as a PAMS site. In August 2005, the Pico Rivera station was moved to a new location one half mile south of the previous site due to the end of the property lease. Figure 7 in Appendix A shows the distribution of the PAMS network. In April 2004, the Hawthorne site was replaced by LAX Hastings, also due to the end of a property lease.

An automated gas chromatography VOC system is in operation at Pico Rivera, and a similar system was installed at Burbank in July 1997. VOC canister and carbonyl sampling, with subsequent laboratory analysis, is conducted at the other PAMS sites.

The first SCAQMD upper air monitoring station was established at Los Angeles International Airport (LAX) in 1994. Subsequent upper air stations include Ontario International Airport (ONT), installed in 1996, and Moreno Valley (MOV), installed in 2001 at the Moreno Valley Municipal Water Treatment Plant in Riverside County. A fourth upper air station became operational in Orange County at the end of 2006, at the University of California Research and Extension Center in Irvine. The installation of a fifth station is planned for 2007 to address ozone transport into the Santa Clarita Valley area in northern Los Angeles County. The upper air stations use a combination of remote sensing and surface meteorological instrumentation, including the Vaisala (formerly Radian/URS) LAP-3000 radar wind profiler with a Radio Acoustic Sounding System (RASS), the Atmospheric Systems Corporation (formerly AeroVironment Inc.) miniSodar acoustic wind profiler, and tower-mounted meteorological measurements of wind, pressure, temperature, relative humidity, solar radiation and ultraviolet radiation.

PM2.5

A network of 17 Federal Reference Method (FRM) samplers was first implemented in January 1999. On December 26, 1999, a second Coachella Valley PM2.5 sampling site was established in Palm Springs. On June 20, 2003, PM2.5 sampling began at the South Long Beach site. The final addition to the PM2.5 FRM network occurred in October 2005, at the new Mira Loma site. This brings the total number of PM2.5 FRM sampling sites to 20. The sites are depicted in Figure 8, Appendix A and the actual starting date of each sampler is listed in Table 4. Collocated sampler sites are at Rubidoux, Central Los

Angeles, and Indio. All sites in the Network using FRM samplers are suitable for comparison against the annual PM_{2.5} National Ambient Air Quality Standard (NAAQS).

Continuous PM_{2.5} Met One Beta Attenuation Monitors (BAMs) were first deployed in Fiscal Year 2001–02. Eight monitors are now operating in the Basin, two at Rubidoux (collocated), and one each at Anaheim, Los Angeles, South Long Beach, Burbank, Palm Springs, and Banning. In January 2006, two additional samplers were added at Lake Elsinore and Glendora to assist in the Children’s Health Study, bringing the total to ten.

PM_{2.5} speciation sampling is also a part of the SCAQMD PM_{2.5} program. Collocated Met One SASS PM_{2.5} speciation samplers were deployed in March 2001 at Rubidoux. Another SASS sampler was deployed at Central Los Angeles in 2002 as part of the EPA national Speciation Trends Network. In 2003, SASS PM_{2.5} speciation samplers were installed at Fontana and Anaheim. In 2004, additional samplers were installed in Long Beach, Pico Rivera, and Burbank as part of the MATES III project, which concluded in April of 2006 (see below). Samples continue to be taken at the Long Beach location. Analysis of the filters from these new SASS samplers is being conducted at SCAQMD’s laboratory. This approach has the concurrence of CARB and U.S. EPA, Region IX.

Special Programs

Special monitoring programs are conducted for rule compliance purposes or to characterize the levels of toxic air contaminants and other criteria pollutants in sub-regional areas of the Basin. The following is a list of special monitoring programs that were active during the past year. Note that this is being provided for informational purposes only. At this time, none of the Special Monitoring Programs are designated as a “Special Purpose Monitor” under 40 CFR 58.20.

Multiple Air Toxics Exposure Study (MATES-III)

MATES is the most comprehensive urban air quality study to date. In April 2004, the SCAQMD initiated the third round of MATES (MATES-III) to assess the ambient levels of airborne compounds linked to adverse health effects in humans. The previous study, MATES-II, was a year-long intensive sampling program. During the study, air toxics were monitored at ten fixed sites and additional short-term “microscale” monitoring was conducted at 14 sites using five mobile sampling platforms. Fixed sites were established to assess regional air toxics, while microscale sites assess source impacts on a more local level, such as an area of heavy industrial activity in close proximity to a residential area. MATES-III incorporated elements of the two prior studies to establish trend assessments with similar sampling methodologies. Enhancements to the sampling network with the latest air monitoring technologies and more frequent sampling schedules were also incorporated. Instrumentation at each site measured PM₁₀, speciated PM_{2.5}, VOCs, and air toxics such as heavy metals, hexavalent chromium, and carbonyls.

The 2004-05 winter season in Southern California produced record levels of rainfall in most areas of the South Coast Air Basin. As expected, this led to lower than expected levels of airborne constituents including PM concentrations. As a result, MATES-III was extended an additional year to collect more representative air toxics data. Sampling at

the fixed sites was completed in April 2006. Microscale sampling has been completed at the Indio, San Bernardino, Commerce, La Puente, Santa Ana, and Sun Valley sites. The final microscale site is located adjacent to Long Beach Airport and was completed in October 2006.

Fugitive Dust Study

In support of SCAQMD Rule 403 - Fugitive Dust, SSI PM10 samplers are deployed on an episodic basis upwind and downwind of potential sources as required under Rule 403. Since 2003, periodic sampling has been conducted around gravel quarries and other industries which seem to be producing large volumes of dust. This sampling will continue through 2007 and 2008.

Hexavalent Chrome

The SCAQMD has an ongoing program of collecting ambient hexavalent chrome in the vicinity of several chrome plating facilities located throughout the basin. Monitoring continues at Los Angeles, Newport Beach, and other locations throughout the SCAQMD jurisdiction.

Port Area Monitoring Program

The SCAQMD has initiated an intensive air monitoring program in the communities adjacent to the Ports of Los Angeles and Long Beach. Monitoring consists of all gaseous criteria pollutants, air toxics compounds as measured in MATES III, as well as continuous PM2.5 and PM2.5 speciation. Sampling began at four sites in February 2007. Two more sites are planned for June 2007. Monitoring activities are being coordinated with the two Ports' air monitoring programs as well as several CARB Research studies in the area.

Recent or Proposed Modifications to Network

Lynwood

SCAQMD has been operating the Lynwood station since 1973. The deteriorating state of the leased building has made it necessary to propose the relocation of the station to nearby Compton, a former MATES III site. Collocated CO monitoring began at the new site in May 2005 and is continuing. A permanent move to the new site for some of the measurements will be considered in 2008.

PM2.5 Monitoring Network

No changes are planned in the next 18 months for the PM2.5 monitoring network.

Minimum Monitoring Requirements

The SCAQMD jurisdictional boundaries encompass two Metropolitan Statistical Areas (MSA) as defined by the U.S. Office of Management and Budget and the U.S. Census Bureau. The Los Angeles-Long Beach-Santa Ana MSA (Code 31100) had a population of 12,365,627 based on the year 2000 U.S. Census. The Riverside-San Bernardino-Ontario MSA (Code 40140) had a population of 3,254,821 in 2000. The minimum number of monitors for each pollutant is based

on MSA population as described in 40 CFR 58 Appendix D. The SCAQMD network exceeds the minimum monitoring requirements for all criteria pollutants. Details are provided below.

Ozone

| MSA | Min. # Monitors Required | # Monitors Active |
|-------|--------------------------------|-------------------------|
| 31100 | 4 | 18 |
| 40140 | 2 | 12 |

PM2.5

| MSA | Min. # Monitors Required | # Monitors Active |
|-------|--------------------------------|-------------------------|
| 31100 | 3 | 12 |
| 40140 | 3 | 8 |

PM10

| MSA | Min. # Monitors Required | # Monitors Active |
|-------|--------------------------------|-------------------------|
| 31100 | 4-8 | 9 |
| 40140 | 6-10 | 13 |

NO2

| MSA | Min. # Monitors Required | # Monitors Active |
|-------|--------------------------------|-------------------------|
| 31100 | 0 | 17 |
| 40140 | 0 | 8 |

Monitors required for PAMS: 7

SO2

| MSA | Min. # Monitors Required | # Monitors Active |
|-------|--------------------------------|-------------------------|
| 31100 | 0 | 5 |
| 40140 | 0 | 2 |

CO

| MSA | Min. # Monitors Required | # Monitors Active |
|-------|--------------------------------|-------------------------|
| 31100 | 0 | 19 |
| 40140 | 0 | 8 |

Pb

| MSA | Min. # Monitors Required | # Monitors Active |
|-------|--------------------------------|-------------------------|
| 31100 | 0 | 7 |
| 40140 | 0 | 2 |

Table 1. List of Monitoring Sites

| Location | AQS No. | Pollutants Monitored |
|----------------------|----------------|-----------------------------|
| Anaheim | 060590007 | CO,NO2,O3,PM10, PM2.5 |
| Azusa | 060370002 | CO,NO2,O3,PM10,PM2.5 |
| Banning Airport | 060650012 | NO2,O3,PM10 |
| Big Bear | 060718001 | PM2.5 |
| Burbank | 060371002 | CO,NO2,SO2,O3,PM10,PM2.5 |
| Compton | | CO,PM10 |
| Costa Mesa | 060591003 | CO,NO2,SO2,O3 |
| Crestline | 060710005 | O3,PM10 |
| Fontana | 060712002 | CO,NO2,SO2,O3,PM10,PM2.5 |
| Glendora | 060370016 | CO,NO2,O3 |
| Indio | 060652002 | O3,PM10,PM2.5 |
| La Habra | 060595001 | CO,NO2,O3 |
| Lake Elsinore | 060659001 | CO,NO2,O3 |
| LAX Hastings | 060375005 | CO,NO2,O3,PM10,Pb |
| Long Beach | 060374002 | CO,NO2,SO2,O3,PM10,PM2.5,Pb |
| Los Angeles | 060371103 | CO,NO2,SO2,O3,PM10,Pb,PM2.5 |
| Lynwood | 060371301 | CO,NO2,O3,Pb,PM2.5 |
| Mira Loma | | CO,NO2,O3,PM10 |
| Mira Loma (Jurupa) | 060658005 | CO,NO2,O3,PM10,PM2.5 |
| Mission Viejo | 060592022 | CO,O3,PM10,PM2.5 |
| Norco | 060650003 | PM10 |
| Ontario Fire Station | 060710025 | PM10,PM2.5 |
| Palm Springs | 060655001 | CO,NO2,O3,PM10,PM2.5 |
| Pasadena | 060372005 | CO,NO2,O3,PM2.5 |
| Perris | 060656001 | O3,PM10 |
| Pico Rivera | 060371602 | CO,NO2,O3,Pb,PM2.5 |
| Pomona | 060371701 | CO,NO2,O3 |
| Redlands | 060714003 | O3,PM10 |
| Reseda | 060371201 | CO,NO2,O3,PM2.5 |
| Riverside | 060651003 | CO,Pb,PM2.5 |
| Rubidoux | 060658001 | CO,NO2,SO2,O3,PM10,Pb,PM2.5 |
| San Bernardino | 060719004 | CO,NO2,O3,PM10,Pb,PM2.5 |
| Santa Clarita | 060376012 | CO,NO2,O3,PM10 |
| South Long Beach | 060374004 | PM10,Pb,PM2.5 |
| Upland | 060711004 | CO,NO2,O3,Pb |
| West Los Angeles | 060370113 | CO,NO2,O3 |

TABLE 2. Criteria Pollutant Monitoring Objective and Spatial Scales

| | |
|------------------------------------|-------------------------|
| MONITORING OBJECTIVE | SPATIAL SCALE |
| HC – High Concentrations | MI - Microscale |
| RC – Representative Concentrations | MS – Middle Scale |
| IM – Impact | NS – Neighborhood Scale |
| BL – Background | US – Urban Scale |

| Location | CO | NO ₂ | SO ₂ | O ₃ | PM ₁₀ | PM _{2.5} | Pb |
|----------------------|-------|-----------------|-----------------|----------------|------------------|-------------------|-------|
| Anaheim | NS/RC | US/RC | | NS/RC | NS/RC | NS/RC | |
| Azusa | NS/RC | US/RC | | US/HC | NS/RC | NS/RC | |
| Banning Airport | | NS/RC | | NS/RC | NS/RC | | |
| Big Bear | | | | | | NS/RC | |
| Burbank | NS/HC | NS/RC | NS/RC | US/HC | NS/RC | NS/RC | |
| Compton | MS/HC | | | | | | |
| Costa Mesa | NS/RC | NS/RC | NS/RC | NS/RC | | | |
| Crestline | | | | NS/HC | NS/RC | | |
| Fontana | NS/RC | US/RC | NS/RC | US/RC | NS/HC | NS/RC | |
| Glendora | NS/RC | NS/RC | | NS/HC | | | |
| Indio | | | | NS/RC | NS/HC | NS/RC | |
| La Habra | NS/RC | US/RC | | NS/RC | | | |
| Lake Elsinore | NS/RC | NS/RC | | NS/RC | | | |
| LAX Hastings | MS/RC | MS/RC | NS/RC | MS/RC | NS/RC | | NS/RC |
| Long Beach | MI/HC | MS/RC | NS/HC | MS/RC | MI/RC | NS/HC | MI/RC |
| Los Angeles | NS/RC | NS/HC | NS/RC | NS/RC | NS/RC | NS/HC | NS/RC |
| Lynwood | MS/HC | MS/RC | | NS/RC | | NS/RC | NS/RC |
| Mira Loma | NS/RC | NS/RC | | NS/RC | NS/HC | | |
| Mira Loma (Jurupa) | NS/RC | NS/RC | | NS/RC | NS/HC | NS/RC | |
| Mission Viejo | NS/RC | | | NS/RC | NS/RC | NS/RC | |
| Norco | | | | | NS/RC | | |
| Ontario Fire Station | | | | | NS/HC | NS/RC | |
| Palm Springs | NS/RC | NS/RC | | NS/RC | NS/RC | NS/RC | |
| Pasadena | MS/RC | MS/HC | | NS/RC | | NS/RC | |
| Perris | | | | NS/RC | NS/RC | | |
| Pico Rivera | NS/RC | NS/HC | | NS/HC | | NS/RC | NS/RC |
| Pomona | MI/RC | MS/RC | | MS/HC | | | |
| Redlands | | | | NS/RC | NS/RC | | |
| Reseda | NS/RC | US/RC | | US/HC | | NS/RC | |
| Riverside | MI/HC | | | | | NS/RC | MI/HC |
| Rubidoux | MS/RC | US/RC | NS/RC | US/HC | NS/HC | NS/HC | NS/RC |
| San Bernardino | MS/RC | US/RC | | NS/HC | NS/HC | NS/RC | NS/RC |
| Santa Clarita | NS/RC | NS/RC | | US/HC | NS/RC | NS/RC | |
| South Long Beach | | | | | NS/HC | NS/RC | NS/HC |
| Upland | NS/RC | NS/RC | | NS/RC | | | NS/RC |
| West Los Angeles | NS/RC | MS/HC | | MS/RC | | | |

TABLE 3. Criteria Pollutant Monitoring Purposes

MONITORING PURPOSE

BK – Background Level
 HC – High Concentration
 TP – Pollutant Transport
 EX – Population Exposure
 RC – Representative Concentration
 SO – Source Impact
 TR – Trend Analysis
 CP – Site Comparisons

| Location | CO | NO ₂ | SO ₂ | O ₃ | PM ₁₀ | PM _{2.5} | Pb |
|----------------------|-------|-----------------|-----------------|----------------|------------------|-------------------|----|
| Anaheim | TR | TR/RC | | TR | TR | TR/EX | |
| Azusa | TR | TR/RC | | TR | TR | TR/EX | |
| Banning Airport | | TP/RC | | TP | TP | | |
| Big Bear | | | | | | EX/SO/TP | |
| Burbank | TR | TR/RC | TR | TR | TR | TR/EX | |
| Compton | CP | | | | | | |
| Costa Mesa | RC | TR/RC | TR | RC | | | |
| Crestline | | | | HC | TP/RC | | |
| Fontana | RC | TP/RC | TR | RC | HC | EX/TP | |
| Glendora | RC | TR/RC | | HC | | | |
| Indio | | | | TP | HC | TP/EX | |
| La Habra | RC | TR/RC | | RC | | | |
| Lake Elsinore | TP/RC | TP/RC | | TP/RC | | | |
| LAX Hastings | BK | BK | BK | BK | BK | | BK |
| Long Beach | HC | TR/RC | TR/HC | TR | TR/RC | EX/HC | EX |
| Los Angeles | SO/RC | SO/HC | TR | TR/RC | TR/RC | EX/HC | EX |
| Lynwood | TR/HC | TR/RC | | TR/RC | | EX/RC | EX |
| Mira Loma | TP/RC | TP/RC | | TR/RC | HC | | |
| Mira Loma (Jurupa) | CP | CP | | CP | CP | CP | |
| Mission Viejo | RC | | | TR/RC | TR/RC | EX/RC | |
| Norco | | | | | TR/RC | | |
| Ontario Fire Station | | | | | HC | EX/RC | |
| Palm Springs | TP/RC | TP/RC | | TP | TP/RC | EX/TP | |
| Pasadena | TR/RC | TR/HC | | TR/RC | | EX/RC | |
| Perris | | | | TP | TR | | |
| Pico Rivera | RC | HC | | HC | | EX/RC | EX |
| Pomona | RC | RC | | HC | | | |
| Redlands | | | | TP/RC | TP/RC | | |
| Reseda | RC | TR/RC | | HC | | EX/RC | |
| Riverside | HC | | | | | EX/RC | EX |
| Rubidoux | TR/RC | TR/RC | TR | TR/HC | TR/HC | EX/TR/HC | EX |
| San Bernardino | TR/RC | TP/RC | | TR/HC | TR/HC | EX/TR | EX |
| Santa Clarita | RC | TP/RC | | TP/HC | RC | EX/RC | |
| South Long Beach | | | | | HC | EX/SO | EX |
| Upland | RC | TR/RC | | TR/RC | | | EX |
| West Los Angeles | RC | TR/HC | | RC | | | |

TABLE 4. PM_{2.5} Monitoring Stations Assigned Site Numbers

| Location | Site Code | ARB No. | AQS No. | Start Date | Schedule |
|----------------------|-----------|---------|-----------|------------|----------|
| Anaheim | ANAH | 30178 | 060590007 | 1/3/99 | Daily |
| Azusa | AZUS | 70060 | 060370002 | 1/4/99 | Daily |
| Big Bear | BGBR | 36001 | 060718001 | 2/8/99 | 1-in-3 |
| Burbank | BURK | 70069 | 060371002 | 1/21/99 | 1-in-3 |
| Fontana | FONT | 36197 | 060712002 | 1/3/99 | 1-in-3 |
| Indio “A” | INDI | 33157 | 060652002 | 1/30/99 | 1-in-3 |
| Indio “B” | INDI | 33157 | 060652002 | 5/12/00 | 1-in-6 |
| Long Beach | LGBH | 70072 | 060374002 | 1/3/99 | Daily |
| Los Angeles “A” | CELA | 70087 | 060371103 | 1/3/99 | Daily |
| Los Angeles “B” | CELA | 70087 | 060371103 | 1/6/99 | 1-in-6 |
| Lynwood | LYNN | 70084 | 060371301 | 1/3/99 | 1-in-3 |
| Mission Viejo | MSVJ | 30002 | 060592022 | 6/15/99 | 1-in-3 |
| Mira Loma (Jurupa) | MRLM | 33165 | 060658005 | 11/09/05 | 1-in-3 |
| Ontario Fire Station | ONFS | 36025 | 060710025 | 1/3/99 | 1-in-3 |
| Palm Springs | PLSP | 33137 | 060655001 | 12/26/99 | 1-in-3 |
| Pasadena | PASA | 70088 | 060372005 | 3/4/99 | 1-in-3 |
| Pico Rivera | PICO | 70185 | 060371602 | 1/15/99 | 1-in-3 |
| Reseda | RESE | 70074 | 060371201 | 1/24/99 | 1-in-3 |
| Riverside | RIVM | 33146 | 060651003 | 1/6/99 | 1-in-3 |
| Rubidoux “A” | RIVR | 33144 | 060658001 | 1/3/99 | Daily |
| Rubidoux “B” | RIVR | 33144 | 060658001 | 1/3/99 | 1-in-6 |
| San Bernardino | SNBO | 36203 | 060719004 | 1/3/99 | 1-in-3 |
| South Long Beach | SLGB | 70110 | 060374004 | 6/20/03 | Daily |