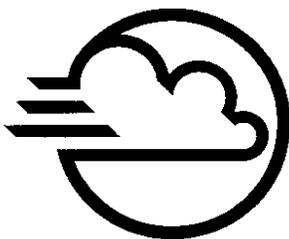


***Ambient
Air
Monitoring
Network
Plan***

2013



***Ventura County Air Pollution Control District
Monitoring Division***

KENT FIELD, MANAGER

669 COUNTY SQUARE DRIVE • VENTURA, CA 93003 • 805-645-1400

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Glossary of Acronyms

| | |
|-------------------|--|
| AQI | Air Quality Index |
| AQS | Air Quality System |
| ARM | Approved Regional Method |
| BAM | Beta Attenuation Monitor |
| CARB | California Air Resources Board |
| CAAA | Clean Air Act Amendments |
| CBSA | Core Based Statistical Area |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| CSN | Chemical Speciation Network |
| EDAS | Ethernet Data Acquisition System |
| EPA | United States Environmental Protection Agency |
| FEM | Federal Equivalent Method |
| FRM | Federal Reference Method |
| Hwy | Highway |
| NAAQS | National Ambient Air Quality Standards |
| NAMS | National Air Monitoring Stations |
| NCore | National Core Air Monitoring Sites |
| MSA | Metropolitan Statistical Area |
| NEI | National Emissions Inventory |
| NO | Nitric Oxide |
| NO ₂ | Nitrogen Dioxide |
| NO _x | Nitrogen Oxides |
| NO _y | Reactive Nitrogen Compounds |
| O ₃ | Ozone |
| PAMS | Photochemical Assessment Monitoring Stations |
| Pb | Lead |
| PM | Particulate Matter |
| PM _{2.5} | Particulates less than or equal to 2.5 microns in size |
| PM ₁₀ | Particulates less than or equal to 10 microns in size |
| POC | Parameter Occurrence Code |
| PQAO | Primary Quality Assurance Organization |
| PSD | Prevention of Significant Deterioration |
| PWEI | Population-Weighted Emission Index |
| SASS | Speciation Air Sampling System |
| SIP | State Implementation Plan |
| SJVAPCD | San Joaquin Valley Air Pollution Control District |
| SLAMS | State and Local Air Monitoring Stations |

Glossary of Acronyms (cont'd)

| | |
|-----------------|---|
| SO ₂ | Sulfur Dioxide |
| SR | State Route |
| STN | Speciation Trends Network |
| TAD | Technical Assistance Document |
| TNMOC | Total Non-Methane Organic Compounds |
| VCAPCD | Ventura County Air Pollution Control District |
| VOC | Volatile Organic Compounds |

1 Introduction

The Ventura County Air Pollution Control District's (VCAPCD) *2013 Ambient Air Monitoring Network Plan* is an examination and evaluation of the VCAPCD's network of ambient air pollution monitoring stations. This annual review of the VCAPCD's State and Local Air Monitoring Stations (SLAMS) air monitoring network is required by Title 40, Code of Federal Regulations, Part 58.10 (40 CFR 58.10). The report meets the requirements for an annual network plan as listed in 40 CFR 58.10, Appendix A.

As required by the regulations, this report includes monitors which are federal reference methods (FRM) or federal equivalent methods (FEM). While the CFR also requires reporting of approved regional methods (ARM), no ARMs are in operation within VCAPCD at this time. The terms FRM, FEM, and ARM denote monitoring instruments that produce measurements of the ambient pollution levels that the regulations allow to be compared to the National Ambient Air Quality Standards (NAAQS) for regulatory purposes.

Federal regulations require specific detailed monitoring network information be included in the annual network plans. A summary of the requirements, and how the VCAPCD has met each of the requirements, can be found in Appendix A. The *2013 Ambient Air Quality Monitoring Network Plan* includes a review of actions taken since preparation of the last plan (July 2012), and plans for action in the year ahead.

This report will be available for a 30 day public inspection period. Any comments received during the public inspection period will be forwarded to the United States Environmental Protection Agency (EPA) concurrently with submittal of the plan. This report may be viewed on the VCAPCD's website, www.vcapcd.org and hardcopies are available for review at VCAPCD's office. Written comments should be submitted to Kent Field, Monitoring Division Manager, at kent@vcapcd.org, 805-662-6960.

2 Overview of Network Operation

The VCAPCD operates five air monitoring stations and one atmospheric profiler within Ventura County. The VCAPCD's SLAMS monitoring network has been designed to provide ozone (O₃), fine particulate matter of a size of 2.5 microns or less (PM_{2.5}) and particulate matter of a size of 10 microns or less (PM₁₀) monitoring coverage to the majority of the inhabited regions of Ventura County. The VCAPCD has conducted air monitoring for ozone or oxidants in the county since 1963. This monitoring network plays a critical role in assessing clean air progress and in determining pollutant exposures throughout Ventura County.

2.1 Ambient Air Monitoring Network in Ventura County

Ventura County is located along the southern portion of the central California coast between Santa Barbara and Los Angeles Counties. Its diverse topography is characterized by mountain ranges to the north, two major river valleys (the Santa Clara, which trends east-west, and the Ventura, which trends roughly north-south), and the Oxnard Plain to the south and west. As pollutants are carried into the inland valleys by prevailing winds, they are frequently trapped against the mountain slopes by a temperature inversion layer, generally occurring between 1500 and 2500 feet above sea level. Above the temperature inversion layer, pollutants are allowed to disperse freely. Our air monitoring stations are therefore found between the coast and the inland valley mountain foothills up to approximately 1000 feet.

The purposes of the VCAPCD's air monitoring network are: 1) to determine Ventura County's attainment status for the National and California standards for ozone, PM_{2.5} and PM₁₀; 2) to track Ventura County's air quality trends; 3) to provide information to the public about the quality of Ventura County's air (i.e., reporting of the Air Quality Index (AQI) and ozone and particulate episode forecasting); and, 4) for data in air quality modeling efforts.

Ambient concentration data are collected for a wide variety of pollutants. The most important of these in Ventura County are ozone, PM_{2.5}, and PM₁₀. Other pollutants measured include oxides of nitrogen (NO_x), nitric oxide (NO), nitrogen dioxide (NO₂), total non-methane organic compounds (TNMOC), speciated PM_{2.5}, toxics (hexavalent chromium, total metals and aldehydes), volatile organic compounds (VOC), and carbonyls.

Measurement of meteorological parameters is also conducted at all monitoring stations. Data for all of the pollutants is used to better understand the nature of the ambient air quality in Ventura County, as well as to inform the public about the quality of the air.

Not all pollutants are monitored at all stations. Most stations monitor for multiple pollutants, while some stations monitor only two pollutants. A particular station’s location and monitoring purpose determine the actual pollutants measured at that station.

The majority of the population¹ resides in the southern half of Ventura County - the VCAPCD has focused its air monitoring efforts there. The south half of Ventura County is divided into five air monitoring regions: Ventura and the Oxnard Coastal Plain, Ojai Valley, Santa Clara River Valley, Simi Valley, and the Conejo Valley. The air monitoring network has been designed to provide air monitoring coverage to those regions of Ventura County.

Table 1 lists the pollutants measured in 2013 at each monitoring station, and the assigned Air Quality System identification (AQS ID) number for each monitoring station.

Table 1 – Air Monitoring Stations and Pollutants Monitored in 2013

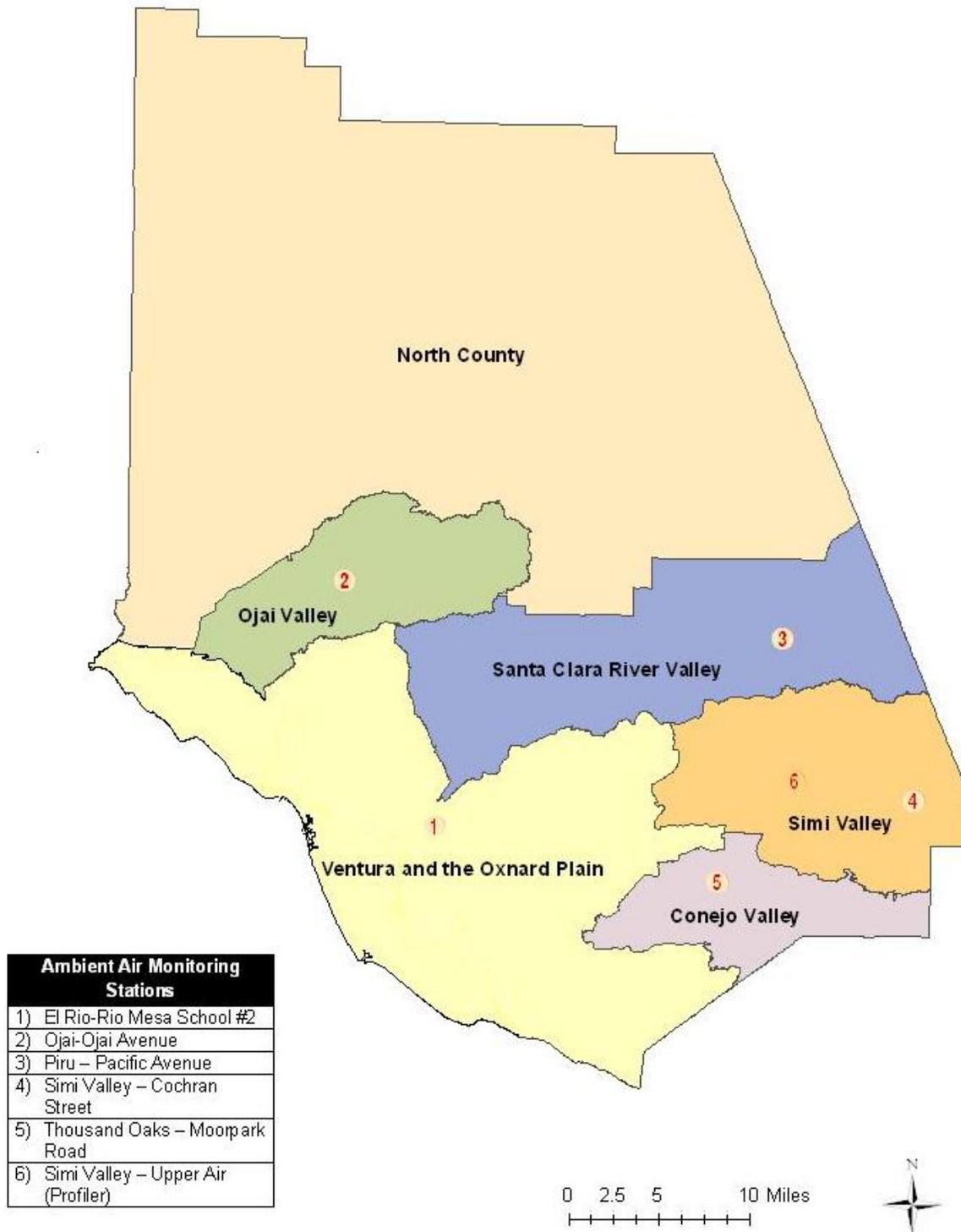
| Station Name AQS ID | Ozone | NO ₂ (area-wide) | PM _{2.5} FRM | PM _{2.5} FEM | PM _{2.5} non-FEM | PM _{2.5} Speciation | PM ₁₀ FRM | PM ₁₀ FEM | Meteorology | Other Parameters |
|---|-------|-----------------------------|-----------------------|-----------------------|---------------------------|------------------------------|----------------------|----------------------|-------------|---------------------------------|
| El Rio – Rio Mesa School #2 061113001 | ● | ◆ | ✓ | ✓ | | | ✓ | ✓ | ● | VOC◆ Carbonyls◆ Toxics*** |
| Ojai – Ojai Avenue 061111004 | ✓ | | | ✓ | | | | | ● | |
| Piru – Pacific Avenue 061110009 | ✓ | | | ✓ | | | | | ● | |
| Simi Valley – Cochran Street 061112002 | ● | ◆ | ✓ | | ✓ | * | ✓** | ✓ | ● | VOC◆ TNMOC◆ Toxics*** |
| Simi Valley Upper Air 061110008 | | | | | | | | | ● | Profiler◆ |
| Thousand Oaks – Moorpark Rd 061110007 | ✓ | | ✓ | ✓ | | | | | ● | |

- * SASS and URG samplers, monitored as part of Speciation Trends Network (STN), Chemical Speciation Network (CSN). ✓ Monitored as part of SLAMS network.
- ** Main and Collocated Samplers ◆ Monitored as part of Photochemical Assessment Monitoring Stations (PAMS) network.
- *** California Air Resources Board ● Monitored as part of SLAMS and PAMS networks.

Figure 1 shows Ventura County’s air monitoring regions and the locations of the monitoring stations.

¹ All population estimates in this document are based on the 2010 US census.

Figure 1 – VCAPCD Monitoring Regions and Ambient Monitoring Stations



A description of each of the five monitoring regions is presented below.

Ventura and the Oxnard Coastal Plain – a broad coastal area stretching from the Pacific Ocean to several inland valleys, covering 405 square miles, and having a population of 433,245 people. This area encompasses the cities of Port Hueneme, Ventura, Oxnard and Camarillo. The Oxnard plain area is a relatively flat plain area with foothills and mountains at its northern border. This area is home to considerable agricultural activities and includes a deepwater port and a number of Ventura County’s major stationary sources², including two natural gas-fired electric generating units, two naval bases, several natural gas-fired cogeneration facilities, several oil and gas production and processing facilities, and a paper products manufacturer. The area is impacted by mobile sources and marine shipping operations occurring off Ventura County’s coast. This area is served by the VCAPCD’s monitoring station at Rio Mesa High School, Central Avenue, in Oxnard.

Ojai Valley – an inland area including the City of Ojai and the communities of Oak View, and Meiners Oaks, covering 102 square miles, and having a population of 27,784 people. The Ojai Valley is surrounded by mountain ranges. There is one major stationary source on the southeastern edge of the region; however, the Ojai Valley may be influenced by oil production activities occurring to the south, in the Ventura Coastal area. The area is impacted primarily by mobile sources. The Ojai Valley is served by the VCAPCD’s monitoring station at Ventura County fire station, Ojai Avenue, in Ojai.

Santa Clara River Valley – an inland area, covering 204 square miles, and having a population of 45,107 people. The Valley is surrounded by foothills and low-lying mountains. The eastern edge of the Santa Clara River Valley is the border between Ventura and Los Angeles Counties. The area is also home to considerable agricultural activities. There are oil production and processing activities occurring throughout the Santa Clara River Valley. There are two major stationary sources in its boundaries. The area is impacted primarily by mobile sources. This area is served by the VCAPCD’s monitoring station on Pacific Avenue, in Piru.

Simi Valley – an inland area, including the cities of Simi Valley and Moorpark, covering 142 square miles, and having a population of 162,683 people. Simi Valley is surrounded by foothills and low-lying mountains. The eastern edge of the Simi Valley is the border between Ventura and Los Angeles Counties. There are two major stationary sources in its boundaries. The area is impacted primarily by mobile sources. This area is served by the VCAPCD’s monitoring station at Simi Valley High School, on Cochran Street, in Simi Valley.

² For the purpose of this report a major stationary source is considered to be a facility that has been issued a federal Part 70 operating permit (also referred to as a Title V permit).

Conejo Valley – an inland area, including the city of Thousand Oaks and the communities of Westlake Village and Newbury Park, covering 75 square miles, and having a population of 153,680 people. The area is surrounded by foothills and low-lying mountains. The eastern edge of the Conejo Valley is the border between Ventura and Los Angeles Counties. There are no major stationary sources in its boundaries. The area is impacted primarily by mobile sources. This area is served by the VCAPCD’s monitoring station at Thousand Oaks High School, Moorpark Road, in Thousand Oaks.

2.2 Monitoring Objectives and Spatial Scales

Federal regulations (40 CFR 58, Appendix D), require that a SLAMS network be designed to meet three monitoring objectives:

1. To provide air pollution data to the public in a timely manner;
2. To support compliance with the NAAQS; and,
3. To support air quality research.

In support of the monitoring objectives above, the monitoring network must be designed with a variety of site types. Sites can be designed:

1. To determine the highest concentration expected to occur in the area covered by the network;
2. To determine typical concentrations in areas of high population density;
3. To determine the impact on ambient pollution levels of significant sources or source categories;
4. To determine general background concentration levels;
5. To determine the extent of regional pollutant transport among populated areas, and in support of secondary standards; and,
6. To determine the welfare-related impacts in more rural and remote areas (such as visibility impairment and effects on vegetation).

The physical siting of an air monitoring station must achieve a spatial scale of representativeness that is consistent with the site type of the monitor. The spatial scale results from the physical location of the station with respect to the pollutant sources. It estimates the size of the area surrounding the monitoring station that experiences uniform pollutant concentrations.

The categories of spatial scale are:

1. Microscale – An area of uniform pollutant concentrations ranging from several meters up to 100 meters.

2. Middle Scale – Uniform pollutant concentrations in an area of about 100 meters to 0.5 kilometer.
3. Neighborhood Scale – An area with dimensions in the 0.5 to 4.0 kilometer range.
4. Urban Scale - Citywide pollutant conditions with dimensions ranging from 4 to 50 kilometers.
5. Regional Scale – A large area, usually rural, of the same general geography and without large sources that extends from tens to hundreds of kilometers.

Table 2 shows the relationship between site types and the spatial scales that are generally appropriate to those site types.

Table 2 – Site Types and Appropriate Spatial Scales

| Site Type | Appropriate Spatial Scale |
|---|-----------------------------|
| Highest Concentration | Micro, Middle, Neighborhood |
| Population Oriented | Neighborhood, Urban |
| Source Impact | Micro, Middle, Neighborhood |
| General/Background & regional transport | Urban, Regional |
| Welfare-related | Urban, Regional |

Table 3 shows each of the VCAPCD’s air monitoring stations and its criteria pollutant objective and spatial scales. Appendix B presents detailed site information about each of the monitoring stations in Ventura County

Table 3 – Pollutants, Monitoring Objectives and Spatial Scales

| Pollutant | Monitoring Station | Monitoring Objectives and Spatial Scale | | | |
|-----------------|--------------------|---|--------------------|----------|---------------|
| | | NAAQS Comparison | Public Information | Research | Spatial Scale |
| Ozone | El Rio | ✓ | | | Urban |
| | Ojai | ✓ | | | Urban |
| | Piru | ✓ | | | Urban |
| | Simi Valley | ✓ | | | Urban |
| | Thousand Oaks | ✓ | | | Urban |
| NO ₂ | El Rio | ✓ | | | Urban |
| | Simi Valley | ✓ | | | Urban |

Table 3 – Pollutants, Monitoring Objectives and Spatial Scales (cont'd)

| Pollutant | Monitoring Station | Monitoring Objectives and Spatial Scale | | | |
|------------------------------|--------------------|---|--------------------|----------|---------------|
| | | NAAQS Comparison | Public Information | Research | Spatial Scale |
| PM _{2.5} | El Rio | ✓ | | | Neighborhood |
| | Ojai | ✓ | | | Neighborhood |
| | Piru | ✓ | | | Neighborhood |
| | Simi Valley | ✓ | ✓ | | Neighborhood |
| | Thousand Oaks | ✓ | | | Neighborhood |
| PM ₁₀ | El Rio | ✓ | | | Neighborhood |
| | Simi Valley | ✓ | | | Neighborhood |
| VOCs | El Rio | | | ✓ | Neighborhood |
| | Simi Valley | | | ✓ | Urban |
| TNMOC | Simi Valley | | | ✓ | Urban |
| Carbonyls | El Rio | | | ✓ | Urban |
| PM _{2.5} Speciation | Simi Valley | | | ✓ | NA* |
| Toxics | El Rio | | | ✓ | NA |
| | Simi Valley | | | ✓ | NA |

* Not Applicable

2.3 Local Monitoring Objectives and Local Spatial Scales

Each of the VCAPCD’s air monitoring stations has, at a minimum, an ozone monitor. Monitors at some stations include PM_{2.5} FRM monitors, continuous PM_{2.5} FEM or non-FEM monitors, PM₁₀ FRM monitors, continuous PM₁₀ FEM monitors, continuous TNMOC, and oxides of nitrogen (NO, NO_x, NO₂). The VCAPCD has located each of its air monitoring stations in relation to specific geographic areas of Ventura County (Section 2.1), depending upon each area’s population, topography and meteorology. The north half of Ventura County is mountainous and sparsely populated, covering nearly 900 square miles, and having a population of only 819 people (population density of less than 1 person/square mile), so no air monitoring stations are located in that area. Because the VCAPCD has designed its network with consideration given to the distinct geographic, topographic and meteorological areas of Ventura County, the areas and population served by VCAPCD’s air monitoring stations vary greatly. The local monitoring objective for VCAPCD’s monitoring stations is reporting the Air Quality Index (AQI) and for ozone episode forecasting. The local spatial scale for VCAPCD’s monitoring stations is urban or neighborhood as previously described.

Table 4 contains the local regions in Ventura County and the population served by each of its air monitoring stations.

Table 4 – Local Air Monitoring Regions - Area and Population Served

| Station Name and Region Served | AQS ID | Area Served (Sq. Mi.) | Population Served | Population Density (Pop./Sq. Mi) |
|---|-----------|-----------------------|-------------------|----------------------------------|
| El Rio – Rio Mesa School #2 Region: Ventura and the Oxnard Coastal Plain | 061113001 | 405 | 433,245 | 1070 |
| Ojai – Ojai Avenue Region: Ojai Valley | 061111004 | 102 | 27,784 | 272 |
| Piru – Pacific Avenue Region: Santa Clara River Valley | 061110009 | 204 | 45,107 | 221 |
| Simi Valley – Cochran Street Region: Simi Valley | 061112002 | 142 | 162,683 | 1146 |
| Thousand Oaks – Moorpark Road Region: Conejo Valley | 061110007 | 75 | 153,680 | 2049 |

Appendix C of this document describes the minimum monitoring requirements for air monitoring networks in Ventura County. These requirements are specified in 40 CFR 58.10, Appendix D. Appendix C also presents documentation for pollutants for which no monitoring is required in Ventura County.

2.3.1 Ozone Monitoring Network

Ventura County is a serious nonattainment area for the federal 8-hour ozone standard. The VCAPCD monitors for ozone hourly at all of its air monitoring stations (El Rio, Ojai, Piru, Simi Valley, and Thousand Oaks), except the Simi Valley Upper Air station. The NAAQS for ozone is based on the 4th highest annual 8-hour maximum average in parts per million (ppm) (level: .075). Appendix D presents the NAAQS as of 2012. The level of the NAAQS has been exceeded at various monitoring stations in Ventura County. The ozone NAAQS is exceeded most frequently at Simi Valley, followed by Ojai and Piru. The El Rio monitoring station infrequently exceeds the ozone NAAQS. The maximum ozone concentration for 2012 was at .087 ppm, recorded at the Simi Valley monitoring station.

2.3.2 PM_{2.5} and PM₁₀ Monitoring Network

The VCAPCD’s particulate monitoring network consists of monitors for PM_{2.5} and PM₁₀. Ventura County is in attainment of the federal PM_{2.5} and PM₁₀ NAAQS. The PM_{2.5} network

has been operating since 1999, in response to establishment of the federal PM_{2.5} standard in 1999. VCAPCD has had PM₁₀ monitors operating since late 1986 in Ventura County.

The PM_{2.5} monitoring network includes three PM_{2.5} FRM monitors (El Rio, Simi Valley, and Thousand Oaks). It also includes four continuous PM_{2.5} FEM monitors (El Rio, Ojai, Piru, and Thousand Oaks); and one continuous PM_{2.5} non-FEM monitor (Simi Valley), that all monitor PM_{2.5} hourly. The annual PM_{2.5} NAAQS is based on the annual weighted mean of the 24-hour averages, in $\mu\text{g}/\text{m}^3$ (level: 15). The 24-hour NAAQS for PM_{2.5} is based on the 98th percentile 24-hour average, in $\mu\text{g}/\text{m}^3$ (level: 35).

The PM₁₀ monitoring network includes three PM₁₀ FRM monitors (El Rio, and Simi Valley (primary and collocated)), and two PM₁₀ FEM monitors (El Rio and Simi Valley). The 24-hour NAAQS for PM₁₀ is set at a level not to be exceeded more than once per year, on average, over 3 years, in $\mu\text{g}/\text{m}^3$ (level: 150).

Appendix E presents documentation of monitor collocation requirements as specified in 40 CFR 58 Appendix A, Section 3. Appendix E also presents documentation for pollutants for which there are no collocation requirements in Ventura County.

There are no PM_{2.5} or PM₁₀ monitors required for SIP or maintenance planning.

2.3.3 Speciation Trends Network (STN), Chemical Speciation Network (CSN)

Under the STN, a part of the CSN, VCAPCD operates a speciation monitor at the Simi Valley air monitoring station. Samples collected from the speciation samplers are analyzed by an EPA contractor. The samplers, a Speciation Air Sampling System (SASS) and URG carbon sampler, are maintained by VCAPCD for EPA. The Met One SASS sampler has been operational since 12/01/2001, and the URG 3000 N sampler since 03/01/2009.

VCAPCD has responsibility to receive the SASS and URG filters, maintain and operate the samplers, and return the exposed filters to the EPA contractor for analysis. The SASS filter module and URG filter cassette are sent to VCAPCD to be run and then returned on a tight (1-in-3 day, alternate) schedule to an EPA contractor for analysis. Although we are fulfilling our responsibilities described above, VCAPCD has had difficulty meeting the receiving, run, and pickup schedules set by the EPA in the alternate 1-in-3 day sampling schedule. Our discussion of these issues with EPA Region 9 reveals this to be a common problem. EPA Region 9, the EPA's contractor, and VCAPCD will be refining these sampling procedures and schedules.

Other aspects of the CSN, such as independent field auditing, are the responsibility of agencies other than the VCAPCD. The California Air Resources Board (CARB) and EPA

are currently exploring assignment of the role of Primary Quality Assurance Organization (PQAO) for the CSN monitoring program. To our knowledge, this issue has not been resolved. Currently, no outside auditing is being conducted for this program, and no audits have been completed since at least 2008.

2.3.4 Photochemical Assessment Monitoring Stations (PAMS)

Section 182(c)(1) of the 1990 Clean Air Act Amendments (CAAA) required the EPA Administrator to promulgate rules for the enhanced monitoring of ozone, NOx, and VOC to obtain more comprehensive and representative data on ozone air pollution. Immediately following the promulgation of such rules, the affected States were to commence such actions as were necessary to adopt and implement a program to improve ambient monitoring activities and the monitoring of emissions of NOx and VOC.

Each State Implementation Plan (SIP) for the affected areas must contain measures to implement the ambient monitoring of such air pollutants. The 40 CFR 58 required States to establish PAMS as part of their SIP monitoring networks in ozone nonattainment areas classified as serious, severe, or extreme. The principal reasons for requiring the collection of additional ambient air pollutant and meteorological data are the number of ozone nonattainment areas nationwide, and the need for a more comprehensive air quality database for ozone and its precursors. The chief objective of the enhanced ozone monitoring revisions is to provide an air quality database that will assist air pollution control agencies in evaluating, tracking the progress of, and, if necessary, refining control strategies for attaining the ozone NAAQS.

2.3.5 California Air Resources Board Toxic Air Contaminant Sampling

VCAPCD collects toxic samples (metals, hexavalent chromium, and aldehydes) at our Simi Valley air monitoring site. Our Simi Valley air monitoring site, one of 20 statewide sites, is part of the CARB Toxics Monitoring Network within major urban areas to provide data to determine the average annual concentrations of toxic air contaminants as input to the identification process, and to assess the effectiveness of controls.

Additionally, VCAPCD is part of the CARB toxics monitoring program for pesticides. CARB monitors pesticides at our El Rio air monitoring site.

2.4 Air Quality Data

VCAPCD’s air monitoring stations report data to the EPA’s Air Quality System (AQS) database. The data generated at these stations are public information and are available in various formats from the respective agencies. Table 5 lists some sources for air quality data.

Table 5 – Sources of Ambient Air Quality Data

| Agency | Address For Data Requests | Internet Address | Data Available |
|---|---|---|--------------------------------|
| Ventura County APCD | 669 County Square Drive Ventura, CA 93003 | http://www.vcapcd.org/ | Ventura County |
| California Air Resources Board | PO Box 2815 Sacramento, CA 95812 | http://www.arb.ca.gov/html/ds.htm | California Air Monitoring Data |
| United States Environmental Protection Agency | Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460 | http://www.epa.gov/airdata/ | National Air Monitoring Data |

Real time air quality and meteorological data is available on CARB’s Air Quality and Meteorological Information System at <http://www.arb.ca.gov/aqmis2/aqmis2.php> .

Federal regulations require that air monitoring organizations submit precision and accuracy data for the data reported to AQS. VCAPCD air monitoring precision data are submitted to the EPA AQS database on a quarterly basis and are up to date as of the publication of this report. Accuracy data are reported to the EPA by CARB.

Federal regulations require the air monitoring organizations to annually submit a letter certifying that ambient data and quality assurance data are completely submitted to AQS and that the ambient data are accurate to the best of our knowledge taking into consideration the quality assurance findings. VCAPCD’s 2012 annual data certification was submitted to EPA on 05/01/2013. A copy of this letter is provided in Appendix F.

3 Recent and Pending Modifications to the Air Monitoring Network

40 CFR 58.14(b) requires that the EPA review and approve modifications to a SLAMS monitoring network, and requires the responsible state or local agency to inform the EPA of any proposed modifications. This provides an opportunity for review and comment on the possible regulatory consequences of such action. Furthermore, the VCAPCD generally would conduct a period of parallel sampling of monitors or if a station is moved, at the current station and the proposed station for a term of several months to one year, depending upon the pollutant, the NAAQS that is of most concern, and on other factors.

3.1 Network Operations - July 2012 to June 2013

This section describes the changes made to VCAPCD's monitoring network since the publication of the 2012 Ambient Air Monitoring Network Plan, and through June 2013.

3.1.1 Network Operations with No Recent Changes

No changes were made to the ozone, particulate, speciation trends, or PAMS monitoring networks during this network plan reporting period.

3.1.2 Recent Changes to the PM_{2.5} and PM₁₀ Monitoring Networks

On November 22, 2011, VCAPCD wrote a request to EPA ("Request for Approval of Modifications to Particulate Monitoring Networks", see Appendix F). The primary focus of the request was to transition from collecting particulate data via filter media to a continuous particulate sampling at all of our air monitoring sites.

FRM filter sampling is an aged method of estimating the concentration of sized particulates in the air. The FRM particulate filter sampling method is a 24 hour sample that requires an additional 7 to 14 days for processing and computation of the particulate data for that 24 hour sample. Additionally, FRM data is collected on a 1-in-3 or 1-in-6 day interval. So, FRM particulate data is not available for every day.

On October 17, 2006, EPA published revisions to ambient air monitoring regulations that included new performance criteria for acceptance of continuous PM_{2.5} monitors as Class III FEMs. PM_{2.5} Class III FEMs are analyzers capable of providing ambient air measurements representative of one-hour or shorter period integrated PM_{2.5} concentrations as well as 24-hour measurements determined as, or equivalent to, the mean of 24 consecutive one-hour measurements. These FEM particulate samplers run continuously and report their data hourly. The FEM continuous particulate samplers provide real-time (hourly) data for an

immediate response to air quality issues.

FEM data readily fulfills the VCAPCD mission statement “To protect public health and agriculture from the adverse effects of air pollution by identifying air pollution problems and developing a comprehensive program to achieve and maintain state and federal air quality standards.” A response time of 7 to 14 days for FRM data is unacceptable for fulfilling our mission statement to responsively monitor the air quality for the concern of the public’s health.

VCAPCD proposes to progress to FEM hourly particulate sampling throughout its network. But we must do this cautiously with data analysis results to back-up and document our decision. VCAPCD is currently running a comparison of FRM to FEM data for both PM_{2.5} and PM₁₀ for the calendar year 2013. PM_{2.5} FRM to PM_{2.5} FEM will be compared at the El Rio, Thousand Oaks, and Simi Valley stations. PM₁₀ FRM to PM₁₀ FEM will be compared at the El Rio and Simi Valley stations. We originally wanted to run this FRM to FEM comparison study in 2012, but sampler supply issues with the manufacturer delayed installation, and hence, a delay in the study by one year to 2013.

Preliminary results of the comparison are quite good and match data shown in other comparisons by other agencies, specifically, and most recently, the April 7, 2011 EPA memo by Tim Hanley and Adam Reff, OAQPS titled “To assess the quality of recently approved PM_{2.5} continuous Federal Equivalent Method (FEM) data as operated in routine monitoring networks.”

EPA responded to our request for modifications to our particulate sampling network on February 11, 2012 (see Appendix F). EPA stated they approved of the “final PM_{2.5} network as outlined in the letter, if the study shows good agreement between the FRMs and FEMs.” In January and February 2014, we will run the comparisons and see if the results show good agreement. We will present the results with conclusions to EPA Region 9 and CARB. If the agreement between FRM and FEM is good, we will request to discontinue FRM operations. As noted in the conclusions of Hanley and Neff’s memo, if the results are not good, we will keep the PM_{2.5} FRM as the primary monitor while working towards improvements in FEM data quality.

3.1.3 Recent Changes to the Data Acquisition and Management System

Situations beyond our control hampered our ability to be productive and move forward with the change-over from our current data management system, ethernet data acquisition system (EDAS) to the new system (AirVision). EDAS is an old system and no longer supported by the manufacturer. EDAS has been in hourly use since 1997. Technology is advancing with data management systems and the data they acquire from the air quality

data analyzers at our air monitoring sites. Our goal is to use these advancements in technologies by having our Air Quality Technicians go into the field less often, and be able to work on the air quality analyzer in the field remotely from the VCAPCD office. This will improve staff productivity and reduce vehicle maintenance costs. VCAPCD has begun preparation and planning for the transition to AirVision. We anticipate having the transition to AirVision completed and the new system operational before the end of 2013.

3.1.4 Recent Changes to Laboratory Filter Processing Operations

In December 1998, we established a monitoring lab with an atmosphere-controlled filter room for processing our PM_{2.5} filters. In addition to our filters, we agreed to assist other air districts around the State by processing their PM_{2.5} filters. In early 2013, we had two contracts for processing particulate samples - with the San Joaquin Valley Air Pollution Control District (SJVAPCD) and CARB.

The processing of PM_{2.5} filters requires controlled atmospheric conditions for pre- and post-weighing. Even though our air conditioning unit is regularly maintained, it had been showing signs of age, and was having a very difficult time keeping the weighing room within operation specifications. In May 2013, the air conditioning unit appeared as if failure was imminent, and we could not guarantee the timely processing of PM_{2.5} filters for our clients.

The replacement cost for the air conditioning unit is approximately \$43,000. PM_{2.5} processing needs are being drastically reduced with the use of PM_{2.5} continuous samplers. Because of these issues, we reassessed whether a large financial expenditure for particulate sampling technology that is being phased out was a responsible use of funds. We decided it was not.

VCAPCD notified EPA, CARB, and SJVAPCD that we would not be able to process any more client PM_{2.5} filters. We completed processing the PM_{2.5} filters that we had received. CARB agreed to short term processing of PM_{2.5} filters until another lab could be found to process the filters. We sent filters and supplies to CARB to enable them to process filters, and CARB filter processing lab personnel worked extra shifts to respond to this immediate need. VCAPCD is very appreciative of the cooperation given to us, on such short notice, by CARB, SJVAPCD, and EPA Region 9 in addressing this issue.

VCAPCD continues to process PM_{2.5} filters from VCAPCD monitoring sites.

3.1.5 Replacement of Analyzers and Equipment Since Last Reporting Period

In the interest of keeping up with technology and a desire to be proactive, we have an analyzer replacement schedule set up for the different analyzers, samplers, and calibration

equipment. Experience has shown that repairing aging and ailing analyzers reaches a point where it is no longer productive and, ultimately, is more costly than replacing the equipment. Our proactive analyzer replacement schedule minimizes data loss, providing VCAPCD and the public with timely air quality data.

Ozone analyzers, FEMs, and calibration devices will be considered for replacement every 5 years. NOx/NO/NO₂ analyzers and data loggers will be considered for replacement every 8 years. Meteorological equipment will be considered for replacement every 7 to 15 years. Uniformity of equipment throughout our network allows us to have a small stock of replacement parts that have an expected failure rate. These parts of our air monitoring network will be replaced as they fail. The equipment that fails will be replaced quickly due to a stock of replacement parts sufficient to meet a 6 month equipment failure projection.

Table 6 summarizes the analyzer and equipment replacement that has taken place at VCAPCD air monitoring sites since preparation of the *2012 Ambient Air Monitoring Network Plan*.

Table 6 – Analyzer and Equipment Replacement – July 2012 to June 2013

| Date(s) | Equipment | Event | Notes |
|-------------------|---|-----------|---|
| 11/2012 – 01/2013 | Flow calibration devices | Purchased | Enables calibration of PM _{2.5} FEM and PM ₁₀ FEM continuous particulate samplers, and SASS sampler (operated for CARB) |
| 01/2012 | Trace NO _y analyzer to continuous NO ₂ analyzer | Converted | Converted from an unusable monitor from a discontinued program. One-fifth the cost of a new analyzer, saving VCAPCD \$11,000. |
| 01/2013 – 05/2013 | Site computers – all sites | Purchased | Last replaced in 2006. Used to communicate, via the internet, between the VCAPCD office and site datalogger. These computers also allow us to communicate with the air quality analyzers and calibrators at the air monitoring sites. |
| 01/2013 – 04/2013 | Wind sensors | Purchased | Replace RM Young Aerovane wind sensors with Climatron wind sensors at El Rio and Simi Upper Air sites. All sites now equipped with Climatron. |
| 01/2013 – 04/2013 | Temperature/humidity sensors | Purchased | Replaced all sites with Met One equipment. Temperature sensor life: 10 - 20 years, Humidity sensor life: 5 – 10 years |
| 05/2013 | Calibrator for our gaseous air quality analyzers | Purchased | Replace an ailing/aged calibrator at the El Rio site. |
| “ | Ozone analyzer | Ordered | Old ozone analyzer will be used for parts for existing ozone analyzers. |
| “ | NO ₂ /NO _x /NO analyzer | Ordered | Replace aged analyzer at the El Rio site. |

Table 6 – Analyzer and Equipment Replacement – July 2012 to June 2013 (cont'd)

| Date(s) | Equipment | Event | Notes |
|---------------------------------------|--|-----------|---|
| 05/2013 | PM2.5 FEM continuous particulate sampler | Ordered | Replace a very aged (2002) PM2.5 Beta Attenuation Monitor (BAM) at the Simi Valley site. |
| " | FEM sampler probe inlets - raised | Completed | In response to the early May 2013 CARB audits; to remove any question of roof safety railing interference or adjacent building proximity that may affect air flow to the probe inlet. |
| Fall 2013 (Estimated completion date) | Air inlet sampling lines | Purchased | Associated with the replacement of gaseous air quality analyzers and calibrators; replaced due to deterioration and the requirement of higher flow rates of the new equipment |

3.2 Network Operations – Post June 2013

This section describes proposed future changes for VCAPCD’s monitoring network.

3.2.1 Network Operations with No Proposed Changes

No changes are proposed for the ozone or the meteorological network during the remainder of this network plan reporting period.

3.2.2 Future Changes to the PM_{2.5} and PM₁₀ Monitoring Network

In summer or fall of 2013, the PM_{2.5} non-FEM sampler will be replaced with a PM_{2.5} FEM sampler.

No additional changes are proposed for the PM_{2.5} or PM₁₀ Monitoring Networks at this time. As noted in Section 3.1.2, Recent Changes to the PM_{2.5} and PM₁₀ Monitoring Networks, should FRM and FEM show good agreement following review of 2013 data, in Spring 2014, we will request to discontinue FRM operations. If agreement is not good, we will keep the FRMs as the primary monitors while working towards improvements in FEM data quality.

3.2.3 Future Changes to the Speciation Trends Network

The CSN was originally established in the early 1990’s to help determine the source of PM_{2.5} particles on days that exceeded the standard for those sites. Historically, many of the CSN sites were located at PAMS monitoring sites.

With the future of the PAMS program in Ventura County uncertain due to EPA PAMS re-engineering efforts, VCAPCD anticipates evaluating the justification for continuing the CSN at the Simi Valley monitoring site in a future annual network plan, once the PAMS

re-engineering program details are finalized.

3.2.4 Future Changes - New NO₂ Near-Road Monitoring Station

On February 9, 2010, EPA promulgated new minimum monitoring requirements for the NO₂ Monitoring Network in support of a newly revised 1-hour NO₂ NAAQS and the retained annual NAAQS. In the new monitoring requirements, state and local air monitoring agencies are required to install Near-Road NO₂ monitoring stations at locations where peak hourly NO₂ concentrations are expected to occur within the Near-Road environment in larger urban areas. State and local air agencies are required to consider traffic volumes, fleet mix, roadway design, traffic congestion patterns, local terrain or topography, and meteorology in determining where a required Near-Road NO₂ monitor should be placed. In 40 CFR Part 58 Appendix D, the EPA requires state and local air agencies to operate one Near-Road NO₂ monitor in any core-based statistical area (CBSA) with a population of 500,000 or more persons.

For site location requirements, 40 CFR Part 58, Appendix E states: "As near as practicable to the outside nearest edge of the traffic lanes of the target road segment; but shall not be located at a distance greater than 50 meters, in the horizontal, from the outside nearest edge of the traffic lanes of the target road segment." In their Technical Assistance Document (TAD) for help with siting, EPA recommends that the target distance for near-road NO₂ monitor probes be within 20 meters of the target road whenever possible.

Preliminary results of traffic data indicate that the area with the highest traffic counts is the U.S. Highway (Hwy) 101 Freeway, east of the Hwy 101 and State Route (SR) 23 interchange. Our preliminary review of the meteorology of the area, and the other factors for considering site selection and location in the TAD (*Near-Road NO₂ Monitoring Technical Assistance Document*, EPA-454/B-12-002, June 2012) indicates that a possible site location could be on the dirt median, on the north side of Hwy 101, at approximately 3600 Duesenberg Drive, Thousand Oaks, California (N34.161889, W-118.830872).

In October 2012, EPA proposed a revision to the Near-Road NO₂ monitoring requirement of site establishment by January 1, 2013. The EPA proposal, *Revision to Ambient Nitrogen Dioxide Monitoring Requirements* (proposed revision), was published in the *Federal Register* on October 19, 2012 (77 *Federal Register* 64244). The proposed revision states that a Near-Road NO₂ monitoring site would be required in each CBSA with a population more than 500,000, but less than 1 million, by January 1, 2017. Ventura County has a population of approximately 823,318 (as of 2010 census); hence only one Near-Road NO₂ site would be required to be operational by January 1, 2017.

Site acquisition and permission is the first step for the Near-Road NO₂ monitoring site. We

will begin discussions for site location permission with Caltrans, EPA, CARB, and the City of Thousand Oaks in 2015. In 2015, we will also begin the process of hiring an Air Quality Instrument Technician to help assist with the additional workload, and begin the learning curve on air quality instrumentation operation and maintenance. As noted in Table 7, we are planning on the procurement of equipment and personnel in 2015, provided EPA funding assistance. Equipment would be delivered in early 2016, and testing would begin in Spring 2016. Once permission for establishment of a site is obtained, we will begin construction of the air monitoring site during the Summer 2016. By Fall 2016, the site will begin operational testing of equipment and systems. On January 1, 2017, our Near-Road NO₂ air monitoring site in Thousand Oaks, California will officially begin collecting and reporting data.

3.2.5 Future Changes to the PAMS Network

VCAPCD has three PAMS air quality monitoring sites. El Rio is a site Type 2 (maximum precursor emission site), Simi Valley is a site Type 3 (maximum ozone concentration site), and Simi Upper Air is a Type 3 support site for collecting meteorological atmospheric structure data. The El Rio and Simi Valley sites collect canisters on a 1-in-3 day schedule during July, August, and September, pursuant to the California Alternative Plan III.

In May 2012, VCAPCD staff attended the EPA National Air Quality Conference in Denver, Colorado. At that conference, Kevin Cavender (EPA) presented "PAMS Re-Engineering". As part of that presentation, EPA proposed to decrease the number of PAMS sites from 52 to a future 26. Ventura County was a county listed as not having a PAMS monitoring site in the future. Additionally, an April 28, 2011 email from EPA Region 9 contact, Meredith Kurpius, cautioned us on changing any part of our PAMS monitoring program due to the possibility of the discontinuation of the program in Ventura County, at least until the EPA's PAMS re-engineering is finalized.

Continuous TNMOC monitoring is required at site Types 2 and 3. Our TNMOC analyzers at the El Rio and Simi Valley sites failed in 2010. In an effort to monitor ozone precursors, we installed and made operational the TNMOC analyzer at Simi Valley in April 2012. The El Rio site TNMOC analyzer has not been installed, because, as stated above, our PAMS network is on hold and we are not to make any changes to our existing PAMS network until after the EPA updates PAMS requirements.

In December 2012, at the Simi Valley Type 3 site, our hydrogen generator began to fail, and in January 2013, our hydrocarbon analyzer began to fail. Both pieces of equipment failed in April 2013. The replacement of this equipment would cost VCAPCD approximately \$11,000, plus staff time, and an ongoing operational specialty gas usage cost of \$400 per month. Due to the continued improvements in air quality and uncertainty of the value/need to identify ozone precursors at the Simi Valley site, VCAPCD questioned large financial

expenditures for a project that may be cancelled in the near future, and the value of the data for historical correlation to ozone formation. With permission to not replace the hydrocarbon equipment given via email from EPA-Region 9 Meredith Kurpius and EPA's Kevin Cavender, VCAPCD chose not to replace the equipment, and wait until the EPA's PAMS re-engineering is finalized. A letter formally requesting discontinuation of collection of continuous hydrocarbon data at the Simi Valley site is included in Appendix F.

The atmospheric profiler in Simi Valley (Simi Upper Air site) had been a very useful tool in determining lower atmosphere winds and temperature structure from the surface up to 2 kilometers. The atmospheric profiler became operational in July 1995 and continued operation until November 2010. The atmospheric profiler was designed to last about 5 years. But with upgrades and staff know-how, we were able to keep the atmospheric profiler running for many years past its design life. But in November 2010, we could no longer repair the computer and associated hardware.

In April 2011, we found a company that could rebuild our atmospheric profiler. In May 2012, that company installed the upgraded components, which made the atmospheric profiler operational again. But, the profiler upgrade failed soon after, working for short periods of time, as the atmospheric profiler upgrade company tried to make the profiler work. But after nearly 9 months of poor performance, VCAPCD stopped the project in January 2013. The atmospheric profiler failed to work for even a week at a time during those 9 months. We are now (June 2013) in talks with the upgrade company to fix the atmospheric profiler or refund the upgrade costs.

40 CFR 58 Appendix D, Section 5 specifies the network design for the PAMS program. Federal regulations require the addition of reactive nitrogen compounds (NO_y) monitoring at Type 3 sites (Simi Valley) and trace carbon monoxide (CO) monitoring at Type 2 sites (El Rio). We have not installed the instrumentation due to widespread questioning by Federal and state air agency staff of the rationale of monitoring NO_y and trace CO in Southern California.

Our gas chromatograph and carbonyl sampler are aged and are being kept operational even though they have exceeded their design life. We are keeping them operational, repairing/replacing parts that fail, until we hear further about the re-engineering requirements of PAMS.

3.2.6 Future Changes to the Data Acquisition and Management System

As described in Section 3.1.3, Recent Changes to the Data Acquisition and Management System, VCAPCD is beginning the transition from EDAS to AirVision, and anticipates completion of the project by the end of 2013.

3.2.7 Future Replacement of Analyzers and Equipment

In an effort to save staff time and maintain data collection objectives, VCAPCD has an equipment replacement schedule set up to replace our old equipment as it begins to fail, and a cost/benefit analysis shows that equipment replacement is more prudent than equipment repair. Table 7 is the anticipated analyzer and equipment replacement schedule for the next few fiscal years. This schedule is updated on an as-needed basis; if current equipment continues to function well, then replacement dates are postponed.

Table 7 – Analyzer and Equipment Replacement – Post June 2013

| Date(s) | Equipment | Event | Notes |
|---------------|--|---------|---|
| FY 2013/2014 | Two ozone analyzers | Planned | |
| " | One air quality analyzer calibrator | Planned | |
| " | One zero air generator | Planned | |
| " | One PM _{2.5} FRM sampler | Planned | |
| " | One PM _{2.5} FEM sampler | Planned | |
| FY 2014/2015 | Two ozone analyzers | Planned | |
| | One PM ₁₀ FRM sampler | Planned | |
| FY 2015/2016 | One ozone analyzer | Planned | |
| " | One air quality analyzer calibrator | Planned | |
| " | One PM _{2.5} FRM sampler | Planned | |
| " | Two PM _{2.5} FEM samplers | Planned | |
| " | Two PM ₁₀ FEM samplers | Planned | |
| " | One flow calibrator | Planned | For air quality gaseous analyzers |
| " | Glass sample trains | Planned | |
| Mid/Late 2015 | Equipment for new Near-Road NO ₂ monitor | Planned | Specific equipment unknown (as of June 2013). Begin purchase and preparation for setup and testing at new site. |
| FY 2016/2017 | One ozone analyzer | Planned | |
| " | Two PM _{2.5} FEM samplers | Planned | |
| " | One NO ₂ /NO _x /NO analyzer | Planned | |
| " | Equipment for new Near-Road NO ₂ monitor - finalize | Planned | Specific equipment unknown (as of June 2013). Complete acquisition and installation of equipment for new site. |
| FY 2017/2018 | One ozone analyzer | Planned | |
| " | Site computers – all sites | Planned | Only if needed - technological improvements of air quality analyzers may make use of computers obsolete. |
| " | AirVision data management computer | Planned | For VCAPCD office |

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Appendix A 2013 ANNUAL AIR MONITORING NETWORK PLAN CHECKLIST

The VCAPCD has included this appendix in an effort to clearly communicate the location of information required as part of Annual Monitoring Network Plans per 40 CFR 58. Table 8 is taken from the *2013 Annual Air Monitoring Network Plan Checklist*, provided to Kent Field, Monitoring Division Manager, VCAPCD, by Meredith Kurpius, PhD., Air Quality Analysis Office, Air Monitoring Team Lead, EPA Region 9. District staff replaced the column “Was the info submitted? If yes, page #s. Flag if incorrect?” in the original checklist with “Location of submitted info.” Otherwise, the content of the table is the same as the original checklist received by Dr Kurpius.

Table 8 – Location of Submitted Information – 2013 Ambient Air Monitoring Network Plan

| | ANP requirement | Citation within 40 CFR 58 | Location of submitted info | Does the information provided meet the req? | Notes |
|-----|--|---|-----------------------------------|---|--------------|
| 1. | Submit plan by July 1 st | 58.10 (a)(1) | Submittal letter | | |
| 2. | Statement of purpose for each monitor | 58.10 (a)(1) | Section 2.1 and Appendix B | [Yes if correct info was submitted] | |
| 3. | 30-day public comment / inspection period | 58.10 (a)(1), 58.10 (a)(2) | Section 1 | | |
| 4. | Modifications to SLAMS network – case when we are not approving actual system modifications (i.e., we will do it outside the ANP process) | 58.10 (a)(2) 58.10(e) | Appendix F | [Yes if correct info was submitted] | |
| 5. | Modifications to SLAMS network – case when we are approving actual system modifications per 58.14(c) | 58.10 (a)(2) 58.10 (b)(5) 58.10(e) 58.14 (c) | Appendix F | [Yes if correct info was submitted and 58.14(c) has been met] | |
| 6. | Does plan include documentation (e.g., attached approval letter) for system modifications that have been approved since last ANP approval? | | Appendix F | [Yes if correct info was submitted] | |
| 7. | NCore site operational (by 1/1/2011) | 58.10 (a)(3) | Appendix C (NA) | | |
| 8. | Pb site for 0.5-1.0 tpy sources operational (by 12/27/2011) | 58.10 (a)(4) | Appendix C (NA) | | |
| 9. | NO2 plan for area-wide and RA40 sites submitted by 7/1/2012 | 58.10 (a)(5) | Appendix C (NA) | | |
| 10. | NO2 area-wide and RA40 sites operational by 1/1/2013 | 58.10 (a)(5) | Appendix C (NA) | | |
| 11. | NO2 plan for Near-Road sites submitted by 7/1/2013 | 58.10 (a)(5) | Appendix C (NA) | | |
| 12. | SO2 sites operational (by 1/1/2013) | 58.10 (a)(6) and 58.13(d) | Appendix C (NA) | | |
| 13. | AQS site identification number for each site | 58.10 (b)(1) | Table 1 and Appendix B | [Yes if correct info was submitted] | |

Table 8 – Location of Submitted Information – 2013 Ambient Air Monitoring Network Plan (cont'd)

| | ANP requirement | Citation within 40 CFR 58 | Location of submitted info | Does the information provided meet the req? | Notes |
|-----|---|----------------------------------|-----------------------------------|--|--------------|
| 14. | Location of each site: street address and geographic coordinates | 58.10 (b)(2) | Appendix B | [Yes if correct info was submitted] | |
| 15. | Sampling and analysis method(s) for each measured parameter | 58.10 (b)(3) | Appendix B | | |
| 16. | Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal | 58.10 (b)(5) | NA | [Yes if correct info was submitted, (assumes we are not approving the changes in ANP)] | |
| 17 | Scale of representativeness for each monitor as defined in Appendix D | 58.10(b)(6); App D | Appendix B | | |
| 18. | Identification of sites suitable and sites not suitable for comparison to the annual PM _{2.5} NAAQS as described in Part 58.30 | 58.10 (b)(7) | Appendix B | | |
| 19. | MSA, CBSA, CSA or other area represented by the monitor | 58.10 (b)(8) | Appendix B | [Yes if correct info was submitted] | |
| 20. | Designation of any Pb monitors as either source-oriented or non-source-oriented | 58.10 (b)(9) | Appendix C (NA) | [Yes if correct info was submitted] | |
| 21. | Any source-oriented Pb site for which a waiver has been granted by EPA RA | 58.10 (b)(10) | Appendix C (NA) | [Yes if correct info was submitted] | |
| 22. | Any Pb monitor for which a waiver has been requested or granted by EPA RA for us of Pb-PM ₁₀ in lieu of Pb-TSP | 58.10 (b)(11) | Appendix C (NA) | [Yes if correct info was submitted] | |
| 23. | <i>Identification of required NO₂ monitors as either Near-Road or area-wide</i> | <i>58.10 (b)(12)</i> | Table 1 and Appendix C | | |

Table 8 – Location of Submitted Information – 2013 Ambient Air Monitoring Network Plan (cont'd)

| | ANP requirement | Citation within 40 CFR 58 | Location of submitted info | Does the information provided meet the req? | Notes |
|-----|---|--------------------------------------|-----------------------------------|--|--------------|
| 24. | <i>Identification of any PM2.5 FEMs and/or ARMs not eligible to be compared to the NAAQS (Note 1: must include required data assessment.) (Note 2: Required SLAMS must monitor PM2.5 with NAAQS-comparable monitor at the required sample frequency.)</i> | 58.10 (b)(13) 58.11 (e) | NA | | |
| 25. | <i>For SPMs listed as non-regulatory, note the start Date of FRM/FEM/ARM at SPM. If > 24 months, and monitor is eligible for comparison to the NAAQS per 58.11 (e) and 58.30, the agency must supply information that App A, C or E requirements were not met.</i> | 58.20(c) | NA | | |
| 26. | Document how states and local agencies provide for the review of changes to a PM2.5 monitoring network that impact the location of a violating PM2.5 monitor. | 58.10 (c) | Appendix C | [Yes if correct info was submitted] | |
| 27. | <i>Does the plan include a request for approval for and alternative to appendix A requirements for SPMs operating a FRM/FEM/ARM which also meets appendix E?</i> | 58.11 (a) (2) | NA | | |
| 28. | Precision/Accuracy reports submitted to AQS | 58.16(a); App A, 1.3 and 5.1.1 | Appendix B | | |
| 29. | Annual data certification submitted | 58.15 App. A 1.3 | Section 2.4 | | |
| 30. | Frequency of flow rate verification for manual PM samplers audit | App A 3.3.2 | Appendix B | | |

Table 8 – Location of Submitted Information – 2013 Ambient Air Monitoring Network Plan (cont'd)

| | ANP requirement | Citation within 40 CFR 58 | Location of submitted info | Does the information provided meet the req? | Notes |
|-----|--|----------------------------------|-----------------------------------|--|--------------|
| 31. | Frequency of flow rate verification for automated PM analyzers audit | App A 3.2.3 | Appendix B | | |
| 32. | Frequency of one-point flow rate verification for Pb samplers audit | App A 3.3.4.1 | NA | | |
| 33. | Frequency of one-point QC check (gaseous) | App. A 3.2.1 | Appendix B | | |
| 34. | Date of last Annual Performance Evaluation (gaseous) | App. A 3.2.2 | Appendix B | | |
| 35. | Dates of last two semi-annual flow rate audits for PM monitors | App A, 3.2.4 and 3.3.3 | Appendix B | | |
| 36. | Dates of last two semi-annual flow rate audits for Pb monitors | App A 3.3.4.1 | NA | | |
| 37. | PM2.5 co-location | App A 3.2.5 | Appendix E | | |
| 38. | <i>Designation of a primary monitor if there is more than one monitor for a pollutant at a site.</i> | Need to determine collocation | Appendix B | | |
| 39. | Distance between co-located monitors (<i>Note: waiver request or the date of previous waiver approval must be included if the distance deviates from requirement.</i>) | App. A 3.2.5.6 and 3.2.6.3 | Appendix B | | |
| 40. | Manual PM10 method co-location met? (note: continuous PM10 does not have this requirement) | App A 3.3.1 | Appendix B and Appendix E | | |
| 41. | Pb co-location | App A 3.3.4.3 | Appendix E (NA) | | |
| 42. | PM10-2.5 co-location (note: only applies to Fresno and Phoenix NCore sites) | App A 3.3.6 | Appendix E (NA) | | |

Table 8 – Location of Submitted Information – 2013 Ambient Air Monitoring Network Plan (cont'd)

| | ANP requirement | Citation within 40 CFR 58 | Location of submitted info | Does the information provided meet the req? | Notes |
|-----|--|---|-----------------------------------|--|--------------|
| 43. | Instrument/monitoring method code for each monitor: is it reported properly? Is it reported correctly (i.e., appropriate method code for regulatory monitors)? | App C 2.4.1.2 | Appendix B | | |
| 44. | <i>For agencies that share monitoring responsibilities in an MSA/CSA: does each affected State or local agency meet full monitoring requirements or is an agreement between the affected agencies and the EPA Regional Administrator in place?</i> | App D 2(e) | Section 2.3.3 | | |
| 45. | Start date for each monitor | Required to determine if other req. (e.g., min # and co-lo) are met | Appendix B | [Yes if correct info was submitted] | |
| 46. | Instrument monitor type for each monitor | Required to determine if other req. (e.g., min # and co-lo) are met | Appendix B | [Yes if correct info was submitted] | |
| 47. | Monitoring objective for each instrument | App D 1.1 58.10 (b)(6) | Appendix B | [Yes if correct info was submitted] | |
| 48. | Site type for each instrument | App D 1.1.1 | Appendix B | [Yes if correct info was submitted] | |

Table 8 – Location of Submitted Information – 2013 Ambient Air Monitoring Network Plan (cont'd)

| | ANP requirement | Citation within 40 CFR 58 | Location of submitted info | Does the information provided meet the req? | Notes |
|-----|---|---|-----------------------------------|--|--------------|
| 49. | Instrument parameter code for each instrument | Required to determine if other req. (e.g., min # and co-lo) are met | Appendix B | [Yes if correct info was submitted] | |
| 50. | Instrument parameter occurrence code for each instrument | Required to determine if other req. (e.g., min # and co-lo) are met | Appendix B | [Yes if correct info was submitted] | |
| 51. | Sampling season for ozone (note: date of waiver approval must be included if the sampling season deviates from requirement) | 58.10 (b)(4) App D, 4.1(i) | Appendix B | | |
| 52. | Sampling schedule for PM2.5 - applies to year-round and seasonal sampling schedules (note: date of waiver approval must be included if the sampling season deviates from requirement) | 58.10 (b)(4) 58.12(d) App D 4.7 EPA flowchart | Appendix B | | |
| 53. | Sampling schedule for PM10 | 58.10 (b)(4) 58.12(e) App D 4.6 | Appendix B | | |
| 54. | Sampling schedule for Pb | 58.10 (b)(4) 58.12(b) App D 4.5 | NA | | |

Table 8 – Location of Submitted Information – 2013 Ambient Air Monitoring Network Plan (cont'd)

| | ANP requirement | Citation within 40 CFR 58 | Location of submitted info | Does the information provided meet the req? | Notes |
|-----|--|---------------------------------------|-----------------------------------|--|--------------|
| 55. | Sampling schedule for PM10-2.5 | 58.10 (b)(4) 58.12(f) App D 4.8 | NA | | |
| 56. | Minimum # of monitors for O3[Note: should be supported by MSA ID, MSA population, DV, # monitors, and # required monitors] | App D, 4.1(a) and Table D-2 | Appendix C | | |
| 57. | Identification of max. conc. O3 monitor(s) | App D 4.1 (b) | Section 2.3.1 | | |
| 58. | <i>Minimum monitoring requirements met for Near-Road NO2 (2014 start date)</i> | <i>App D 4.3.2</i> | Appendix C | | |
| 59. | <i>Minimum monitoring requirements met for area-wide NO2</i> | <i>App D 4.3.3</i> | Appendix C | | |
| 60. | <i>Minimum monitoring requirements met for RA-40 NO2</i> | <i>App D 4.3.4</i> | Appendix C (NA) | | |
| 61. | Minimum monitoring requirements met for SO2 [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.] | App D 4.4 | Appendix C (NA) | | |
| 62. | Minimum monitoring requirements met for Pb [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.] | App D 4.5 58.13(a) | Appendix C (NA) | | |
| 63. | Minimum # of monitors for PM2.5 [Note 1: should be supported by MSA ID, MSA population, DV, # monitors, and # required monitors] [Note 2: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.] | App D, 4.7.1(a) and Table D-5 | Appendix C | | |

Table 8 – Location of Submitted Information – 2013 Ambient Air Monitoring Network Plan (cont'd)

| | ANP requirement | Citation within 40 CFR 58 | Location of submitted info | Does the information provided meet the req? | Notes |
|-----|---|-------------------------------------|-----------------------------------|--|--------------|
| 64. | <i>Optional PM2.5 Network Clarifications: Provide a list of required sites if it does not include all SLAMS. [Note: default will assume all SLAMS are considered required sites.]</i> | Need to assess several requirements | Sections 2.3.2 – 2.3.4 | | |
| 65. | Required PM2.5 sites represent <i>area-wide</i> air quality | App D 4.7.1(b) | Table 3 | | |
| 66. | For PM2.5, is at least one site <i>at neighborhood or larger scale in an area</i> of expected maximum concentration | App D 4.7.1(b)(1) | Table 3 and Appendix B | | |
| 67. | If <i>additional</i> SLAMS PM2.5 required, is there a site in an area of poor air quality | App D 4.7.1(b)(2) | NA | | |
| 68. | Minimum monitoring requirements for continuous PM2.5 | App D 4.7.2 | Appendix C | | |
| 69. | Requirements for PM2.5 background and transport sites | App D 4.7.3 | NA | | |
| 70. | Are PM2.5 Chemical Speciation requirements met for official STN sites? | App D 4.7.4 | Section 2.3.3 | | |
| 71. | Minimum # of monitors for PM10 | App D, 4.6 (a) and Table D-4 | Appendix C | | |
| 72. | Minimum monitoring requirements met for PM10-2.5 mass | App D 4.8 | Appendix C (NA) | | |
| 73. | Distance of site from nearest road | App E 6 | Appendix B | | |
| 74. | Traffic count of nearest road | App E | Appendix B | | |
| 75. | Groundcover | App E 3(a) | Appendix B | | |
| 76. | Probe height | App E 2 | Appendix B | | |
| 77. | Distance from supporting structure | App E 2 | Appendix B | | |

Table 8 – Location of Submitted Information – 2013 Ambient Air Monitoring Network Plan (cont'd)

| | ANP requirement | Citation within 40 CFR 58 | Location of submitted info | Does the information provided meet the req? | Notes |
|-----|---|----------------------------------|-----------------------------------|--|--------------|
| 78. | Distance from obstructions on roof | App E 4(b) | Appendix B | | |
| 79. | Distance from obstructions not on roof | App E 4(a) | Appendix B | | |
| 80. | Distance from trees | App E 5 | Appendix B | | |
| 81. | Distance to furnace or incinerator flue | App E 3(b) | Appendix B | | |
| 82. | Unrestricted airflow | App E, 4(a) and 4(b) | Appendix B | | |
| 83. | Probe material (if applicable) | App E 9 | Appendix B | | |
| 84. | Residence time (if applicable) | App E 9 | Appendix B | | |

Public Comments on Annual Network Plan

Were comments submitted to the S/L/T agency during the public comment period?

If no, skip the remaining questions.

If yes:

- Were any of the comments substantive?
 - If yes, which ones?
 - Explain basis for determination if any comments were considered not substantive:
- Did the agency respond to the substantive comments?
 - If yes, was the response adequate?
- Do the substantive comments require separate EPA response (i.e., agency response wasn't adequate)?
- Are the sections of the annual network plan that received substantive comments approvable after consideration of comments?
 - If yes, provide rationale:

Appendix B Detailed Station Information

This appendix presents detailed site information the reporting of which is required by federal regulation.

Table 9 – El Rio Station Information

| Local Site Name > | | El Rio – Rio Mesa School #2 | | | |
|--------------------------------------|---|------------------------------------|--------------------------------|-------------------------------------|--|
| AQS ID | 061113001 | | | | |
| GPS coordinates | 34.25238, -119.14318 | | | | |
| Street address | 545 Central Ave, Oxnard CA 93030 | | | | |
| County | Ventura County | | | | |
| Distance to roadways | 101 meters | | | | |
| Traffic count | 5,000 vehicles/day, 2013 | | | | |
| Groundcover | Paved/Asphalt | | | | |
| Representative statistical area name | Oxnard-Thousand Oaks-Ventura Metro Area | | | | |
| Pollutant, POC > | Ozone, 1 | NO₂, 1 | PM_{2.5} FEM, 3 | PM_{2.5} FRM, 1 | |
| Parameter code | 44201 | 42602 | 88101 | 88101 | |
| Basic monitoring objective | NAAQS | NAAQS | NAAQS | NAAQS | |
| Site type | Population Exposure | Population Exposure | Population Exposure | Population Exposure | |
| Monitor type | SLAMS, PAMS | PAMS | SLAMS | SLAMS | |
| Instrument manufacturer and model | API Model 400 | API Model 200 | Met One BAM 1020 | Thermo Fischer Scientific 2025 Seq. | |
| Method code | 087 | 082 | 170 | 118 | |
| Primary monitor | Yes | Yes | No | Yes | |
| FRM/FEM/ARM/other | FRM | FRM | FEM | FRM | |
| Collecting agency | VCAPCD | VCAPCD | VCAPCD | VCAPCD | |
| Analytical lab | NA | NA | NA | NA | |
| Reporting agency | VCAPCD | VCAPCD | VCAPCD | VCAPCD | |
| Spatial scale | Urban | Urban | Neighborhood | Neighborhood | |
| Monitoring start date | 01/01/1979 | 01/01/1980 | 01/26/2012 | 01/01/1999 | |
| Current sampling frequency | Continuous | Continuous | Continuous | 1-in-6 days | |
| Calculated sampling frequency | NA | NA | NA | NA | |
| Sampling season | Year-round | Year-round | Year-round | Year-round | |
| Probe height | 4.3 meters | 4.3 meters | 4.6 meters | 5.8 meters | |
| Distance from supporting structure | 1.2 meters | 1.2 meters | 1.7 meters | 2.2 meters | |
| Distance from obstructions on roof | None | None | None | None | |

Table 9 – El Rio Station Information (cont'd)

| Pollutant, POC > | Ozone, 1 | NO ₂ , 1 | PM _{2.5} FEM, 3 | PM _{2.5} FRM, 1 |
|---|---------------------------------|---------------------------------|------------------------------|--------------------------------|
| Distance from obstructions not on roof | None | None | None | None |
| Distance from trees | 25 meters | 25 meters | 29 meters | 27 meters |
| Distance to furnace or incinerator flue | NA | NA | NA | NA |
| Distance between collocated monitors | NA | NA | NA | NA |
| Unrestricted airflow | 360 degrees | 360 degrees | 360 degrees | 360 degrees |
| Probe material for reactive gases | Borosilicate glass & FEP Teflon | Borosilicate glass & FEP Teflon | NA | NA |
| Residence time for reactive gases | 7.5 seconds | 8.8 seconds | NA | NA |
| Will there be changes within the next 18 months? | No | No | No | Maybe see Section 3.1.2 |
| Is it suitable for comparison against the annual PM _{2.5} NAAQS? | NA | NA | Yes | Yes |
| Frequency of flow rate verification for manual PM samplers | NA | NA | NA | 1x/month flow 2x/month leak |
| Frequency of flow rate verification for automated PM analyzers | NA | NA | 2x/month flow and leak check | NA |
| Frequency of one-point QC check for gaseous instruments | Weekly | Weekly | NA | NA |
| Last Annual Performance Evaluation for gaseous parameters | 04/30/2013 | 04/30/2013 | NA | NA |
| Last two semi-annual flow rate audits for PM monitors | NA | NA | 11/07/2012 04/30/2013 | 11/07/2012 04/30/2013 |

Table 9 – El Rio Station Information (cont'd)

| Local Site Name > | | El Rio – Rio Mesa School #2 | | | |
|--------------------------------------|---|------------------------------------|---|---|--|
| AQS ID | 061113001 | | | | |
| GPS coordinates | 34.25238, -119.14318 | | | | |
| Street address | 545 Central Ave, Oxnard CA 93030 | | | | |
| County | Ventura County | | | | |
| Distance to roadways | 101 meters | | | | |
| Traffic count | 5,000 vehicles/day, 2013 | | | | |
| Groundcover | Paved/Asphalt | | | | |
| Representative statistical area name | Oxnard-Thousand Oaks-Ventura Metro Area | | | | |
| Pollutant, POC > | PM₁₀ FEM, 3 | PM₁₀ FRM, 1 | VOCs, 1 | Carbonyls, 1 | |
| Parameter code | 81102 | 81102 | NA | 43502 43503 43551 | |
| Basic monitoring objective | NAAQS | NAAQS | Research | Research | |
| Site type | Population exposure | Population exposure | Maximum Precursor Emissions Impact | Maximum Precursor Emissions Impact | |
| Monitor type | SLAMS | SLAMS | PAMS | PAMS | |
| Instrument manufacturer and model | Met One BAM 1020 | GMW 1200 | Varian 3800 | Atec Model 800 | |
| Method code | 122 | 063 | 123 | 102 | |
| Primary monitor | No | Yes | Yes | Yes | |
| FRM/FEM/ARM/other | FEM | FRM | Other | Other | |
| Collecting agency | VCAPCD | VCAPCD | VCAPCD | VCAPCD | |
| Analytical lab | NA | NA | VCAPCD | Atmospheric Analysis & Consulting | |
| Reporting agency | VCAPCD | VCAPCD | VCAPCD | VCAPCD | |
| Spatial scale | Neighborhood | Neighborhood | Neighborhood | Urban | |
| Monitoring start date | 07/22/2012 | 04/03/1988 | 06/01/1994 | 06/01/1995 | |
| Current sampling frequency | Continuous | 1-in-6 days | 1-in-3 days and days in which ozone is predicted to exceed .075 ppm | 1-in-3 days and days in which ozone is predicted to exceed .075 ppm | |
| Calculated sampling frequency | NA | NA | NA | NA | |
| Sampling season | Year-round | Year-round | July 1 through September 30 | July 1 through September 30 | |
| Probe height | 4.5 meters | 5.2 meters | 4.3 meters | 5.0 meters | |

Table 9 – El Rio Station Information (cont'd)

| Pollutant, POC > | PM ₁₀ FEM, 3 | PM ₁₀ FRM, 1 | VOCs, 1 | Carbonyls, 1 |
|---|------------------------------|--------------------------|---------------------------------|--------------|
| Distance from supporting structure | 1.6 meters | 1.6 meters | 1.2 meters | 1.5 meters |
| Distance from obstructions on roof | None | None | None | None |
| Distance from obstructions not on roof | None | None | None | None |
| Distance from trees | 29 meters | 28 meters | 29 meters | 30 meters |
| Distance to furnace or incinerator flue | NA | NA | NA | NA |
| Distance between collocated monitors | NA | NA | NA | NA |
| Unrestricted airflow | 360 degrees | 360 degrees | 360 degrees | 360 degrees |
| Probe material for reactive gases | NA | NA | Borosilicate glass & FEP Teflon | NA |
| Residence time for reactive gases | NA | NA | NA | Maybe |
| Will there be changes within the next 18 months? | No | Yes | Maybe, awaiting EPA decision | NA |
| Is it suitable for comparison against the annual PM _{2.5} NAAQS? | NA | NA | NA | NA |
| Frequency of flow rate verification for manual PM samplers | NA | 1x/month flow | NA | NA |
| Frequency of flow rate verification for automated PM analyzers | 2x/month flow and leak check | NA | NA | NA |
| Frequency of one-point QC check for gaseous instruments | NA | NA | 2x/smog season, June & October | NA |
| Last Annual Performance Evaluation for gaseous parameters | NA | NA | 2011 | NA |
| Last two semi-annual flow rate audits for PM monitors | 11/07/2012 04/30/2013 | 11/07/2012 04/30/2013 | NA | NA |

Table 10 – Ojai Station Information

| Local Site Name > | | Ojai - Ojai Avenue | |
|---|---|--------------------------------|--|
| AQS ID | 061111004 | | |
| GPS coordinates | 34.44804,-119.23131 | | |
| Street address | 1201 Ojai Ave., Ojai CA 93023 | | |
| County | Ventura County | | |
| Distance to roadways | 65 meters | | |
| Traffic count | 7,300 vehicles/day, 2011 | | |
| Groundcover | Paved | | |
| Representative statistical area name | Oxnard-Thousand Oaks-Ventura Metro Area | | |
| Pollutant, POC > | Ozone, 1 | PM_{2.5} FEM, 3 | |
| Parameter code | 44201 | 88101 | |
| Basic monitoring objective | NAAQS | NAAQS | |
| Site type | Population exposure | Population exposure | |
| Monitor type | SLAMS | SLAMS | |
| Instrument manufacturer and model | API Model 400 | Met One BAM 1020 | |
| Method code | 087 | 170 | |
| Primary monitor | Yes | Yes | |
| FRM/FEM/ARM/other | FRM | FEM | |
| Collecting agency | VCAPCD | VCAPCD | |
| Analytical lab | NA | NA | |
| Reporting agency | VCAPCD | VCAPCD | |
| Spatial scale | Urban | Neighborhood | |
| Monitoring start date | 04/01/1996 | 11/29/2011 | |
| Current sampling frequency | Continuous | Continuous | |
| Calculated sampling frequency | NA | NA | |
| Sampling season | Year-round | Year-round | |
| Probe height | 4.0 meters | 4.6 meters | |
| Distance from supporting structure | 1.5 meters | 1.5 meters | |
| Distance from obstructions on roof | None | None | |
| Distance from obstructions not on roof | None | None | |
| Distance from trees | 35 meters | 33 meters | |
| Distance to furnace or incinerator flue | NA | NA | |
| Distance between collocated monitors | NA | NA | |
| Unrestricted airflow | 360 degrees | 360 degrees | |

Table 10 – Ojai Station Information (cont'd)

| Pollutant, POC > | Ozone, 1 | PM _{2.5} FEM, 3 |
|---|---------------------------------|------------------------------|
| Probe material for reactive gases | Borosilicate glass & FEP Teflon | NA |
| Residence time for reactive gases | 8.5 seconds | NA |
| Will there be changes within the next 18 months? | No | No |
| Is it suitable for comparison against the annual PM _{2.5} NAAQS? | NA | Yes |
| Frequency of flow rate verification for manual PM samplers | NA | NA |
| Frequency of flow rate verification for automated PM analyzers | NA | 2x/month flow and leak check |
| Frequency of one-point QC check for gaseous instruments | Weekly | NA |
| Last Annual Performance Evaluation for gaseous parameters | 05/02/2013 | NA |
| Last two semi-annual flow rate audits for PM monitors | NA | 11/07/2012 05/02/2012 |

Table 11 – Piru Station Information

| Local Site Name > | | Piru – Pacific Avenue | |
|---|---|--------------------------------|--|
| AQS ID | 061110009 | | |
| GPS coordinates | 34.40426, -118.80991 | | |
| Street address | 3301 Pacific Ave., Piru CA 93040 | | |
| County | Ventura County | | |
| Distance to roadways | 382 meters | | |
| Traffic count | 23,000 vehicles/day, 2011 | | |
| Groundcover | Gravel | | |
| Representative statistical area name | Oxnard-Thousand Oaks-Ventura Metro Area | | |
| Pollutant, POC > | Ozone, 1 | PM_{2.5} FEM, 3 | |
| Parameter code | 44201 | 88101 | |
| Basic monitoring objective | NAAQS | NAAQS | |
| Site type | Population exposure | Population exposure | |
| Monitor type | SLAMS | SLAMS | |
| Instrument manufacturer and model | API Model 400 | Met One BAM 1020 | |
| Method code | 087 | 170 | |
| Primary monitor | Yes | Yes | |
| FRM/FEM/ARM/other | FRM | FEM | |
| Collecting agency | VCAPCD | VCAPCD | |
| Analytical lab | NA | NA | |
| Reporting agency | VCAPCD | VCAPCD | |
| Spatial scale | Urban | Neighborhood | |
| Monitoring start date | 11/03/2000 | 11/15/2011 | |
| Current sampling frequency | Continuous | Continuous | |
| Calculated sampling frequency | NA | NA | |
| Sampling season | Year-round | Year-round | |
| Probe height | 3.5 meters | 4.6 meters | |
| Distance from supporting structure | 1.0 meters | 2.0 meters | |
| Distance from obstructions on roof | None | None | |
| Distance from obstructions not on roof | None | None | |
| Distance from trees | 30 meters | 29 meters | |
| Distance to furnace or incinerator flue | NA | NA | |
| Distance between collocated monitors | NA | NA | |
| Unrestricted airflow | 360 degrees | 360 degrees | |
| Probe material for reactive gases | Borosilicate glass & FEP Teflon | NA | |
| Residence time for reactive gases | 9.9 seconds | NA | |

Table 11 – Piru Station Information (cont'd)

| Pollutant, POC > | Ozone, 1 | PM _{2.5} FEM, 3 |
|---|------------|---------------------------------|
| Will there be changes within the next 18 months? | No | No |
| Is it suitable for comparison against the annual PM _{2.5} NAAQS? | NA | Yes |
| Frequency of flow rate verification for manual PM samplers | NA | NA |
| Frequency of flow rate verification for automated PM analyzers | NA | 2x/month flow and leak check |
| Frequency of one-point QC check for gaseous instruments | Weekly | NA |
| Last Annual Performance Evaluation for gaseous parameters | 05/20/2013 | NA |
| Last two semi-annual flow rate audits for PM monitors | NA | 11/07/2012 05/20/2013 |

Table 12 – Simi Valley Station Information

| Local Site Name > | | Simi Valley – Cochran Street | | | |
|---|---|-------------------------------------|-------------------------------------|------------------------------------|--|
| AQS ID | 061112002 | | | | |
| GPS coordinates | 34.27640, -118.68375 | | | | |
| Street address | 5400 Cochran St., Simi Valley CA 93063 | | | | |
| County | Ventura County | | | | |
| Distance to roadways | 278 meters | | | | |
| Traffic count | 10,200 vehicles/day, 2013 | | | | |
| Groundcover | Asphalt | | | | |
| Representative statistical area name | Oxnard-Thousand Oaks-Ventura Metro Area | | | | |
| Pollutant, POC > | Ozone,1 | NO₂, 1 | PM_{2.5} FRM, 1 | PM_{2.5} Non-FEM, 3 | |
| Parameter code | 44201 | 42602 | 88101 | 88501 | |
| Basic monitoring objective | NAAQS | NAAQS | NAAQS | Public Information | |
| Site type | Highest concentration | Highest concentration | Highest concentration | Highest concentration | |
| Monitor type | SLAMS, PAMS | PAMS | SLAMS | SLAMS | |
| Instrument manufacturer and model | API Model 400 | API Model 200 | Thermo Fischer Scientific 2025 Seq. | Met One BAM 1020 | |
| Method code | 087 | 082 | 118 | 170 | |
| Primary monitor | Yes | Yes | Yes | No | |
| FRM/FEM/ARM/other | FRM | FRM | FRM | NA | |
| Collecting agency | VCAPCD | VCAPCD | VCAPCD | VCAPCD | |
| Analytical lab | NA | NA | NA | NA | |
| Reporting agency | VCAPCD | VCAPCD | VCAPCD | VCAPCD | |
| Spatial scale | Urban | Urban | Neighborhood | Neighborhood | |
| Monitoring start date | 06/01/1985 | 06/01/1985 | 01/01/1999 | 01/01/2004 | |
| Current sampling frequency | Continuous | Continuous | 1-in-3 days | Continuous | |
| Calculated sampling frequency | NA | NA | NA | NA | |
| Sampling season | Year-round | Year-round | Year-round | Year-round | |
| Probe height | 3.5 meters | 3.5 meters | 6.8 meters | 4.6 meters | |
| Distance from supporting structure | 1.0 meters | 1.0 meters | 2.3 meters | 2.3 meters | |
| Distance from obstructions on roof | None | None | None | None | |
| Distance from obstructions not on roof | None | None | None | None | |
| Distance from trees | 49 meters | 49 meters | 60 meters | 49 meters | |
| Distance to furnace or incinerator flue | NA | NA | NA | NA | |
| Distance between collocated monitors | NA | NA | NA | NA | |
| Unrestricted airflow | 360 degrees | 360 degrees | 360 degrees | 360 degrees | |

Table 12 – Simi Valley Station Information (cont'd)

| Pollutant, POC > | Ozone, 1 | NO ₂ , 1 | PM _{2.5} FRM, 1 | PM _{2.5} Non-FEM, 3 |
|---|---------------------------------|---------------------------------|--------------------------------|------------------------------|
| Probe material for reactive gases | Borosilicate glass & FEP Teflon | Borosilicate glass & FEP Teflon | NA | NA |
| Residence time for reactive gases | 10.2 seconds | 9.3 seconds | NA | NA |
| Will there be changes within the next 18 months? | No | No | Yes, Reduction | Yes, become FEM |
| Is it suitable for comparison against the annual PM _{2.5} NAAQS? | NA | NA | Yes | No, will be with FEM |
| Frequency of flow rate verification for manual PM samplers | NA | NA | 1x/month flow 2x/month leak | NA |
| Frequency of flow rate verification for automated PM analyzers | NA | NA | NA | 1x/month flow and leak check |
| Frequency of one-point QC check for gaseous instruments | Weekly | Weekly | NA | NA |
| Last Annual Performance Evaluation for gaseous parameters | 05/09/2013 | 05/09/2013 | NA | NA |
| Last two semi-annual flow rate audits for PM monitors | NA | NA | 11/06/2012 05/09/2013 | 11/06/2012 05/09/2013 |

Table 12 – Simi Valley Station Information (cont'd)

| Local Site Name > | | Simi Valley – Cochran Street | | |
|--|---|---------------------------------------|---|-------------------------------|
| AQS ID | 061112002 | | | |
| GPS coordinates | 34.27640, -118.68375 | | | |
| Street address | 5400 Cochran St., Simi Valley CA 93063 | | | |
| County | Ventura County | | | |
| Distance to roadways | 278 meters | | | |
| Traffic count | 10,200 vehicles/day, 2013 | | | |
| Groundcover | Asphalt | | | |
| Representative statistical area name | Oxnard-Thousand Oaks-Ventura Metro Area | | | |
| Pollutant, POC > | PM_{2.5} Speciation, 1 | PM_{2.5} Speciation, 1 | VOCs, 1 | PM₁₀ FEM, 3 |
| Parameter code | NA | NA | NA | 81102-3 |
| Basic monitoring objective | Research | Research | Research | NAAQS |
| Site type | Other | Other | Maximum Precursor Emissions Impact | Highest Concentration |
| Monitor type | STN | STN | PAMS | SLAMS |
| Instrument manufacturer and model | Met One Sass | URG 3000 N | Varian 3800 | Met One BAM 1020 |
| Method code | 811 | 871 | 123 | 122 |
| Primary monitor | Yes | Yes | Yes | No |
| FRM/FEM/ARM/other | Other | Other | Other | FEM |
| Collecting agency | VCAPCD | VCAPCD | VCAPCD | VCAPCD |
| Analytical lab | US EPA | US EPA | VCAPCD | NA |
| Reporting agency | VCAPCD | VCAPCD | VCAPCD | VCAPCD |
| Spatial scale | NA | NA | Urban | Neighborhood |
| Monitoring start date | 12/01/2001 | 03/01/2009 | 06/01/1994 | 06/19/2012 |
| Current sampling frequency | 1-in-3 days | 1-in-3 days | 1-in-3 days and days in which ozone is predicted to exceed .075 ppm | Continuous |
| Calculated sampling frequency | NA | NA | NA | NA |
| Sampling season | Year-round | Year-round | July 1 through September 30 | Year-round |
| Probe height | 6.3 meters | 6.0 meters | 5.0 meters | 4.5 meters |
| Distance from supporting structure | 1.8 meters | 1.5 meters | 1.5 meters | 2.2 meters |
| Distance from obstructions on roof | None | None | None | None |
| Distance from obstructions not on roof | None | None | None | None |
| Distance from trees | 73 meters | 62 meters | 47 meters | 48 meters |

Table 12 – Simi Valley Station Information (cont'd)

| Pollutant, POC > | PM _{2.5} Speciation, 1 | PM _{2.5} Speciation, 1 | VOCs, 1 | PM ₁₀ FEM, 3 |
|---|---------------------------------|---------------------------------|---------------------------------|------------------------------|
| Distance to furnace or incinerator flue | NA | NA | NA | NA |
| Distance between collocated monitors | NA | NA | NA | NA |
| Unrestricted airflow | 360 degrees | 360 degrees | 360 degrees | 360 degrees |
| Probe material for reactive gases | NA | NA | Borosilicate glass & FEP Teflon | NA |
| Residence time for reactive gases | NA | NA | NA | NA |
| Will there be changes within the next 18 months? | No | No | No | No |
| Is it suitable for comparison against the annual PM _{2.5} NAAQS? | No | No | NA | NA |
| Frequency of flow rate verification for manual PM samplers | NA | NA | NA | NA |
| Frequency of flow rate verification for automated PM analyzers | NA | NA | NA | 2x/month flow and leak check |
| Frequency of one-point QC check for gaseous instruments | NA | NA | 2x/smog season June & October | NA |
| Last Annual Performance Evaluation for gaseous parameters | NA | NA | 2011 | NA |
| Last two semi-annual flow rate audits for PM monitors | NA | NA | NA | 11/06/2012 05/09/2013 |

Table 12 – Simi Valley Station Information (cont'd)

| Local Site Name > | | Simi Valley – Cochran Street | | |
|---|---|---------------------------------------|------------------------------------|--|
| AQS ID | 061112002 | | | |
| GPS coordinates | 34.27640, -118.68375 | | | |
| Street address | 5400 Cochran St., Simi Valley CA 93063 | | | |
| County | Ventura County | | | |
| Distance to roadways | 278 meters | | | |
| Traffic count | 10,200 vehicles/day, 2013 | | | |
| Groundcover | Asphalt | | | |
| Representative statistical area name | Oxnard-Thousand Oaks-Ventura Metro Area | | | |
| Pollutant, POC > | PM₁₀ FRM (Primary), 1 | PM₁₀ FRM (Collo), 2 | TNMOC, 3 | |
| Parameter code | 81102 | 81102 | 43102 | |
| Basic monitoring objective | NAAQS | NAAQS | Research | |
| Site type | Highest Concentration | Highest Concentration | Maximum Precursor Emissions Impact | |
| Monitor type | SLAMS | SLAMS | SLAMS/PAMS | |
| Instrument manufacturer and model | GMW 1200 | GMW 1200 | Thermo Electron 55i | |
| Method code | 063 | 063 | 164 | |
| Primary monitor | Yes | No | Yes | |
| FRM/FEM/ARM/other | FRM | FRM | Other | |
| Collecting agency | VCAPCD | VCAPCD | VCAPCD | |
| Analytical lab | NA | NA | NA | |
| Reporting agency | VCAPCD | VCAPCD | VCAPCD | |
| Spatial scale | Neighborhood | Neighborhood | Urban | |
| Monitoring start date | 11/04/1986 | 08/20/1988 | 03/01/1992 | |
| Current sampling frequency | 1-in-6 days | 1-in-6 days | Continuous | |
| Calculated sampling frequency | NA | NA | NA | |
| Sampling season | Year-round | Year-round | Year-round | |
| Probe height | 6.3 meters | 6.3 meters | 3.5 meters | |
| Distance from supporting structure | 1.8 meters | 1.8 meters | 1.0 meters | |
| Distance from obstructions on roof | None | None | None | |
| Distance from obstructions not on roof | None | None | None | |
| Distance from trees | 66 meters | 65 meters | 48 meters | |
| Distance to furnace or incinerator flue | NA | NA | NA | |
| Distance between collocated monitors | 3.0 meters | 3.0 meters | NA | |

Table 12 – Simi Valley Station Information (cont'd)

| Pollutant, POC > | PM ₁₀ FRM (Primary), 1 | PM ₁₀ FRM (Collo), 2 | TNMOC, 3 |
|---|-----------------------------------|---------------------------------|--|
| Unrestricted airflow | 360 degrees | 360 degrees | 360 degrees |
| Probe material for reactive gases | NA | NA | Borosilicate glass & FEP Teflon |
| Residence time for reactive gases | NA | NA | 8.4 seconds |
| Will there be changes within the next 18 months? | Yes, Reduction | Yes, Reduction | Maybe see Section 3.2.5 and Appendix F |
| Is it suitable for comparison against the annual PM _{2.5} NAAQS? | NA | NA | NA |
| Frequency of flow rate verification for manual PM samplers | 1x/month flow | 1x/month flow | NA |
| Frequency of flow rate verification for automated PM analyzers | NA | NA | NA |
| Frequency of one-point QC check for gaseous instruments | NA | NA | Weekly |
| Last Annual Performance Evaluation for gaseous parameters | NA | NA | 06/06/2006 |
| Last two semi-annual flow rate audits for PM monitors | 11/06/2012 05/09/2013 | 11/06/2012 05/09/2013 | NA |

Table 13 – Thousand Oaks Station Information

| Local Site Name > | | Thousand Oaks – Moorpark Road | | |
|---|---|--------------------------------------|-------------------------------------|--|
| AQS ID | 061110007 | | | |
| GPS coordinates | 34.21014, -118.87050 | | | |
| Street address | 2323 Moorpark Rd., Thousand Oaks CA 91360 | | | |
| County | Ventura County | | | |
| Distance to roadways | 193 meters | | | |
| Traffic count | 17,700 vehicles/day, 2011 | | | |
| Groundcover | Asphalt | | | |
| Representative statistical area name | Oxnard-Thousand Oaks-Ventura Metro Area | | | |
| Pollutant, POC > | Ozone, 1 | PM_{2.5} FEM, 3 | PM_{2.5} FRM, 1 | |
| Parameter code | 44201 | 88101 | 88101 | |
| Basic monitoring objective | NAAQS | NAAQS | NAAQS | |
| Site type | Population Exposure | Population Exposure | Population Exposure | |
| Monitor type | SLAMS | SLAMS | SLAMS | |
| Instrument manufacturer and model | API Model 400 | Met One BAM 1020 | Thermo Fischer Scientific 2025 Seq. | |
| Method code | 087 | 170 | 118 | |
| Primary monitor | Yes | No | Yes | |
| FRM/FEM/ARM/other | FRM | FEM | FRM | |
| Collecting agency | VCAPCD | VCAPCD | VCAPCD | |
| Analytical lab | NA | NA | NA | |
| Reporting agency | VCAPCD | VCAPCD | VCAPCD | |
| Spatial scale | Urban | Neighborhood | Neighborhood | |
| Monitoring start date | 03/01/1992 | 01/07/2012 | 01/01/1999 | |
| Current sampling frequency | Continuous | Continuous | 1-in-6 days | |
| Calculated sampling frequency | NA | NA | NA | |
| Sampling season | Year-round | Year-round | Year-round | |
| Probe height | 3.7 meters | 4.6 meters | 4.6 meters | |
| Distance from supporting structure | 1.1 meters | 2.0 meters | 2.0 meters | |
| Distance from obstructions on roof | None | None | None | |
| Distance from obstructions not on roof | None | None | None | |
| Distance from trees | 87 meters | 87 meters | 86 meters | |
| Distance to furnace or incinerator flue | NA | NA | NA | |
| Distance between collocated monitors | NA | NA - Colo not approved by EPA yet | NA | |
| Unrestricted airflow | 360 degrees | 360 degrees | 360 degrees | |

Table 13 – Thousand Oaks Station Information (cont'd)

| Pollutant, POC > | Ozone, 1 | PM _{2.5} FEM, 3 | PM _{2.5} FRM, 1 |
|---|---------------------------------|------------------------------|--------------------------------|
| Probe material for reactive gases | Borosilicate glass & FEP Teflon | NA | NA |
| Residence time for reactive gases | 13.1 seconds | NA | NA |
| Will there be changes within the next 18 months? | No | No | Yes, Reduction |
| Is it suitable for comparison against the annual PM _{2.5} NAAQS? | NA | Yes | Yes |
| Frequency of flow rate verification for manual PM samplers | NA | NA | 1x/month flow 2x/month leak |
| Frequency of flow rate verification for automated PM analyzers | NA | 2x/month flow and leak check | NA |
| Frequency of one-point QC check for gaseous instruments | Weekly | NA | NA |
| Last Annual Performance Evaluation for gaseous parameters | 05/01/2013 | NA | NA |
| Last two semi-annual flow rate audits for PM monitors | NA | 11/06/2012 05/01/2013 | 11/06/2012 05/01/2013 |

Table 14 – Simi Valley – Upper Air Station Information

| Local Site Name > | Simi Valley – Upper Air |
|--------------------------------------|---|
| AQS ID | 061110008 |
| GPS Coordinates | 34.29124, -118.79761 |
| Street Address | 2801 Madera Rd., Simi Valley CA 93063 |
| County | Ventura County |
| Distance to roadways | 443 meters |
| Traffic count | 94,000 vehicles/day, 2011 |
| Groundcover | Gravel |
| Representative statistical area name | Oxnard-Thousand Oaks-Ventura Metro Area |
| Last Annual Performance Evaluation | 05/01/2013 |

In addition to measuring ambient levels of gaseous and particulate (solid and liquid aerosol) air pollutants listed in Tables 9 – 14 above, stations in Ventura County also collect meteorological data. Table 15 lists the types of meteorological data collected by site, and whether the data is being collected as part of SLAMS or SLAMS and PAMS networks.

Table 15 – Meteorological Data Collected at Sites

| Local Site Name AQS ID | Wind Speed | Wind Direction | Temperature | Relative Humidity | Total Solar Radiation | Rainfall | Ultraviolet Radiation | Barometric Pressure | Visibility |
|---|------------|----------------|-------------|-------------------|-----------------------|----------|-----------------------|---------------------|------------|
| El Rio – Rio Mesa School #2 061113001 | ● | ● | ● | ● | ● | ✓ | | | |
| Ojai – Ojai Avenue 061111004 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Piru – Pacific Avenue 061110009 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Simi Valley – Cochran St 061112002 | ● | ● | ● | ● | ● | | | | ✓ |
| Simi Valley Upper Air Profiler 061110008 | ● | ● | ● | ● | ● | ✓ | ● | ● | |
| Thousand Oaks – Moorpark Rd 061110007 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |

- ✓ Monitored as part of SLAMS network.
- Monitored as part of SLAMS and PAMS networks.

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Appendix C Minimum Monitoring Requirements

40 CFR 58.10, Appendix D specifies the minimum requirements for air monitoring networks. As shown in Tables 16 through 25, the VCAPCD air monitoring network meets or exceeds the minimum monitoring requirements for all criteria pollutants.

Certain monitoring requirements in 40 CFR 58 are based upon Metropolitan Statistical Areas (MSAs). MSAs are part of a population, economic and social-based classification of geographical regions developed by the U.S. Census Bureau. An MSA may include one or more counties. However, not all counties are within an MSA. The VCAPCD contains a single MSA, the Oxnard-Thousand Oaks-Ventura MSA. A Core Based Statistical Area (CBSA) is a collective term for MSAs and micropolitan areas, so since there is only one MSA in Ventura County, the MSA and CBSA are the same.

Ozone

Table 16 – Minimum Monitoring Requirements for Ozone

| MSA | County | Population (Census Year) | 8-Hour Design Value (Years) | Design Value Site (AQS ID) | # Required Monitors | # Active Monitors | # Add'l Monitors Needed |
|------------------------------|-------------------|-----------------------------|-----------------------------------|----------------------------------|---------------------------|----------------------|-------------------------------|
| Oxnard-Thousand Oaks-Ventura | Ventura County | 823,318 (2010) | 81 ppb (2010-2012) | Simi Valley (061112002) | 2 | 5 | 0 |

Monitors required for SIP or Maintenance Plan: 2

PM_{2.5}

With regard to 40 CFR 58.10(c), "...review of changes to a PM_{2.5} monitoring network that impact the location of a violating PM_{2.5} monitor." Should such a violation occur, VCAPCD would review the possible causes for the violation (weather, geography, changes to the local area). Prior to making any changes to the PM_{2.5} monitoring network to address such a violation, VCAPCD would consult EPA and CARB regarding possible methodologies to better monitor PM_{2.5} and better define the issue. Any changes to the monitoring network related to a violating monitor that would change PM_{2.5} monitoring would be through a process of public comment on the plan via the public notification process.

Table 17 – Minimum Monitoring Requirements for PM_{2.5} SLAMS

| MSA | County | Population (Census Year) | Annual Design Value (Years) | Annual Design Value Site (AQS ID) | Daily Design Value (Years) | Daily Design Value Site (AQS ID) | # Required SLAMS Monitors | # Active SLAMS Monitors | # Add'l SLAMS Monitors Needed |
|------------------------------|----------------|--------------------------|-----------------------------------|--|----------------------------------|----------------------------------|---------------------------|-------------------------|-------------------------------|
| Oxnard-Thousand Oaks-Ventura | Ventura County | 823,318 (2010) | 8.9 µg/m ³ (2010-2012) | Thousand Oaks (061110007) Simi Valley (061112002) | 20 µg/m ³ (2010-2012) | Thousand Oaks (061110007) | 1 | 8 | 0 |

Table 18 – Minimum Monitoring Requirements for Continuous PM_{2.5} Monitors

| MSA | County | Population (Census Year) | Annual Design Value (Years) | Annual Design Value Site (AQS ID) | Daily Design Value (Years) | Daily Design Value Site (AQS ID) | # Required Continuous Monitors | # Active Continuous Monitors | # Add'l Continuous Monitors Needed |
|------------------------------|----------------|--------------------------|-----------------------------------|--|----------------------------------|----------------------------------|--------------------------------|------------------------------|------------------------------------|
| Oxnard-Thousand Oaks-Ventura | Ventura County | 823,318 (2010) | 8.9 µg/m ³ (2010-2012) | Thousand Oaks (061110007) Simi Valley (061112002) | 20 µg/m ³ (2010-2012) | Thousand Oaks (061110007) | 1 | 5 | 0 |

Monitors required for SIP or Maintenance Plan: None.

PM₁₀

PM_{10-2.5} monitoring is required only at NCore stations. There is no requirement for an NCore station in Ventura County.

Table 19 – Minimum Monitoring Requirements for PM₁₀

| MSA | County | Population (Census Year) | Max Concentration | Max Concentration Site | # Required Monitors | # Active Monitors | # Add'l Monitors Needed |
|------------------------------|-------------------|-----------------------------|----------------------|------------------------------|---------------------------|-------------------------|-------------------------------|
| Oxnard-Thousand Oaks-Ventura | Ventura County | 823,318 (2010) | 39 µg/m ³ | Simi Valley (061112002) | 1 - 2 | 5 | 0 |

Monitors required for SIP or Maintenance Plan: None.

Table 20 – Minimum Monitoring Requirements for PM_{10-2.5}

| MSA | County | Population (Census Year) | Max Concentration | Max Concentration Site | # Required Monitors | # Active Monitors | # Add'l Monitors Needed |
|------------------------------|-------------------|-----------------------------|----------------------|------------------------------|---------------------------|-------------------------|-------------------------------|
| Oxnard-Thousand Oaks-Ventura | Ventura County | 823,318 (2010) | 39 µg/m ³ | Simi Valley (061112002) | 0 | 0 | 0 |

Monitors required for SIP or Maintenance Plan: None.

NO₂

The VCAPCD previously operated monitors to measure levels of nitrogen dioxide (NO₂) at the Ojai, Ventura, and Thousand Oaks monitoring stations. Because of the low levels recorded, NO₂ monitoring at these stations was discontinued in July 2004. The VCAPCD currently monitors for NO₂ at El Rio and Simi Valley monitoring stations as part of PAMS. There are no NO₂ monitors required in Ventura County for RA-40 monitoring. There are no NO₂ monitors required for SIP or maintenance planning.

In 2010, EPA adopted a new NAAQS for nitrogen dioxide (NO₂). Per 40 CFR 58.10(a)(5)(v), one Near-Road monitor NO₂ monitor will be required for Ventura County. When NO₂ Near-Road requirements are defined by EPA, VCAPCD expects to establish the ambient NO₂ Near-Road monitoring site along US Highway 101 (the Ventura Freeway), in Thousand Oaks between Hampshire

Road and Westlake Village Road. The Near-Road NO₂ monitor must be operational by January 1, 2017. Discussion of the future Near-Road NO₂ monitoring site is included in Section 3.2.4.

Table 21 – Minimum Monitoring Requirements for NO₂

| CBSA | Population (Census Year) | Max AADT Counts (Year) | # Required Near-Road Monitors | # Active Near-Road Monitors | # Add'l Near-Road Monitors Needed | # Required Area-wide Monitors | # Active Area-wide Monitors | # Add'l Area-wide Monitors Needed |
|------------------------------|--------------------------------|------------------------------|--|--------------------------------------|---|--|-----------------------------------|--|
| Oxnard-Thousand Oaks-Ventura | 823,318 (2010) | 189,000 (2011) | 0 | 0 | 0 | 0* | 2 | 0 |

* Review of minimum monitoring requirements indicates that there is no requirement for area-wide NO₂ monitoring in Ventura County. Corrections were made in AQS to change monitor type to PAMS in June 2013 for the El Rio and Simi Valley NO₂ monitors.

Monitors required for SIP or Maintenance Plan: None

Monitors required for PAMS: 2

EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.3.4: None.

Sulfur Dioxide (SO₂)

The VCAPCD previously operated a monitor to measure SO₂ at the El Rio monitoring station. Because of the low levels recorded, SO₂ monitoring was discontinued in July 2004.

On June 2, 2010, EPA established a new 1-hour SO₂ NAAQS, effective August 23, 2010, which is based on the same 3-year average of the annual 99th percentile of 1-hour daily maximum averages in ppb (level: 75). MSA’s with a population-weighted emission index (PWEI) greater than a threshold would be required to establish an ambient SO₂ monitoring program by January 1, 2013. On May 27, 2011, EPA Region 9 issued an email from Meredith Kurpius, PhD, Air Division, stating that “EPA did not expect Ventura County to have any additional SO₂ monitoring requirements based on the 2008 NEI.” Therefore, based on the 2008 National Emissions Inventory (NEI), Ventura County fell below the PWEI threshold, releasing the VCAPCD from the need to monitor SO₂. There are no NO₂ monitors required for SIP or maintenance planning.

Table 22 – Minimum Monitoring Requirements for SO₂

| CBSA | County | Population (Census Year) | Total SO ₂ | Population Weighted Emissions Index | # Required Monitors | # Active Monitors | # Add'l Monitors Needed |
|----------------------------------|-------------------|-----------------------------|-----------------------|--|---------------------------|-------------------------|-------------------------------|
| Oxnard-Thousand Oaks- Ventura | Ventura County | 823,318 (2010) | NA | NA | 0 | 0 | 0 |

Monitors required for SIP or Maintenance Plan: None.

EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.4.3: None.

CO

The VCAPCD previously operated monitors to measure levels of CO at the El Rio and Simi Valley monitoring stations. Because of the low levels recorded, CO monitoring at these stations was discontinued in March and July 2004.

40 CFR 58, Appendix D, Section 4.2.1 states that CBSAs having a population of 1,000,000 or more persons are required to have one CO monitor collocated with a Near-Road NO₂ monitor, as required by 40 CFR 58, Appendix D, Section 4.3.2. Because the population of the Oxnard-Thousand Oaks-Ventura CBSA is less than 1,000,000 persons, there is no requirement for a Near-Road CO monitor in Ventura County.

Table 23 – Minimum Monitoring Requirements for CO

| CBSA | County | Population (Census Year) | # Required Near-Road Monitors | # Active Near-Road Monitors | # Add'l Monitors Needed |
|----------------------------------|-------------------|-----------------------------|----------------------------------|--------------------------------|----------------------------|
| Oxnard-Thousand Oaks- Ventura | Ventura County | 823,318 (2010) | 0 | 0 | 0 |

Monitors required for SIP or Maintenance Plan: None.

EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.2.2: None.

NCore

The NCore Network, formerly known as the national Air Monitoring Stations (NAMS) is a multi-pollutant air monitoring network across the United States that integrates several advanced measurement systems for particles, pollutant gases and meteorology. Most NCore stations have been operating since the formal start of the network on January 1, 2011. NCore sites are required under 40 CFR Part 58.10(a)(3), and are generally sited in large metropolitan areas at a rate of one site per state. There is no requirement for an NCore site in Ventura County.

Lead (Pb)

In 2008, EPA revised the NAAQS for lead from 1.5 µg/m³ to 0.15 µg/m³. The regulation requires that state and local agencies establish an ambient lead monitor by January 1, 2011. In December 2009, EPA proposed revisions to the regulation that revise “source oriented” monitoring requirements. As a result of EPA’s revisions, and EPA’s recent acceptance of the VCAPCD’s lead emission inventory for airports, the VCAPCD will not be subject to the lead monitoring requirements.

Table 24 – Minimum Monitoring Requirements for Pb at NCore

| NCore Site | CBSA | Population (Census Year) | # Required Monitors | # Active Monitors | # Add'l Monitors Needed |
|------------|---------------------------------|-----------------------------|------------------------|----------------------|----------------------------|
| NA | Oxnard-Thousand Oaks-Ventura | 823,318 (2010) | 0 | 0 | 0 |

Table 25 – Source Oriented Lead Monitoring (Including Airports)

| Source Name | Address | Pb Emissions (tons per year) | Emission Inventory Source | Max 3-Month Design Value | Design Value Date | # Required Monitors | # Active Monitors | # Add'l Monitors Needed |
|-------------|---------|------------------------------------|---------------------------------|-----------------------------|----------------------|---------------------------|-------------------------|-------------------------------|
| NA | NA | NA | NA | NA | NA | 0 | 0 | 0 |

Monitors required for SIP or Maintenance Plan: None.

EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.5(c): None.

Appendix D Ambient Air Quality Standards

Table 26 – Ambient Air Quality Standards

| Pollutant | Averaging Time | California Standards | National Standards |
|--|-------------------------|--|---------------------------------------|
| Ozone (O₃) | 8 Hour | 0.070 ppm | 0.075 ppm |
| | 1 Hour | 0.09 ppm | — |
| Respirable Particulate Matter (PM₁₀) | 24 Hour | 50 µg/m ³ | 150 µg/m ³ |
| | Annual Arithmetic Mean | 20 µg/m ³ | |
| Fine Particulate Matter (PM_{2.5}) | 24 Hour | — | 35 µg/m ³ |
| | Annual Arithmetic Mean | 12 µg/m ³ | 15 µg/m ³ |
| Carbon Monoxide (CO) | 8 Hour | 9.0 ppm | 9 ppm |
| | 1 Hour | 20 ppm | 35 ppm |
| Nitrogen Dioxide (NO₂) | 1 Hour | 0.18 ppm | 100 ppb |
| | Annual Arithmetic Mean | 0.030 ppm | 0.053 ppm |
| Sulfur Dioxide (SO₂) | 1 Hour | 0.25 ppm | 75 ppb |
| | 3 Hour | — | 0.5 ppm (secondary) |
| | 24 Hour | 0.04 ppm | 0.14 ppm (primary, certain areas) |
| | Annual Arithmetic Mean | — | 0.030 ppm (primary, certain areas) |
| Lead | 30 Day Average | 1.5 µg/m ³ | — |
| | Calendar Quarter | — | 1.5 µg/m ³ (certain areas) |
| | Rolling 3-Month Average | — | 0.15 µg/m ³ |
| Visibility Reducing Particles | 8 Hour | Sufficient amount to reduce the prevailing visibility to less than ten miles when the relative humidity is less than 70% | — |
| Sulfates | 24 Hour | 25 µg/m ³ | — |
| Hydrogen Sulfide (H₂S) | 1 Hour | 0.03 ppm | — |
| Vinyl Chloride | 24 hour | 0.01 ppm | — |

As of June 7, 2012.

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Appendix E Collocation Requirements

40 CFR 58, Appendix A, Section 3 includes collocation requirements for PM_{2.5}, continuous PM_{2.5}, PM₁₀, and Pb monitoring networks. The requirements apply at the PQAQ level. A PQAQ is a monitoring organization or a coordinated aggregation of such organizations that is responsible for a set of stations that monitors the same pollutant and for which data quality assessments can logically be pooled. Ventura County is in the CARB PQAQ.

PM_{2.5} FRM

There are three Thermo Fischer Scientific 2025 Sequential PM_{2.5} FRM samplers (method code 118) in Ventura County. They are all designated as primary monitors, and are located at the El Rio, Simi Valley, and Thousand Oaks stations. There are no collocated PM_{2.5} FRM samplers in the county. However, collocation requirements apply at the PQAQ level. The CARB 2012 Annual Monitoring Report for Small Districts in California indicates that the CARB PQAQ, which is the PQAQ for Ventura County, is meeting its collocation requirements for method code 118.

| Method Code | # Primary Monitors | # Required Collocated Monitors | # Active Collocated Monitors |
|-------------|--------------------|--------------------------------|------------------------------|
| 118 | 3 | 0 | 0 |

Continuous PM_{2.5}

There are four Met One BAM 1020 continuous PM_{2.5} FEM samplers (method code 170) in Ventura County, at the El Rio, Ojai, Piru, and Thousand Oaks stations. Two of these samplers are designated as primary monitors, at the Ojai and Piru stations. There is also one Met One BAM 1020 continuous PM_{2.5} non-FEM sampler (method code 731) at the Simi Valley station. There are no collocated PM_{2.5} FRM samplers in the county. However, collocation requirements apply at the PQAQ level. The CARB 2012 Annual Monitoring Report for Small Districts in California indicates that the CARB PQAQ, which is the PQAQ for Ventura County, is meeting its collocation requirements for method code 170.

As stated above, collocation requirements apply at the PQAQ level. Prior to making any changes to our PM_{2.5} network, we will consult with CARB (our PQAQ) and EPA Region 9. Following our 2013 FRM to FEM comparison study described in Section 3.1.2, Recent Changes to the PM_{2.5} and PM₁₀ Monitoring Networks, should the study show good agreement, then VCAPCD would request that we opt out of any collocation requirements under the PQAQ.

| Method Code | # Primary Monitors | # Required Collocated Monitors | # Active Collocated Monitors |
|-------------|--------------------|--------------------------------|------------------------------|
| 170 (FEM) | 2 | 1 | 0 |

PM₁₀

There are three GMW 1200 PM₁₀ FRM samplers (method code 063) in Ventura County. Two of these samplers are designated as primary monitors, one at the El Rio station and one at the Simi Valley station. There is one collocated PM₁₀ FRM sampler at the Simi Valley monitoring station, located 3 meters from the primary PM₁₀ FRM sampler. If collocation requirements applied at the air district level, Ventura County would be meeting its collocation requirements. However, collocation requirements apply at the PQAQ level. The CARB *2012 Annual Monitoring Report for Small Districts in California* indicates that the CARB PQAQ, which is the PQAQ for Ventura County, needs additional collocated monitors for method code 063, which it intended to address in the year following distribution of the report.

| Method Code | # Primary Monitors | # Required Collocated Monitors | # Active Collocated Monitors |
|-------------|--------------------|--------------------------------|------------------------------|
| 063 | 2 | 1 | 1 |

Non-NCore Pb

There is no source or non-source Pb monitoring required in Ventura County, and there are no NCore sites in Ventura County. Therefore, there are no collocated monitors in Ventura County.

| Method Code | # Primary Monitors | # Required Collocated Monitors | # Active Collocated Monitors |
|-------------|--------------------|--------------------------------|------------------------------|
| NA | 0 | 0 | 0 |

Appendix F Air Monitoring Network Related Correspondence

This appendix contains correspondence about matters related to the ambient air monitoring network in Ventura County. Table 27 summarizes the documentation in this appendix.

Table 27 – VCAPCD Air Monitoring Network Correspondence

| Date | Author | Recipient | Subject |
|------------|------------------------------|---------------------------------|--|
| 11/22/2011 | Kent Field, VCAPCD | Matt Lakin, EPA, Region 9 | Request for Approval of Modifications to Particulate Monitoring Networks |
| 02/10/2012 | Matthew Lakin, EPA, Region 9 | Kent Field, VCAPCD | Response to Request for Approval of Modifications to Particulate Monitoring Networks |
| 05/01/2013 | Michael Villegas, VCAPCD | Fletcher Clover, EPA, Region IX | 2012 Annual Air Monitoring Data Certification |
| 05/08/2013 | Kent Field, VCAPCD | Meredith Kurpius EPA, Region 9 | Email exchange about discontinuation of the continuous hydrocarbon sampling at the Simi Valley station |
| 06/20/2013 | Kent Field, VCAPCD | Matthew Lakin EPA, Region 9 | Formal letter discontinuation of the continuous hydrocarbon sampling at the Simi Valley station |



**Ventura County
Air Pollution
Control District**

669 County Square Drive
Ventura, California 93003

tel 805/645-1400
fax 805/645-1444
www.vcapcd.org

**Michael Villegas
Air Pollution Control Officer**

November 22, 2011

Matt Lakin, Manager
Air Quality Analysis Office
U. S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

SUBJECT: REQUEST FOR APPROVAL OF MODIFICATIONS TO PARTICULATE MONITORING NETWORKS

Dear Mr. Lakin:

This correspondence is to obtain written approval, as required by 40 CFR 58.14, of the EPA regional administrator for the VCAPCD's plan to modify its SLAMS network. The VCAPCD is upgrading its filter based FRM particulate (PM₁₀ and PM_{2.5}) monitors to continuous FEM Beta Attenuation Method monitors to allow for both daily AQI reporting and comparisons to the NAAQS. The upgrade brings improved temporal resolution to the VCAPCD's particulate monitoring program and will result in a cost savings through less staff travel time, less maintenance and fewer filters to weigh.

In July, 2010 the VCAPCD submitted to EPA our five year Ambient Air Monitoring Network Assessment which identified FEM continuous BAM monitors as a new technology that may be appropriate for incorporation into our particulate monitoring network. The VCAPCD's 2011 Ambient Air Monitoring Network Plan contained a proposal to replace our current continuous non-FEM PM_{2.5} BAM monitors with continuous FEM PM_{2.5} BAM monitors, to discontinue some FRM PM_{2.5} samplers and to initiate a yearlong comparative study establishing the relationship between our current manual FRM PM_{2.5} samplers and the new automated continuous PM_{2.5} BAM FEM monitors. The plan also proposed to reduce the number of PM₁₀ monitors and to replace manual FRM PM₁₀ samplers with continuous FEM PM₁₀ BAM monitors. A yearlong comparative study establishing the relationship between our current manual PM₁₀ FRM samplers and the new automated continuous FEM PM₁₀ BAM monitors was also proposed. The 2010 Network Assessment and the 2011 Network Plan were made available for 30 days for public comment.

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PM_{2.5} Monitoring Network

The 2011 Network Plan proposed replacing non-FEM PM_{2.5} BAM monitors with FEM PM_{2.5} BAM monitors at Piru, Thousand Oaks and El Rio and to initiate a PM_{2.5} BAM FEM monitor at Ojai during December 2011. The non-FEM PM_{2.5} BAM monitor at Simi Valley will continue operation and be used for AQI/episode forecasting and reporting. The FRM PM_{2.5} sampler at Simi Valley will continue sampling on a 1 in 3 day schedule and continue as the primary monitor for the Simi Valley station and as the design value sampler for Ventura County. The FRM PM_{2.5} sampler at Piru and the primary FRM PM_{2.5} at Thousand Oaks will be discontinued on December 31, 2011 so that data completeness criteria for 2011 are met. The collocated FRM PM_{2.5} sampler at Thousand Oaks will be collocated with the FEM PM_{2.5} BAM sampler. The FEM PM_{2.5} BAM monitors at El Rio, Ojai, Piru and Thousand Oaks will become the primary samplers for those monitoring stations. These changes constitute a net increase of one PM_{2.5} monitor in Ventura County. Beginning January 1, 2012 the yearlong comparative study will begin at a near coastal site, El Rio and at an inland valley site, Thousand Oaks. The table below contains a summary of changes to our PM_{2.5} monitoring network for CY-2012, the year of the comparison study.

CY-2012 PM_{2.5} Comparison Study
(Beginning January 1, 2012)

| Station | FRM PM _{2.5} | FRM PM _{2.5} Collocated | Non-FEM PM _{2.5} | FEM PM _{2.5} |
|------------------------------|-----------------------|----------------------------------|---------------------------|-----------------------|
| El Rio 06-111-3001 | 1 in 6* | | Discontinued | Initiated/Primary* |
| Ojai Valley 06-111-1004 | | | | Initiated/Primary |
| Piru 06-111-0009 | Discontinued | | Discontinued | Initiated/Primary |
| Thousand Oaks 06-111-0007 | Discontinued | 1 in 6* | Discontinued | Initiated/Primary* |
| Simi Valley 06-111-2002 | Primary/1 in 3/DV | | Continued/AQI-Episode | |

*Monitors in Comparison Study
Sampling Schedule Changes from CY-2011 - El Rio FRM 2.5 changed from 1 in 3 to 1 in 6

The comparative study will continue through December 31, 2012. At the conclusion of the study the FRM PM_{2.5} sampler at El Rio will be discontinued and the FRM PM_{2.5} sampler at Thousand Oaks will continue being collocated with the FEM PM_{2.5} with a change to a 1 in 12 day sampling schedule. The table below contains our PM_{2.5} monitoring network’s final configuration.

CY-2013 Pending Final PM_{2.5} Network
(Beginning January 1, 2013)

| Station | FRM PM _{2.5} | FRM PM _{2.5} Collocated | Non-FEM PM _{2.5} | FEM PM _{2.5} |
|------------------------------|-----------------------|----------------------------------|---------------------------|-----------------------|
| El Rio 06-111-3001 | Discontinued | | | Primary |
| Ojai Valley 06-111-1004 | | | | Primary |
| Piru 06-111-0009 | | | | Primary |
| Thousand Oaks 06-111-0007 | | 1 in 12 | | Primary |
| Simi Valley 06-111-2002 | Primary/1 in 3/DV | | Continued/AQI-Episode | |

Sampling Schedule Changes from CY-2012 - Thousand Oaks FRM 2.5 Collocated changed from 1-6 to 1-12

PM₁₀ Monitoring Network

The 2011 Network Plan proposed discontinuing the FRM PM₁₀ monitor at Ojai, and replacing it with an FEM PM_{2.5} BAM monitor. The discontinuation of the Ojai FRM PM₁₀ monitor is requested in accordance with criterion (2) of 40 CFR 58.14(c). This monitor has measured consistently lower during the previous five years than either/or El Rio and Simi Valley as shown in the table below.

Annual Maximum 24-Hour Averages

| Station | 2006 | 2007 | 2008 | 2009 | 2010 |
|----------------------------|------|------|------|-----------------|-----------------|
| El Rio 06-111-3001 | 119 | 248* | 80 | 100 | 62 |
| Ojai Valley 06-111-1004 | 47 | 99* | 61 | 38 | 45 |
| Simi Valley 06-111-2002 | 56 | 117* | 80 | 75 ¹ | 31 ² |

*Flagged as an exceptional event

¹The annual maximum 24-hour average for the collocated sampler was 77

²The annual maximum 24-hour average for the collocated sampler was 34

This represents a net reduction of one monitor in VCAPCD's PM₁₀ monitoring network. The PM₁₀ monitoring network continues to meet the minimum requirements established in 40 CFR 58.10 Appendix D as shown in the table below.

PM₁₀ Minimum Monitoring Requirements

| MSA | Population (2010) | Min. # Monitors Required | # Monitors Active | # Monitors Needed |
|----------------------------------|-------------------|--------------------------|-------------------|-------------------|
| Oxnard-Thousand Oaks-Ventura MSA | 822,499 | 1 - 2 | 2* | 0 |

*This number reflects the discontinuation of FRM PM₁₀ monitoring at Ojai

The 2011 Network Plan also proposed replacing the FRM PM₁₀ samplers at El Rio and Simi Valley with FEM PM₁₀ BAM monitors as the primary monitors beginning January 1, 2012. The FRM PM₁₀ monitor at Simi Valley will become the collocated monitor for the FEM PM₁₀ BAM. The Simi Valley FEM PM₁₀ BAM monitor will become the design value sampler for Ventura County. Beginning January 1, 2012 at Simi Valley, a yearlong comparative study will be conducted to establish the relationship between FRM PM₁₀ samplers and FEM PM₁₀ BAM monitors. The table below contains a summary of changes to our PM₁₀ monitoring network for CY-2012, the year of the comparison study.

CY-2012 PM₁₀ Comparison Study
(Beginning January 1, 2012)

| Station | FRM PM ₁₀ | FRM PM ₁₀ Collocated | FEM PM ₁₀ |
|----------------------------|----------------------|---------------------------------|-----------------------|
| El Rio 06-111-3001 | Discontinued | | Initiated/Primary |
| Ojai Valley 06-111-1004 | Discontinued | | |
| Simi Valley 06-111-2002 | Discontinued | 1 in 6* | Initiated/Primary*/DV |

* Monitors in Comparison Study

The comparative study will continue through December 31, 2012. At the conclusion of the study the FRM PM₁₀ at Simi Valley will continue as the collocated sampler for the FEM PM₁₀ BAM on a 1 in 12 sampling schedule. The table below contains our PM₁₀ monitoring network's final configuration.

CY-2013 Pending Final PM₁₀ Network
(Beginning January 1, 2013)

| Station | FRM PM ₁₀ | FRM PM ₁₀ Collocated | FEM PM ₁₀ |
|----------------------------|----------------------|---------------------------------|----------------------|
| El Rio 06-111-3001 | | | Primary |
| Simi Valley 06-111-2002 | | 1 in 12 | Primary/DV |

Sampling Schedule Changes from CY-2012 - Simi Valley FRM PM₁₀ Collocated changed from 1 in 6 to 1 in 12

Meredith Kurpius, of your agency, Merrin J. Wright, Manager, ARB Quality Assurance Section and Karen Magliano, Chief, ARB Air Quality Data Branch were consulted during the development of this plan. If you have any questions about our proposed network modifications or if you need additional information, please contact me at 805-662-6960 or kent@vcapcd.org.

Regards,



Kent Field, Manager
Monitoring Division
Ventura County Air Pollution Control District

C: Mike Villegas, APCO VCAPCD
Meredith Kurpius, PhD, Air Division US EPA Region 9
Mike Miguel, Chief ARB Quality Management Branch
Merrin J. Wright, Manager ARB Quality Assurance Section
Karen Magliano, Chief ARB Air Quality Data Branch



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION IX
 75 Hawthorne Street
 San Francisco, CA 94105
 FEB 10 2012

RECEIVED
 VENTURA COUNTY
 12 FEB 17 AM 11:25
 A.P.C.D.

Kent Field, Manager
 Air Quality Monitoring Division
 Ventura County Air Pollution Control District
 669 County Square Drive
 Ventura, CA 93003-5417

Dear Mr. Field:

This letter is in response to your request for modifications to your particulate matter network dated November 22nd. EPA approves the following changes as requested by your agency:

- 2012 monitoring scheme for the PM_{2.5} study, including replacement of the Piru and Thousand Oaks FRMs with PM_{2.5} continuous FEMs.
- Final PM_{2.5} network as outlined in the letter, if the study shows good agreement between the FRMs and the FEMs.
- Discontinuation of the Ojai PM₁₀ FRM since it is not required and has consistently measured lower during the past five years than either the El Rio or Simi Valley monitors.
- Replacement of PM₁₀ FRMs at El Rio and Simi Valley sites with FEMs for a comparison study in 2012.
- Final PM₁₀ network, scheduled for 2013, with PM₁₀ FEMs at El Rio and Simi Valley and 1:12 co-location with an FRM at Simi Valley.

If you have any questions regarding this letter, please feel free to contact me at (415) 972-3851 or Meredith Kurpius at (415) 947-4534.

Sincerely,

Matthew Lakin, Manager
 Air Quality Analysis Office
 Air Division

cc: Karen Magliano, CARB



**Ventura County
Air Pollution
Control District**

669 County Square Drive
Ventura, California 93003

tel 805/645-1400
fax 805/645-1444
www.vcapcd.org

**Michael Villegas
Air Pollution Control Officer**

May 1, 2013

Fletcher Clover
U.S. Environmental Protection Agency
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Clover,

This correspondence is to comply with: (1) 40 CFR 58.15, Annual Air Monitoring Data Certification and (2) Ventura County APCD's FY 2012 §105 EPA Grant Objective #5 for Air Monitoring. These require an annual certification of SLAMS/NAMS data for the calendar year 2012. To satisfy this year's submittal, my staff has reviewed Ventura County APCD's (VCAPCD) 2012 calendar year data in AQS. Only the parameters, POC's and selection protocols listed in the attached reports (with the exceptions noted below) are being certified.

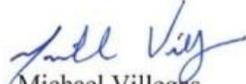
The ambient concentration data and the quality assurance data are completely submitted to AQS and the ambient data are accurate to the best of my knowledge taking into consideration the quality assurance findings. Attachment 1 is the AQS Data Certification Report (AMP600) for VCAPCD. Attachment 2 is AQS Quick Look Report (AMP450NC) for VCAPCD's PAMS program. Attachment 3 is AQS Quick Look Report (AMP450NC) for VCAPCD's remaining non-criteria pollutants. Since the California Air Resources Board submits accuracy data for this agency, only the 1-Point Quality Control and Collocation data are being certified.

As a regional PM2.5 filter lab, we also reviewed the PM2.5 FRM data for the monitors in our client network. The ambient concentration data are completely submitted to AQS. Attachment 1 (AMP 600) also includes our clients samplers whose filters are analyzed by our filter lab.

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If you have any questions, please contact Phil Moyal of the VCAPCD's Monitoring Division by phone at 805-662-6953 or by email at phil@vcapcd.org.

Sincerely,



Michael Villegas

Air Pollution Control Officer/Executive Officer

Attachments

C: Meredith Kurpius at Kurpius.Meredith@epa.gov
Karen Magliano at kmaglian@arb.ca.gov
Kent Field at kent@vcapcd.org
Phil Moyal at phil@vcapcd.org

Kent Field

From: Kurpius, Meredith <Kurpius.Meredith@epa.gov>
Sent: Tuesday, May 14, 2013 9:53 AM
To: Kent Field
Cc: Cavender, Kevin
Subject: RE: Question?

Hi Kent,
 I just spoke with Kevin Cavender about the PAMS equipment. Kevin agreed that it probably doesn't make sense to replace the instruments. Kevin suggested a letter exchange to make this formal. Since we are coming up on ANP submittal time, how about we use that mechanism to approve it? If that's ok with you, please include this request in the section on system modifications. Let me know how this sounds.

-Meredith

From: Kent Field [mailto:kent@vcapcd.org]
Sent: Thursday, May 09, 2013 11:35 AM
To: Kurpius, Meredith
Subject: RE: Question?

Email is working.

Kent

From: Kent Field
Sent: Wednesday, May 08, 2013 2:11 PM
To: Meredith Kurpius
Subject: Question?

Meredith,

Give me a call when you can. I have a short question on the status of PAMS for Ventura County APCD. Specifically, continuous hydrocarbon monitoring at Simi Valley.

Simi Valley is a PAMS type 3 (maximum O3 concentration downwind of emissions) site. At Simi Valley we monitor continuous hydrocarbons for PAMS. Last week, we had our hydrocarbon analyzer and hydrogen generator fail. The cost to repair is \$8200 for the hydrocarbon analyzer and \$2330 for the hydrogen generator. If PAMS is going to continue for us for a while I will get these instruments repaired. But, I need to ask if the cost of repair is reasonable based on our apparent lack of longevity within the PAMS network. I have trouble devoting many thousands dollars towards something that may have little to no future value.

Let me know what you think, Thanks

Kent

Kent Field
Manager – Meteorologist, Monitoring Division

Ventura County Air Pollution Control District
669 County Square Drive
Ventura, California 93105

1-805-662-6960
kent@vcapcd.org



Ventura County
Air Pollution
Control District

669 County Square Drive
Ventura, California 93003

tel 805/645-1400
fax 805/645-1444
www.vcapcd.org

Michael Villegas
Air Pollution Control Officer

June 20, 2013

Matthew Lakin, Manager
Air Quality Analysis Office
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, California 94105

Subject: Request to discontinue continuous hydrocarbon sampling at Simi Valley due to equipment failure and Ventura County's future within the PAMS monitoring network

Mr. Lakin,

Per 40 CFR 58.14 (System modification), this letter is a formal request by the Ventura County Air Pollution Control District (VCAPCD or District) to make a change to the pollutants monitored as part of the Photochemical Assessment Monitoring Stations (PAMS) network in Ventura County. Specifically, the VCAPCD requests that the U.S. Environmental Protection Agency (EPA) allow the District to temporarily discontinue collection of continuous hydrocarbon data at our Simi Valley air monitoring PAMS site type 3 due to equipment failure and the cost to repair that equipment.

EPA is currently re-engineering the PAMS program, and it appears that Ventura County will not be a part of the PAMS program once the effort is completed. We are requesting that we be allowed to discontinue the continuous hydrocarbon monitoring at the Simi Valley site until such time the EPA PAMS re-engineering effort is finalized, and we know whether or not Ventura County will be a part of the PAMS network.

I expressed these concerns via email in May 2013 to our EPA Region 9 contact, Meredith Kurpius, PhD. She spoke to Kevin Cavender about our request, and he agreed that it probably didn't make sense to replace the instruments. He suggested a formal letter as part of our annual network plan. Therefore, this letter is being included in Appendix F, Air Monitoring Network Related Correspondence in our *2013 Ambient Air Monitoring Network Plan*.

In December 2012, at the Simi Valley site, our hydrogen generator began to fail, and in January 2013, our hydrocarbon analyzer began to fail. Both pieces of equipment failed in April 2013. The cost to repair the hydrogen generator is \$2,330, and the cost to repair the hydrocarbon analyzer is \$8,200. Carrier and calibration gases are approximately \$400 per month. Additionally, I am concerned about the investment of staff time and effort to operate the continuous hydrocarbon analyzer at or below the edge of its lower detection limit. As manager of the VCAPCD Monitoring Division, I try to make sure we work efficiently and productively. I

K. Field to M. Lakin – HC at Simi Valley, PAMS
 June 20, 2013
 Page 2

am concerned about such a large expenditure of money and staff time to repair equipment for a program that may be eliminated in the near future in Ventura County.

I look forward to your response to this request. Should you have any questions, please contact me at 805-662-6960, or by email at kent@vcapcd.org.

Regards,

Kent Field
 Manager - Monitoring Division
 Ventura County Air Pollution Control District

C: Mike Villegas, APCO VCAPCD
 Meredith Kurpius, PhD, Air Division EPA Region 9
 Mike Miguel, Chief ARB Quality Assurance Section
 Karen Magliano, Chief ARB Air Quality Data Branch