SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Air Toxics Study in Sun Valley Area

September 2008

MA #2008-01

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
MONITORING AND ANALYSIS

AIR TOXICS STUDY IN SUN VALLEY AREA

Written By

Steve Barbosa
Principal Air Quality Chemist

Program Monitoring Conducted By

Rene Bermudez, Principal Air Quality Instrument Specialist
Sumner Wilson, Principal Air Quality Instrument Specialist
Elizabeth Ayers, Meteorologist Technician
Paul Chavez, Senior Air Quality Instrument Specialist
Brian Vlasich, Senior Air Quality Instrument Specialist
Edward Ruffino, Air Quality Instrument Specialist II
Richard Parent, Air Quality Instrument Specialist I
Joe Macias, Temporary Air Quality Instrument Specialist

Analysis Conducted By

Solomon Teffera, Principal Air Quality Chemist
Sandra Hom, Senior Air Quality Chemist
Tai-Ching Hu, Senior Air Quality Chemist
Kay Liu, Air Quality Chemist
Ken Sanchez, Air Quality Chemist
Paul Williamson, Air Quality Chemist
Alice Chen, Temporary Chemist
Eddie Hwang, Temporary Chemist
Laura Julius, Temporary Chemist

Reviewed By

Chung Liu
Deputy Executive Officer, Science and Technology Advancement

September 2008

TABLE OF CONTENTS

Executive Summary…… Ex-1

1.0 Introduction..... 1

2.0 Project Discussion..... 1

3.0 Meteorological Discussion..... 5

4.0 Data Analysis..... 6

5.0 Conclusions……. 14

LIST OF FIGURES

Figure 1 Sun Valley Sampling Sites…… ……. 3

Figure 2 Fire Station PM_{10}……. 7

Figure 3 LAUSD PM_{10}……. 7

Figure 4 Poly High PM_{10}……..……..... 8

Figure 5 Stonehurst PM_{10}……. 8

Figure 6 Graph of Selected Crustal Elements…….. 8

Figure 7 Fire Station Carbon……..……. 9

Figure 8 LAUSD Carbon……. 9

Figure 9 Poly High Carbon…….. 9

Figure 10 Stonehurst Carbon…….. 9

Figure 11 Concentration Averages Chrome VI……. 11

Figure 12 Hexavalent Chromium Monthly Averages…… 12

Figure 13 Selected Compounds……. 15

LIST OF TABLES

Table 1	Location and Sampling Duration…… …….	2
Table 2	Selected Compounds to be Reported……..……..	4
Table 3	Sampling and Analysis Methods…….…….	4
Table 4	PM_{10} Average and Maximum in µg/m^3…….……..	7
Table 5	Hexavalent Chromium Average and Maximum in ng/m^3….....	10
Table 6	Hexavalent Chromium Average LAUSD and Fire Station 77….	11

LIST OF APPENDICES

Appendix A Wind Rose

Appendix B PM_{10} and Carbon Analysis

Appendix C Hexavalent Chromium (ng/m^3)

Appendix D Selected Compounds Report

EXECUTIVE SUMMARY

Purpose

The South Coast Air Quality Management District (AQMD) staff conducted a sub-regional air toxics monitoring program in the Sun Valley region as a complement to the Multiple Air Toxics Exposure Study III (MATES III). Additional air toxics monitoring was conducted near population centers surrounded by various industrial sources in the Sun Valley region of the South Coast Air Basin. The Sun Valley region (located in the northwestern portion of the Basin) contains several sources of potential air toxic emissions, including a landfill, as well as recycling and industrial facilities, and is located downwind from a commercial airport. The monitoring locations were selected to characterize air toxic impacts in the community. Sampling was conducted using MATES III protocols.

Key Findings

1) With the exception of hexavalent chromium, measured levels of toxic air contaminants were similar across the Sun Valley region. Other toxic metals and toxic gaseous compounds were found to have little variance across Sun Valley. Their average concentrations entering Sun Valley on the predominant winds were changed slightly in traversing the valley. Any influence of the landfill on toxic compound concentrations could not be discerned at the sites chosen for this study.

2) The hexavalent chromium analysis shows that immediately downwind of a source (Superior Plating Inc.), measurable hexavalent chromium concentration levels are detected. However, at short distances away from the source, levels decline and approach concentration levels similar to background levels. Superior Plating ceased operations in November 2006, four months after the end of this study.

3) PM_{10} concentrations are indicative of predominant wind patterns within the sub-region of Sun Valley. Local disturbances to this homogeneity could be ascribed to an abundance of crustal elements.

1.0 INTRODUCTION

In October 2004, the South Coast Air Quality Management District (AQMD) was awarded a grant under the United States Environmental Protection Agency (U.S. EPA) National Air Toxics Assessment Program to conduct a study to characterize air toxics levels in the Sun Valley region. The Sun Valley region contains several sources of potential toxic emissions, including landfills and recycling and industrial facilities, and is located near a general aviation airport. This study complemented the AQMD Multiple Air Toxics Exposure Study III (MATES III) conducted during the same time frame.

An advisory committee consisting of community members, an L.A. City Councilman's representative, local urban associations and an elementary school Vice-Principal was formed to provide input into the air monitoring plan. The first committee meeting was held on December 1, 2004. Stakeholders were asked to provide input on program specifics such as the sampling plan and sampling locations, and to coordinate information outreach. In addition, City of Los Angeles staff indicated their interest to coordinate outreach efforts on air quality and other issues in the Sun Valley area. Several meetings were held between December, 2004 and May of 2005. The plan was implemented in June of 2005.

Three portable sampling platforms were utilized for this study. Two of the platforms were deployed to two locations (LA County Fire Sta. and LAUSD) for the duration of the project. The third sampling platform, based on prevailing winds, was moved by season to be downwind of the major emission sources (Stonehurst and Poly High). A MATES III Microscale site located at Fernangeles Elementary School was in operation throughout the study period as was its nearest paired fixed MATES III site at Burbank. A total of six locations are reported in this study. Samples from all sites are analyzed and reported for multiple air toxics in the gaseous and particulate fractions of the ambient air.

2.0 PROJECT DISCUSSION

After several meetings of the Sun Valley Air Quality Advisory Committee, the study parameters and the sampling plan were finalized. The monitoring locations were selected to best determine the air toxic exposure of the residents within the Sun Valley area with specific interest and focus on the Bradley landfill. After securing the agreed upon sites, sampling was started in June 2005. The sampling platforms used in this study were identical to those used in MATES III. This will allow for data from both studies to be compared. The compounds measured and the methodology used in their measurement can be found in Section 2.2. The methods are well characterized and have been in use at the AQMD for over 10 years. They meet U. S. EPA criteria and the data are comparable to other studies performed throughout the Basin. Meteorological measurements were made throughout the course of the study at Fernangeles Elementary School.

2.1 SITE DESCRIPTIONS

Sampling equipment was set up and operated by the AQMD at the following locations:

Los Angeles County Fire Station (Fire Station)-8 month sampling duration
12605 Osborne Street
Pacoima, CA 91331

Los Angeles County Unified School District Maintenance Yard (LAUSD)
-10 month sampling duration
8960 Herrick Avenue
Sun Valley, CA 91352

John H. Frances Polytechnic High School (Poly High School)-4 month sampling duration
12431 Roscoe Boulevard
Sun Valley, CA 91352

Stonehurst Avenue Elementary School (Stonehurst)-5 ½ month sampling duration
9851 Stonehurst Avenue
Sun Valley, CA 91352

Fernangeles Elementary School (Fernangeles)-12 month sampling duration
12001 Art Street
Sun Valley, CA 91352

Sampling was accomplished from the last half of 2005 through the first half of 2006. Table 1 indicates the duration of the sampling at the study sites.

Table 1. Location and Sampling Duration

Location	**Duration**
LA County Fire Station	10/28/05 to 6/25/06
LAUSD Maintenance Yard	8/23/05 to 6/25/06
John H. Francis Polytechnic High School	2/13/06 to 6/25/06
Stonehurst Avenue Elementary School	8/23/05 to 2/7/06
Fernangeles Elementary School	6/3/05 to 6/25/06

Figure 1 is a map of the sampling sites in relation to the Bradley Landfill in the center of the map. The sites surround the landfill and are near other facilities that may emit toxic air emissions.

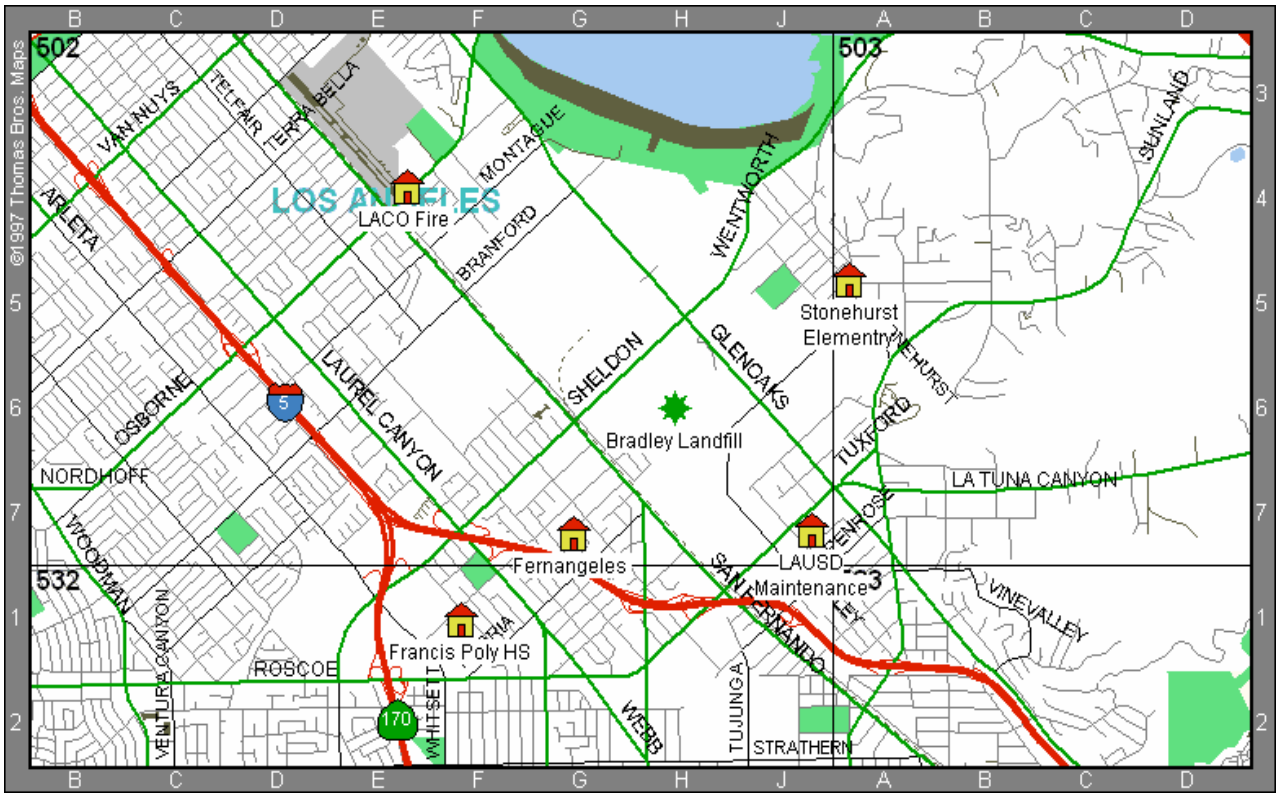


Figure 1. Sun Valley Sampling Sites

2.2 SAMPLING AND ANALYSIS METHODOLOGY

Field sampling and laboratory analysis were conducted by AQMD staff. In the field, instrument specialists placed the sampling equipment and maintained their operation throughout the study. This included loading the sampling media and setting the timers for unattended operation during sampling days. The sample media was then removed and taken to the laboratory along with proper chain of custody forms. Instrument specialists were also responsible for checking and calibrating the flow rates of the instruments. Chemists were responsible for analyzing the samples.

Placement of the sampling platforms was partially based on historical wind patterns collected from the AQMD meteorological network.

To fulfill the requirements of the grant awarded to the AQMD, Table 2 shows the chemical compounds to be reported to the U.S. EPA in the Sun Valley Study. These include the most significant contributors to health risks found in previous studies in the Basin. Additional measurements were conducted since non-carcinogenic compounds are also captured in both the sampling and analytical protocols.

Table 2. Selected Compounds to be Reported

Target Pollutants		
Benzene	Carbon Tetrachloride	Chloroform
1,3-Butadiene	Propylene Dichloride	Trichloroethylene, TCE
Methylene Chloride	Tetrachloroethylene (Perchloroethylene)	Beryllium and Compounds
Vinyl Chloride	Arsenic and Compounds	Lead and Compounds
Cadmium and Compounds	Hexavalent Chromium	Organic Carbon
Manganese and Compounds	Nickel and Compounds	Elemental Carbon
Formaldehyde		Total Carbon
Acetaldehyde		PM_{10}

Twenty-four hour integrated samples were collected on a one-in-three day basis. This schedule is identical to that used in MATES III and the U.S. EPA schedule for ambient PM sampling.

Laboratory analysis of the samples collected was conducted by AQMD chemists. The analytical methods used to measure ambient chemical compounds are provided in Table 3.

Table 3. Sampling and Analysis Methods

Ambient Species	Sampling Method	Laboratory Analysis
Volatile Organic Compounds (VOCs)	Silica-Lined Canisters	Gas Chromatograph/Mass Spectrometer (GC/MS) with automated pre-concentration and cryo-focusing
Carbonyls	DNPH Cartridge	Solvent recovery and subsequent analysis via high performance liquid chromatography (HPLC)
Hexavalent Chromium	Cellulose Fiber Filters	Treatment with buffer solution to maintain proper pH for unwanted conversions followed by analysis via ion chromatograph (IC)
PM_{10}	High-Volume SSI Quartz Filters	Mass determined by analytical balance; metals determined by analysis using inductively coupled plasma mass spectrometry (ICP-MS) or Energy Dispersive X-ray Fluorescence (EDXRF)
Elemental and Organic Carbon	PM_{10}	Section of PM filter removed and analyzed on a laser based thermal analyzer

Volatile organic compounds (VOCs) were measured from air samples collected in silica-lined 6-liter canisters using samplers that fill the canisters at a constant rate over the sampling period. VOCs were identified and measured using a gas chromatograph with a mass spectrometer detector (GC/MS). The AQMD currently has two GC/MS instruments that are configured to run U.S. EPA's TO-14 and TO-15 methods. To enable continuous analysis, these instruments are equipped with automated canister pre-concentrators attached to the gas chromatograph.

Carbonyl compounds were sampled by drawing air through a DNPH (2, 4-Dinitrophenylhydrazine) impregnated silica gel cartridge. The carbonyl compounds undergo derivatization with DNPH. The derivatives are extracted using acetonitrile and analyzed using High Performance Liquid Chromatography (HPLC) in accordance with U.S. EPA method TO-11.

Hexavalent chromium (chrome VI) was analyzed using Ion Chromatography (IC). Sample collection involves drawing air at a prescribed rate through a cellulose fiber filter. The filter is pre-treated with sodium bicarbonate to prevent conversion of chrome VI to chrome III. Chrome VI is extracted from the filter with deionized water aided by sonication and subsequently analyzed using IC.

Particulate matter less than 10 microns (PM_{10}) was collected over a 24-hour period using size selective inlet (SSI) samplers in accordance with the U.S. EPA's Federal Reference Method (FRM). All PM samples were collected on quartz filters and analyzed for total PM mass, metals, ions, organic carbon (OC), and elemental carbon (EC). Metal analysis of particulate samples was determined using methodology based on IO-3 (Compendium of Methods for Inorganic Air Pollutants), implementing a combination of energy dispersive X-ray fluorescence (EDXRF), inductively coupled plasma mass spectrometry (ICP-MS), and IC. Carbon analysis was conducted by taking a small circular disk from sampled PM_{10} filters. The small circular disk was placed into a carbon analyzer which utilizes the thermal optical reflectance (TOR) method to measure the OC and EC content of the filter.

3.0 METEOROLOGICAL DISCUSSION

A full meteorological system was set up at the Fernangeles Elementary School site to characterize the winds in the Sun Valley area over the course of the study. Wind roses depicting wind speed and direction averaged over the study period can be found in Appendix A. Additional wind roses found in the Appendix show the wind speed and direction averaged over various times to coincide with the multiple sites monitoring periods.

In general, wind patterns of Sun Valley are influenced by its location near the Pacific Ocean, the orientation of the San Fernando Valley, the surrounding mountain ranges, and the synoptic weather systems that pass over Southern California. The wind rose generated for the time period, June 2005 through July 2006 found in Appendix A, is

representative of a typical year for Sun Valley and would also correspond closely to surrounding cities in the San Fernando Valley, such as Burbank.

Winds in Sun Valley are influenced by the predominant onshore flow through the day. At night, winds will decrease and reverse to a light offshore flow. This pattern is known as the land-sea breeze effect which dominates the Basin most of the year. During winter months, north winds are more prevalent than other times of the year. This is due to the frequency of synoptic scale systems originating in the Gulf of Alaska that deepen and sweep down into the continental United States. Winter is the wet season in the Basin, with the heaviest precipitation occurring in February. Rain decreases during the spring months with the major storm track migrating northward. Weather, even during the winter months, shows the temperate influence of the Pacific Ocean.

Predominant wind flow for Sun Valley is from the south-southeast. All wind directions are represented in varying amounts throughout the year. Note, for the year represented by this wind rose (Appendix A), the highest wind speeds did not necessarily occur in the dominant wind direction. Synoptic weather patterns have a stronger effect on wind speed than other factors such as topography, radiational heating, and the land-sea breeze effect. Northwest winds occur more frequently during the late fall and winter months due to higher frequency of synoptic systems passing over the Basin. Also winter months have less radiational heating which is caused by shorter days. The average warmest month is August and the average coolest month is December.

Five to ten times a year, normally in the winter months, high pressure systems build over the desert plateaus of Nevada and Utah spreading southward into the Mojave Desert. The clockwise circulation around these high pressure systems can produce a warm, intense northeast wind known locally as a Santa Ana. Santa Ana winds can last from a few hours to several days in the Basin.

As spring approaches, synoptic scale systems are still apt to penetrate south of the blocking mountain ranges thus continuing a higher than average cloud cover over the Basin. During summer, atmospheric conditions are more stable when the dominant features influencing winds will be strong temperature gradients caused by heating over the deserts and the cold waters along the coast.

4.0 DATA ANALYSIS

Pollutant concentration data collected from six sites (Poly High School, Stonehurst Elementary, Fire Station, LAUSD Maintenance Yard, Fernangeles Elementary, and the Burbank Air Monitoring Station) are compared to identify hot spots and discern seasonal or spatial trends of compounds.

4.1 PM_{10} AMBIENT CONCENTRATION ANALYSIS

PM_{10} ambient concentrations measured during the study are summarized in Table 4. The complete data tabulations for each sampling site and day can be found in Appendix B. Burbank and Fernangeles School data span the entire study period.

Table 4. PM_{10} Average and Maximum in µg/m^3

Site	Burbank	Fernangeles	Fire Station	LAUSD	Poly High	Stonehurst
Duration	6/3/05-6/25/06	6/3/05-6/25/06	10/28/05-6/25/06	8/23/05-6/25/06	2/13/06-6/25/06	8/23/05-2/7/06
Average	35	35	28	35	27	40
Maximum	77	75	65	72	67	77
No. of Samples	122	122	77	102	44	55

The maximum daily PM_{10} concentration observed during the study was 77 µg/m^3 at Burbank and Stonehurst Elementary. No study site exceeded the federal PM_{10} 24-hour standard of 150 µg/m^3. Each site's maximum concentration did exceed the state PM_{10} 24-hour standard of 50 µg/m^3.

Particulate matter concentrations in the Basin typically vary by season. Thus, it is necessary to compare PM_{10} concentrations at the sampling sites for the same time periods only. Figures 2 through 5 shows each site's average PM_{10} concentration compared to Fernangeles and Burbank for the same time period.

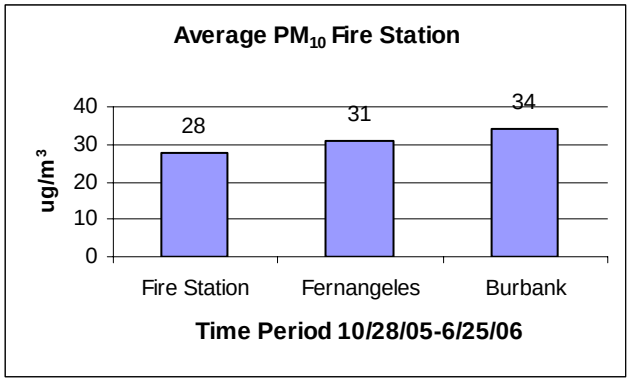


Figure 2. Fire Station PM_{10}

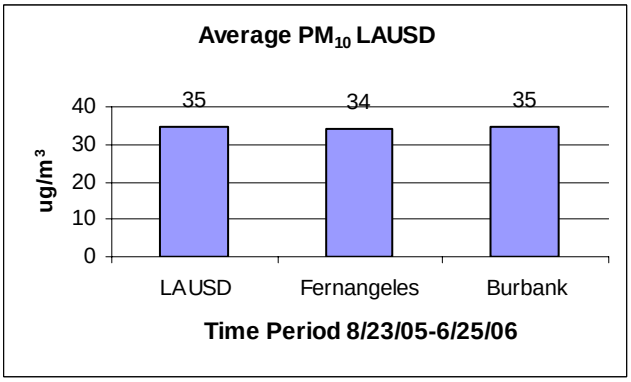


Figure 3. LAUSD PM_{10}

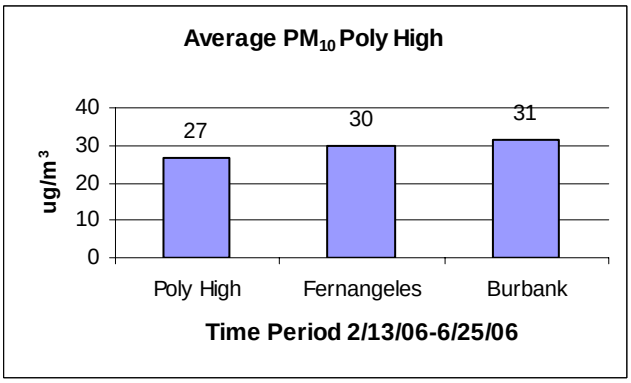


Figure 4. Poly High PM_{10}

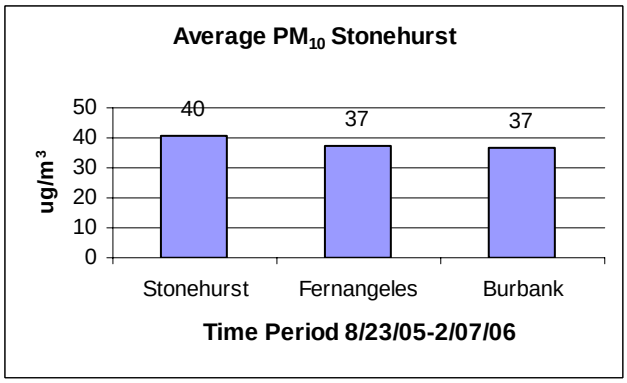


Figure 5. Stonehurst PM_{10}

Throughout the varied time periods, it appears that Burbank and Fernangeles PM_{10} are very similar. It would appear that the same air parcel passes through Burbank and Fernangeles leading to very similar concentrations of PM_{10}. Figures 2 and 4 show that the Fire Station and Poly High experience lower concentrations of PM_{10} than Burbank and Fernangeles. The LAUSD site experiences the same concentration as Burbank and Fernangeles (Figure 3) and most probably experiences the same air parcel. Only Stonehurst experiences on the average slightly higher levels of PM_{10} than Burbank and Fernangeles during its study period.

Stonehurst is located in the northeastern part of Sun Valley adjacent to the less developed area of Sun Valley. As noted in the Meteorological Discussion (Section 3.0), northwest winds occur more frequently during the late fall and winter months, which is the time period of the study at Stonehurst. Wind roses for the Stonehurst monitoring period, found in Appendix A, exhibit this flow. One possible explanation for the higher PM_{10} at Stonehurst could be the prevalence of greater amounts of crustal material found in the filters. Figure 6 displays three selected crustal elements, aluminum, calcium and silicon, averaged from all samples collected at the study sites, and shows that all three crustal elements are highest at Stonehurst Elementary School.

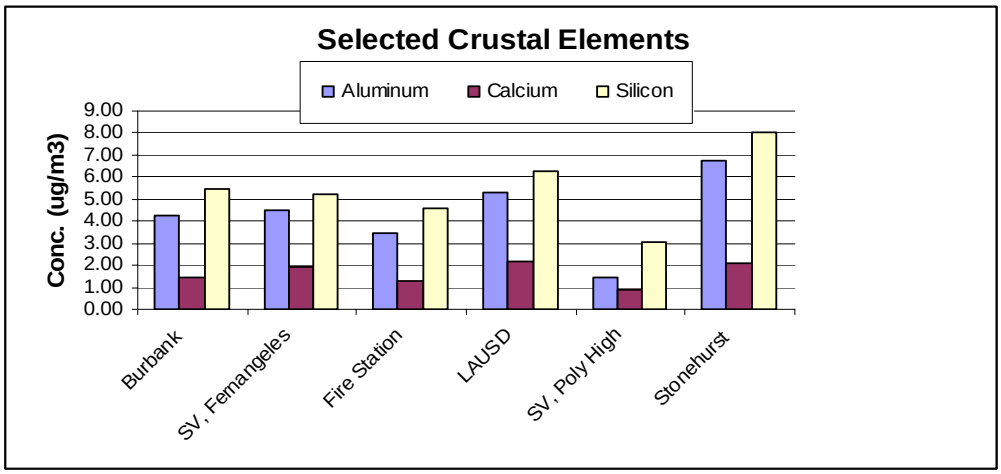


Figure 6. Graph of Selected Crustal Elements

Crustal material refers to elements found in the Earth's crust. The top five elements in order of abundance in the Earth's crust (CRC Handbook of Chemistry and Physics) are: oxygen, silicon, aluminum, iron and calcium. The oxygen is found combined with the silicon, aluminum, iron and calcium. These elements are generally indicative of re-entrained road dust or wind blown dust from the Earth.

4.2 ORGANIC AND ELEMENTAL CARBON CONCENTRATION ANALYSIS

The PM_{10} filters used in the mass analysis discussed in Section 4.1 were analyzed for elemental and organic carbon concentrations. Total carbon is the sum of these two measured components. The elemental carbon contained in the PM_{10} fraction captured in the air filters is considered to signify combustion processes that occur from mobile and stationary sources. Appendix B lists the concentrations measured for each sampling day.

Figures 7 through 10 show the average organic carbon (OC), elemental carbon (EC), and total carbon (TC) for the different sites as compared to Fernangeles and Burbank for the same time period.

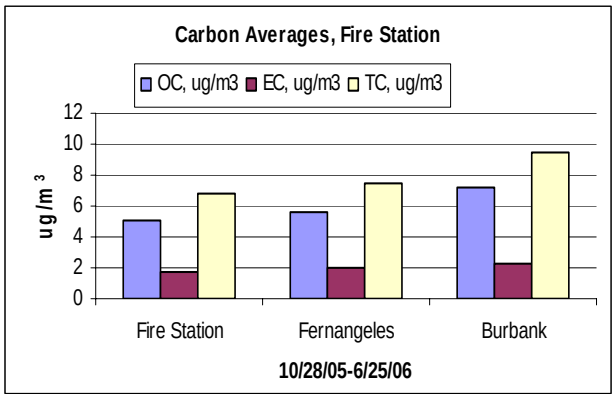


Figure 7. Fire Station Carbon

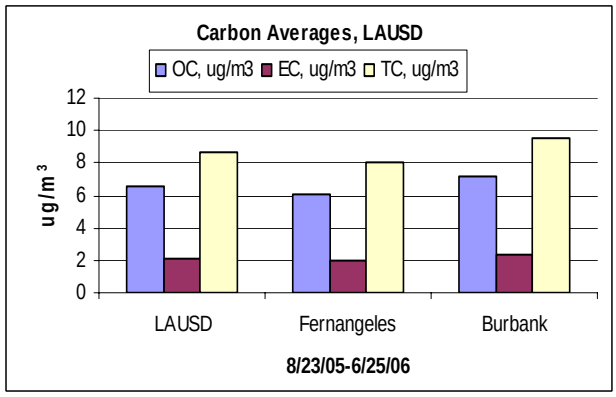


Figure 8. LAUSD Carbon

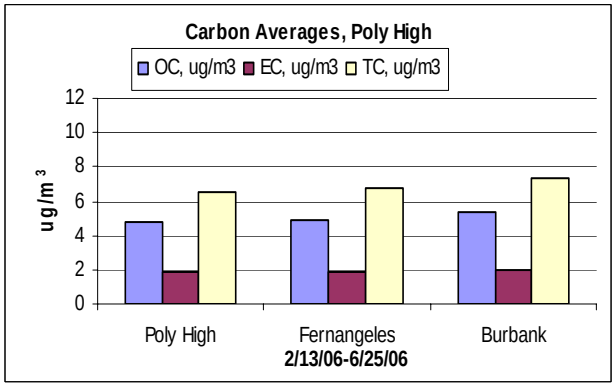


Figure 9. Poly High Carbon

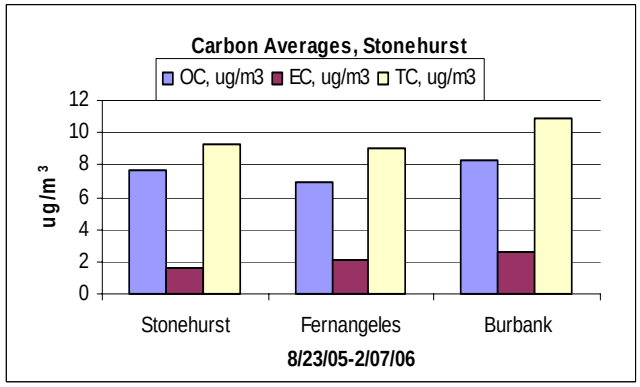


Figure 10. Stonehurst Carbon

The total carbon content of the site filters closely follows the PM10 concentrations. Burbank is higher than Fernangeles and the four other sites. In the case of LAUSD and

Stonehurst the organic carbon is slightly higher than Fernangeles. The organic carbon could indicate higher traffic volumes in these areas.

By combustion processes is meant the burning of hydrocarbons such as gasoline, diesel, fuel oil and natural gas. For mobile sources the predominant fuels are gasoline and diesel. For stationary sources it is primarily natural gas but some gaseous and liquid hydrocarbons may be used such as propane, kerosene or diesel. The organic portion represents the hydrocarbons that are not completely combusted to carbon dioxide or pure carbon (soot in common terms). The definition of these fractions, organic and elemental carbon, are method derived and define the particulate matter into carbon that is volatile (having some vapor pressure at ambient conditions) called "organic" and elemental (soot) that has virtually no volatility. The organic portion represents for the most part unburned hydrocarbons of various molecular weights that attach to the particulate in the air.

4.3 HEXAVALENT CHROMIUM ANALYSES

Hexavalent chromium is produced primarily from certain metal operations, such as chrome plating. Hexavalent chromium is measured in the low nanogram (10^{-9} gram) per cubic meter range, whereas carbon and mass of particulates are measured in the microgram (10^{-6} gram) per cubic meter concentration range. The Basin measured annual average for hexavalent chromium concentrations found in MATES III was 0.23 ng/m^3.[1]

Hexavalent chromium ambient concentrations measured during the study are summarized in Table 5. The complete data tabulations for each sampling site and day can be found in Appendix C. Burbank and Fernangeles data are provided to encompass the entire study period.

Table 5. Hexavalent Chromium Average and Maximum in ng/m^3

Site	Burbank	Fernangeles	Fire Station	LAUSD	Poly High	Stonehurst
Duration	6/3/05-6/25/06	6/3/05-6/25/06	10/28/05-6/25/06	8/23/05-6/25/06	2/13/06-6/25/06	8/23/05-2/7/06
Average	0.13	0.17	0.08	0.50	0.07	0.14
Maximum	0.67	0.90	0.47	5.22	0.23	0.52
No. of Samples	125	123	76	98	38	55

[1] *Multiple Air Toxics Exposure Study (MATES III) Draft Report*, January 2008

Figure 11 is a graphic display of the concentration averages over the course of the study.

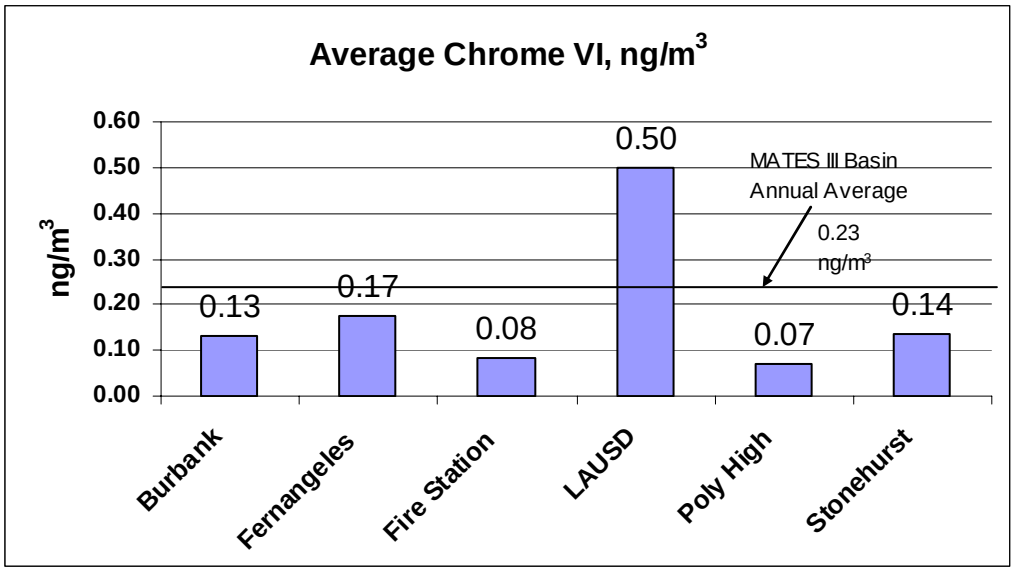


Figure 11. Concentration Averages Chrome VI

In the course of the study, several concentrations above the background daily average were found at the LAUSD site. Investigation by the field technicians found it was in the vicinity of a chrome plating plant, Superior Chrome Plating. Sampling was continued past the full study timeline for chromium six at LAUSD, and a second hexavalent chrome sampling site was set up at Fire Station 77, 8943 Glenoaks Blvd., Sun Valley (not to be confused with Fire Station in Table 5 or Figure 11). Additional sampling for hexavalent chromium was conducted from June 6, 2006 through August 7, 2006. The meteorological studies in Sun Valley (see Section 3.0) indicate predominately south-southeasterly flows in spring and summer and some northwesterly flows in fall and winter. The two-month average, as shown in Table 6 for Fire Station 77, is 0.51 ng/m^3 which is nearly the same for LAUSD over the August to June time period (Table 5). The LAUSD average for the time period June to August 2006 is 0.17 ng/m^3, which is below the Basin wide annual average of 0.23 ng/m^3 found in MATES III.

Table 6. Hexavalent Chromium Average LAUSD and Fire Station 77

Site	**LAUSD**	**Fire Station 77**
Duration	6/7/06-7/28/06	6/7/06-8/7/06
Average	0.17	0.51
Maximum	0.51	3.70
No. of Samples	18	16

The sampling site at Fire Station 77 was closer to the chrome plating facility than the LAUSD site. When the seasonal winds changed the LAUSD site measured at or below

typical background levels observed throughout the study and the Fire Station site now saw levels approaching those seen previously at LAUSD during the winter months. Figure 12 graphically illustrates the average levels found in January and February contrasted with those found in June and July. Data for both sites was only available for the June and July '06 time period. It can be seen that the hexavalent chromium values at LAUSD site reduced as the year went on and the Fire Station 77 site was higher in June and July than the LAUSD site.

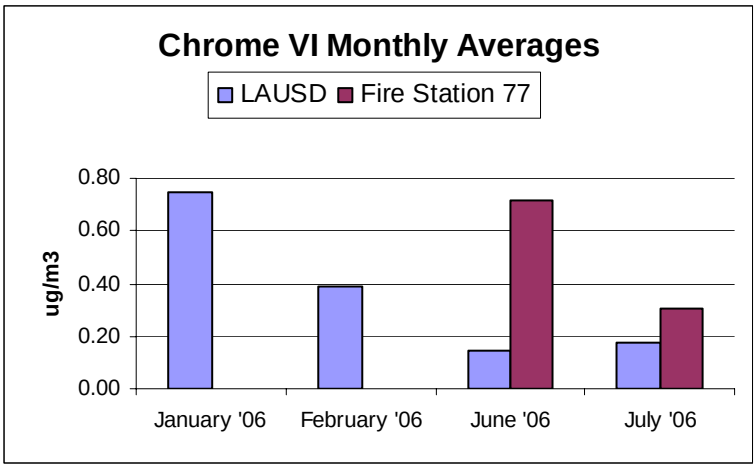


Figure 12. Hexavalent Chromium Monthly Averages

The hexavalent chromium analysis shows that immediately downwind of a source, increases in the hexavalent chromium concentration can be observed. However, a short distance away from the source, the levels decline and approach the same concentration that represents a background level from all sources. By short distances is meant within 500 meters.

It has been reported to SCAQMD that as of November 14, 2006 the company, Superior Plating Inc., ceased operation.

4.4 OTHER COMPOUNDS

To fulfill the U.S. EPA grant awarded to the District, selected toxic compounds were monitored (see Table 2). Summaries of those analyses are presented in Figure 12. The summary data for the figures can be found in Appendix D. The summaries are presented as the average concentration value with bars that represent the maximum and minimum values seen over the course of the study. This gives the range of concentrations that was seen for the compound, although most values will be near the average. Intersite comparisons can be made from the figures for individual compounds and give an indication if local sources are impacting the monitoring location.

Two compounds, vinyl chloride and 1,2-dichloropropane, were at or below detection in all measurements. Vinyl chloride may be found in landfill gas emissions and indicative of such gas migration into the air. The other chlorinated hydrocarbons, methylene

chloride, carbon tetrachloride, perchloroethylene, chloroform, and trichloroethylene exhibit very little spatial variation in concentration. The concentration at Burbank (BU) which is typically the upwind site can be seen to be at or above the rest of Sun Valley. This would indicate that local sources, if any, within Sun Valley were not great enough to influence the overall averages which approach the Basin-wide background levels as seen in MATES III. Several sites did indicate maximum concentrations several times higher than background, but these were the highest one-day levels experienced at that site. Transient emissions of methylene chloride were indicated at LAUSD (LA) and Stonehurst (SH). Transient emissions of trichloroethylene are indicated at LAUSD (LA), Stonehurst (SH), and Fernangeles (FA). The average measured concentrations are very near the detection level and all below 0.2 parts per billion (ppb). Transient emissions could be from a short-time use of cleaning solvent and/or process. The average concentration is a much better indication of exposure over the long term.

Benzene and 1,3-butadiene are both products of tail pipe emissions, and spatial patterns are highly correlated for these compounds. They generally reflect the impact of vehicular traffic in an area. Figure 12 shows that benzene is highest at Burbank with all other sites (considered) downwind of the Burbank station having lower average concentrations. The second highest level on average are at Stonehurst and Fernangeles Elementary Schools, which have nearly identical levels. With respect to 1,3-butadiene, the highest average were found at Stonehurst Elementary and Fernangeles Elementary, which have identical averages.

The principal sources of formaldehyde and acetaldehyde are considered to be on-road mobile sources. It is both primarily emitted and secondarily formed by chemical reactions in the atmosphere. Figure 12 illustrates the similar spatial pattern for these two compounds. The levels are quite uniform throughout the study area. Long-term studies at the Burbank station (10+ years) for formaldehyde and acetaldehyde indicate the levels are similar to basin-wide averages. No elevated concentrations were found at any of the study sites.

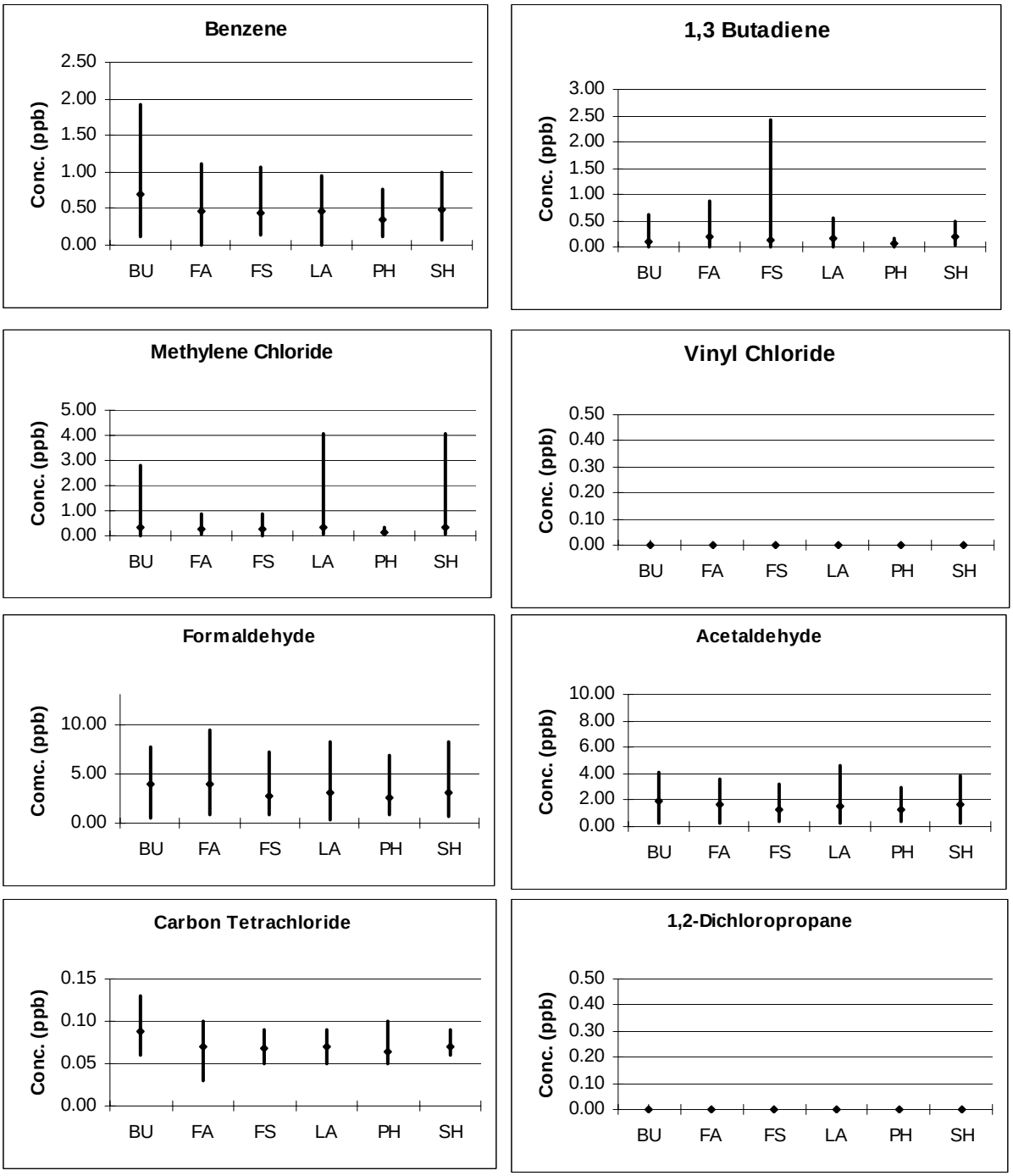
The toxic metals cadmium, manganese, arsenic, nickel, beryllium and lead (Pb) averages vary little from each other at the six sites. The maximum value observed does show variation between the sites. The maximum value in many cases is a single sampling day. All sites experience on average very low levels that do not vary and represent a basin-wide background.

5.0 CONCLUSIONS

With the exception of hexavalent chromium, measured levels of toxic air contaminants were similar across the Sun Valley region and were found to have little variance. Their average concentrations entering Sun Valley on the predominant winds were changed slightly in traversing the valley. Any influence of the landfill on toxic compound concentrations could not be discerned at the sites chosen for this study.

The hexavalent chromium analysis shows that immediately downwind of a source (Superior Plating Inc.), measurable hexavalent chromium concentration levels are detected. However, at short distances away from the source, levels decline and approach concentration levels similar to background levels. Superior Plating ceased operations in November 2006, four months after the end of this study.

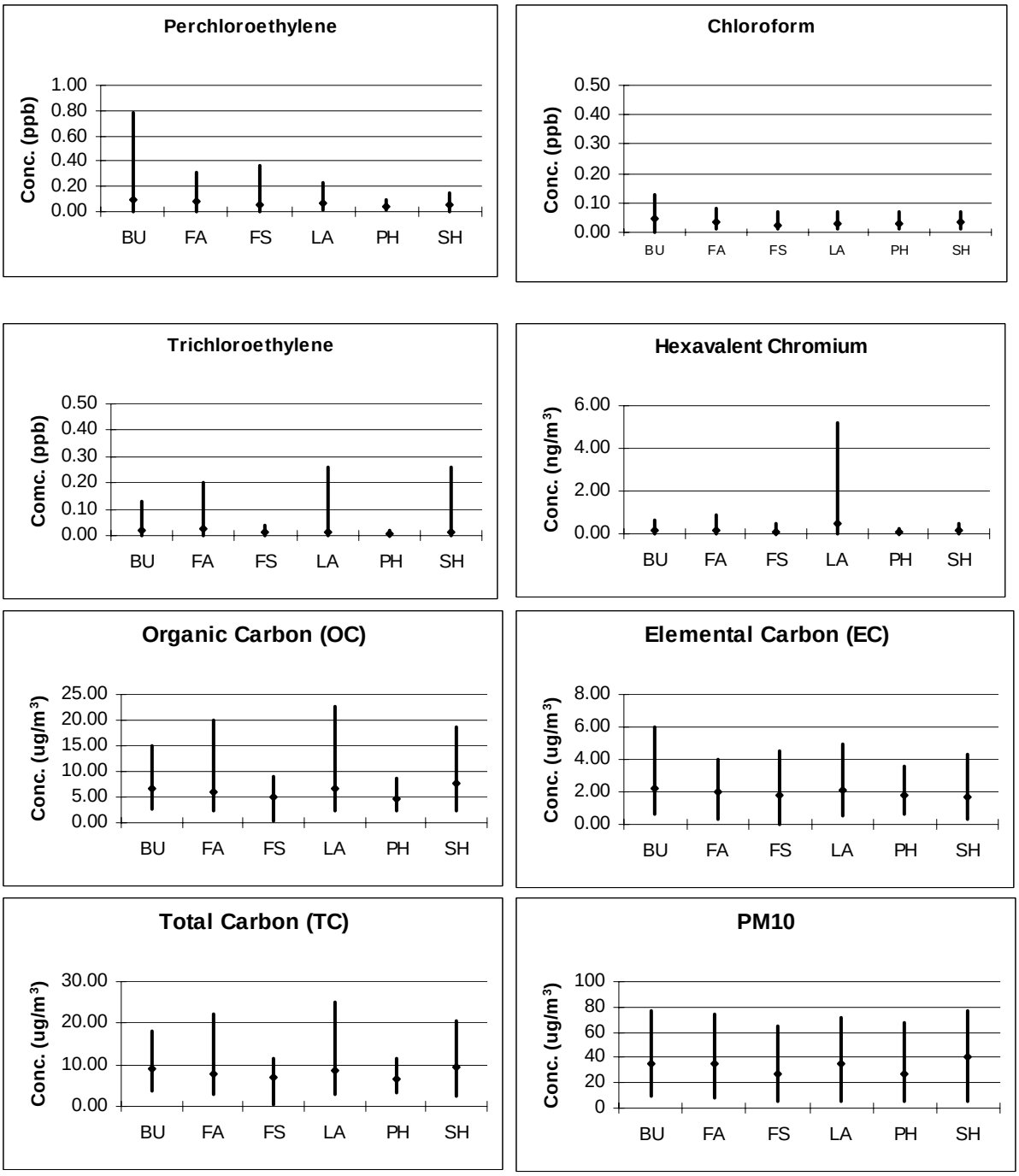
PM_{10} concentrations are indicative of predominant wind patterns within the sub-region of Sun Valley. Local disturbances to this homogeneity could be ascribed to an abundance of crustal elements.



• = Average value	¦ = Minimum and Maximum values

BU=Burbank	FA=Fernangeles	FS=Fire Station
LA=LAUSD	PH=Poly High School	SH=Stonehurst Elementary

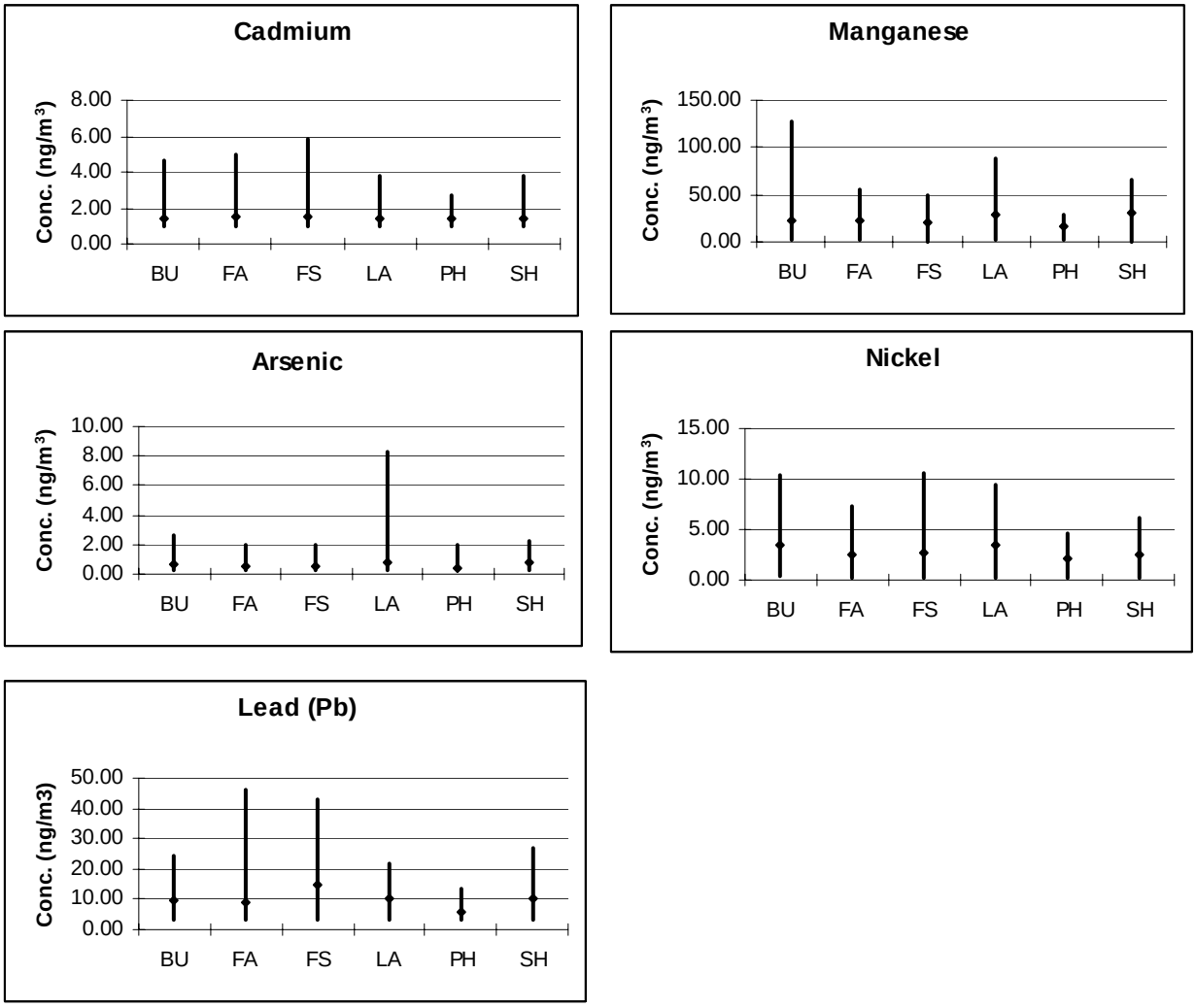
Figure 13. Selected Compounds



• = Average value	¦ = Minimum and Maximum values

BU=Burbank	FA=Fernangeles	FS=Fire Station
LA=LAUSD	PH=Poly High School	SH=Stonehurst Elementary

Figure 13. Continued



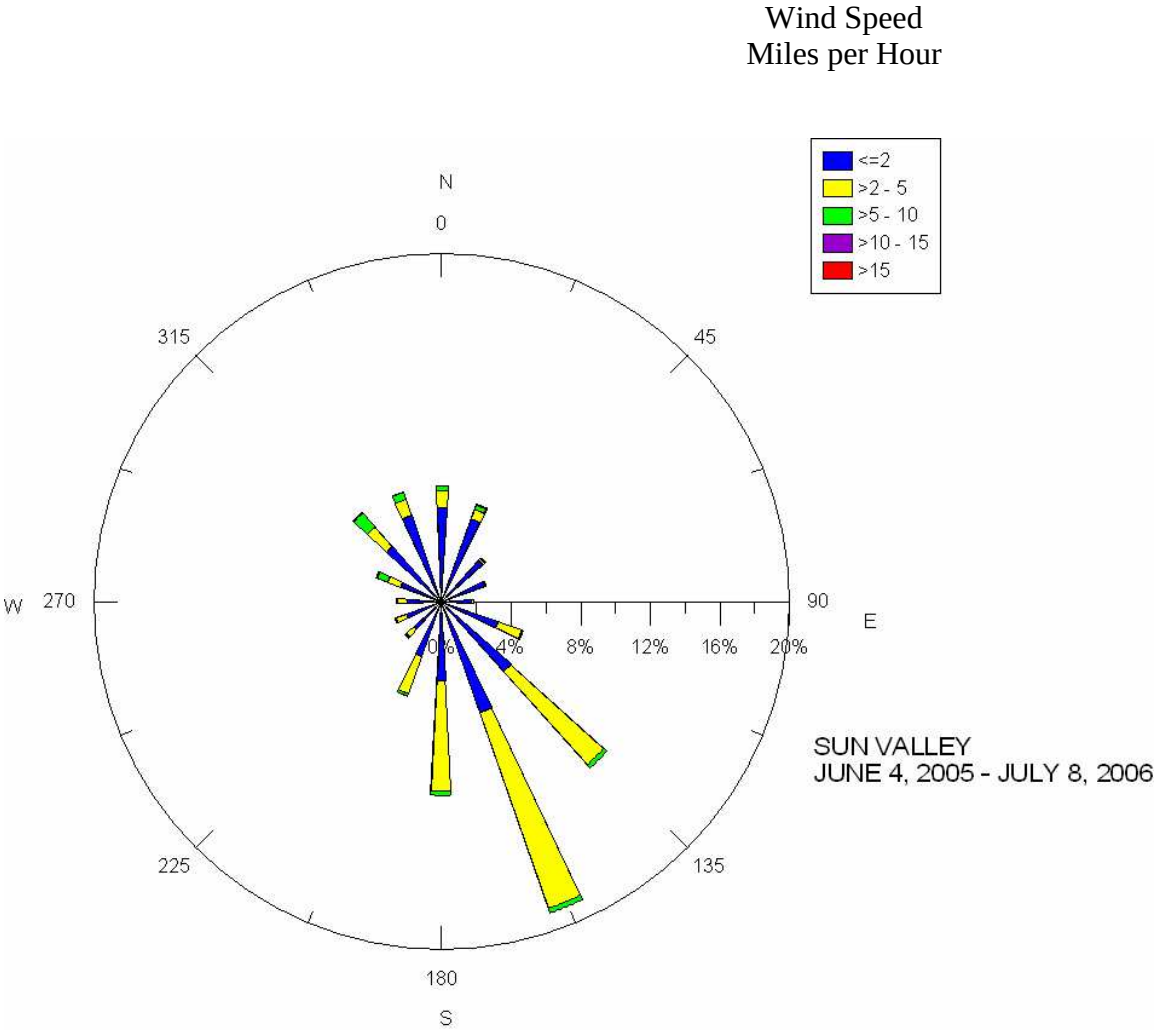
• = Average value	¦ = Minimum and Maximum values

BU=Burbank	FA=Fernangeles	FS=Fire Station
LA=LAUSD	PH=Poly High School	SH=Stonehurst Elementary

Figure 13. Continued

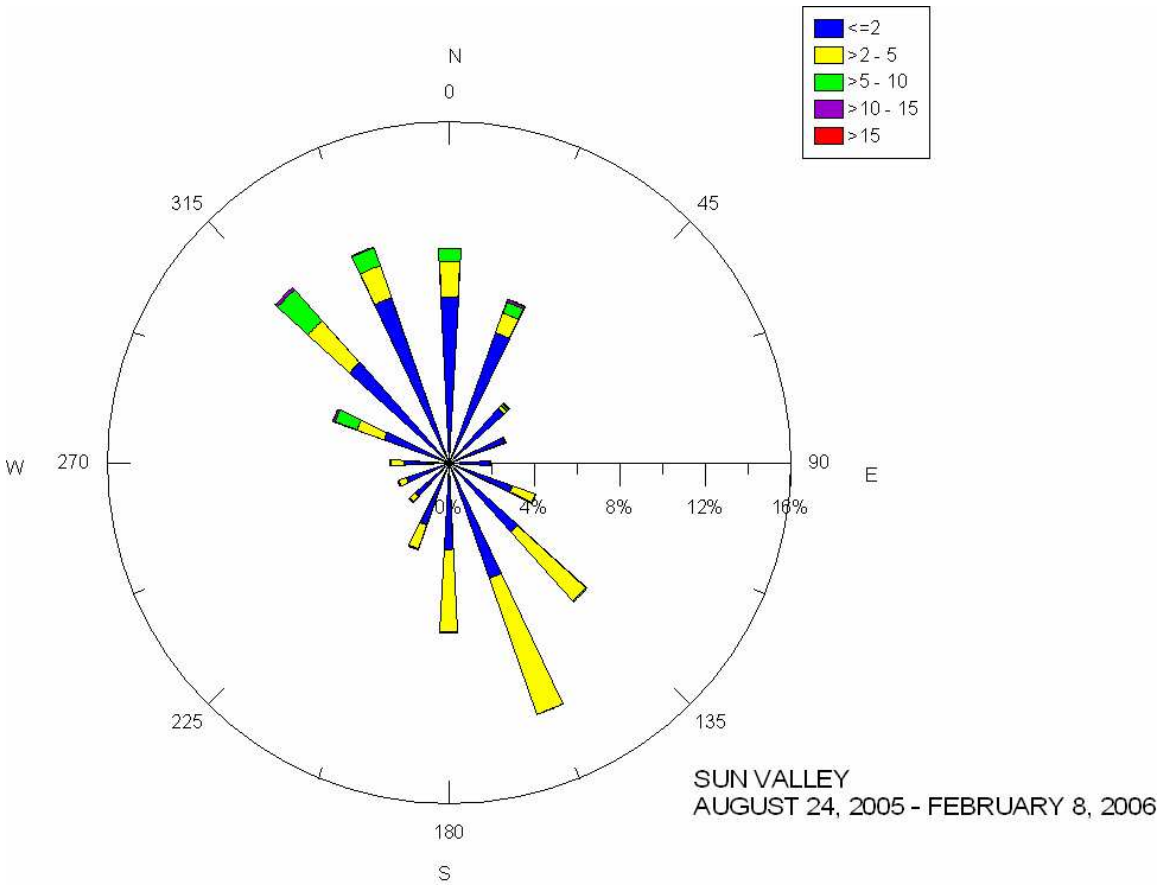
Appendix A

Wind Rose
Fernageles Full Year



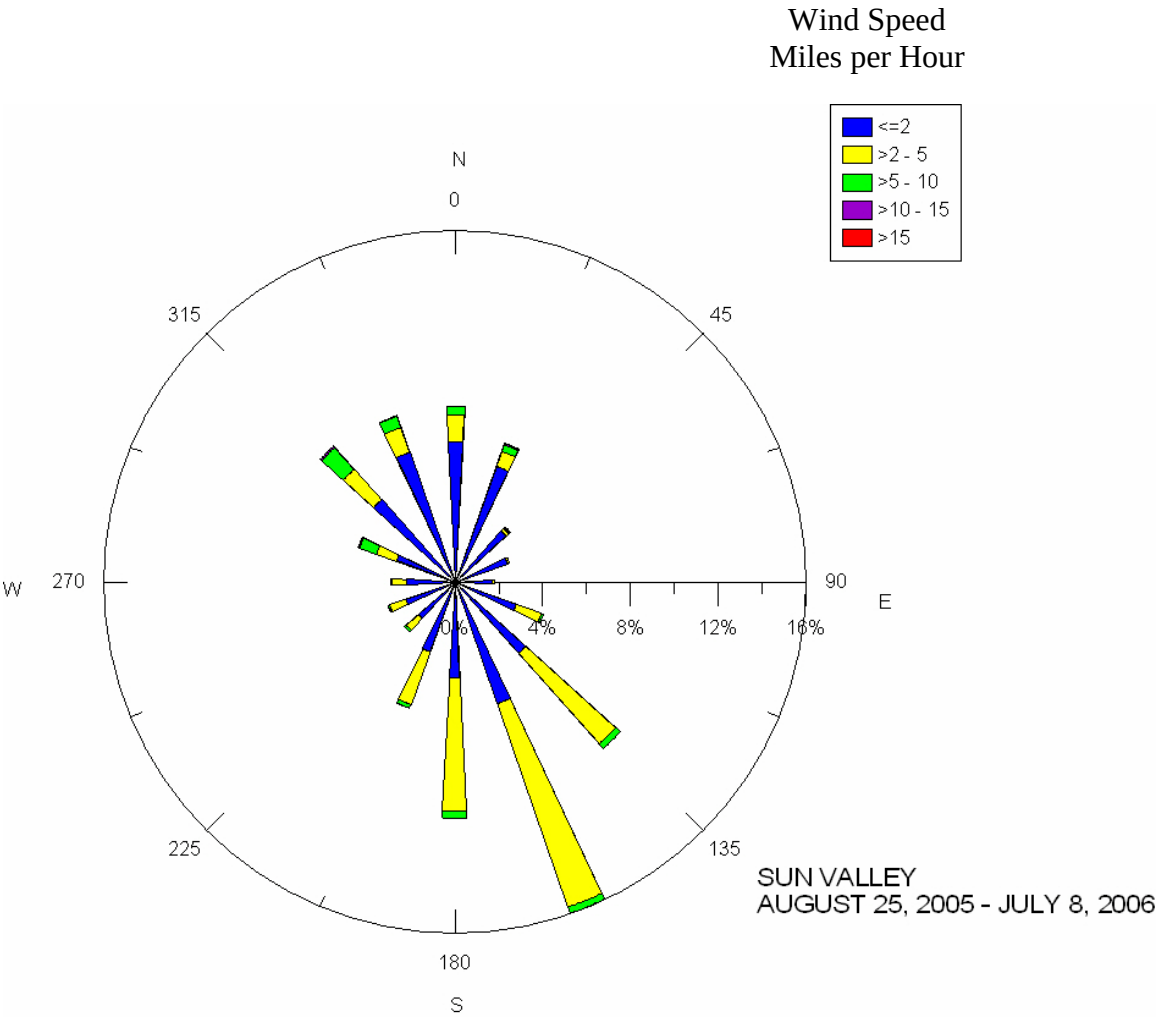
Wind Rose
Fernangeles

Stonehurst Monitoring Period



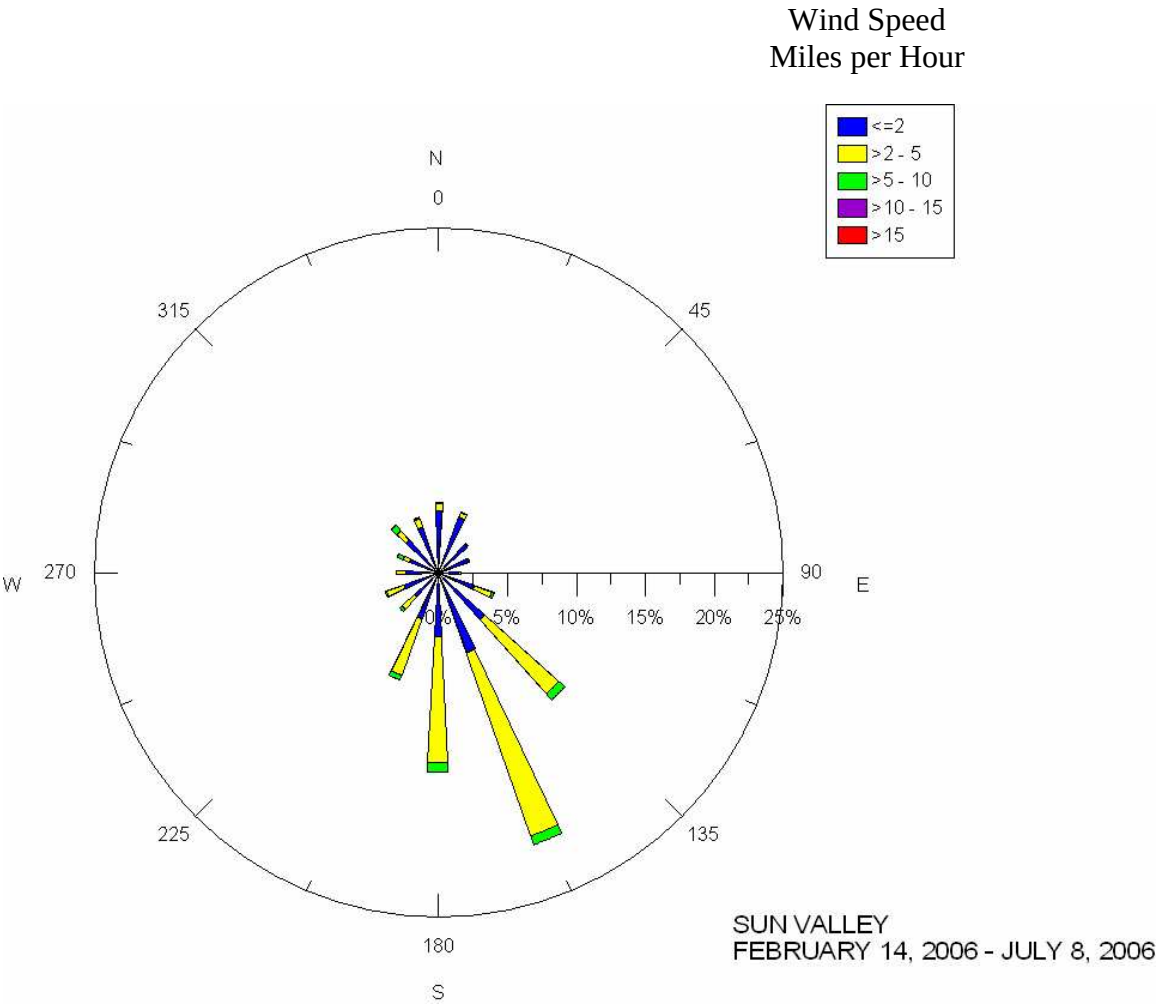
Wind Rose
Fernangeles

LAUSD Monitoring Period



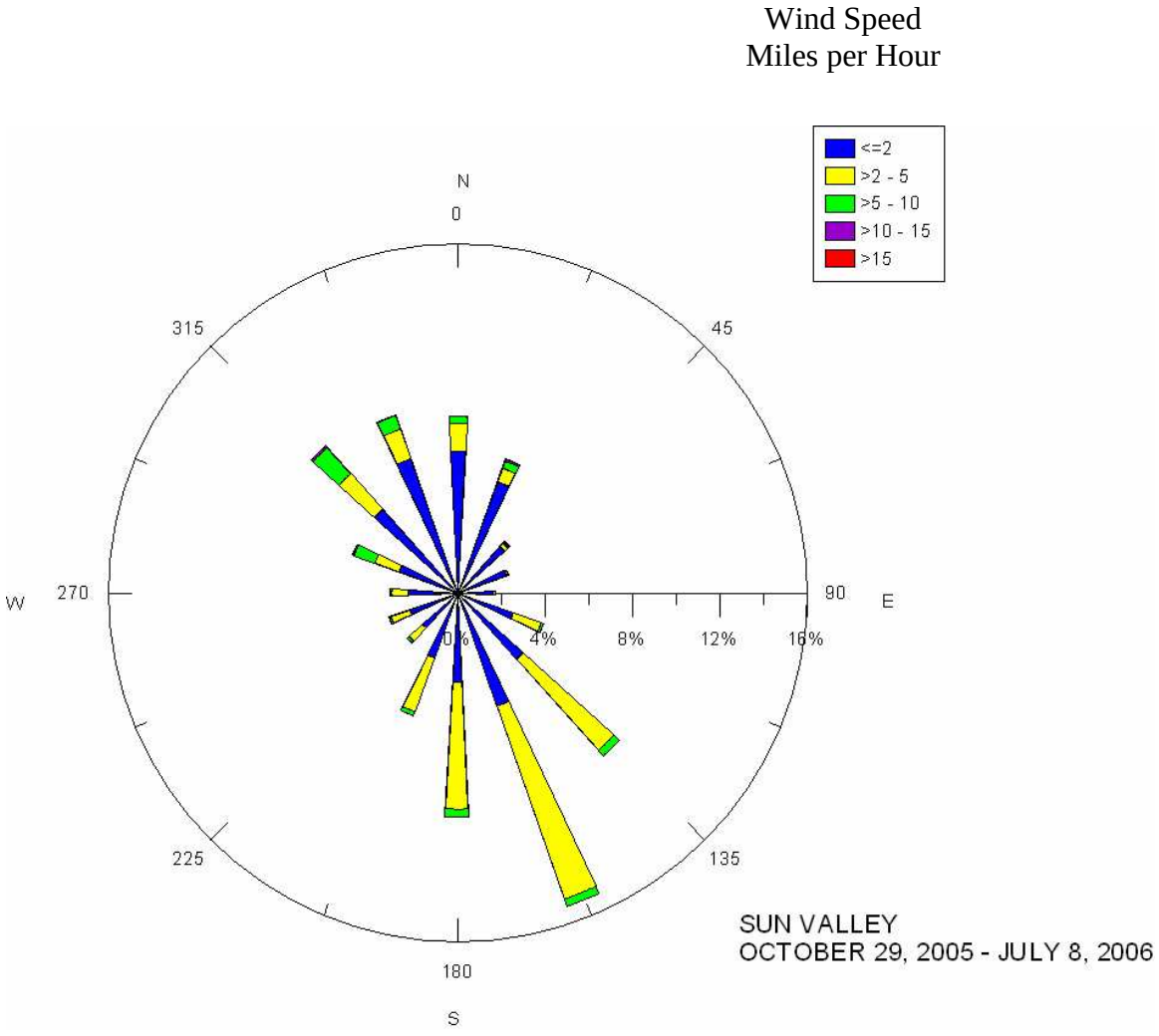
Wind Rose
Fernangeles

Poly High Monitoring Period



Windrose
Fernangeles

LA County Fire Station Monitoring Period



Appendix B

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
Burbank	6/3/2005	26	3.74	1.56	5.30
Burbank	6/6/2005	28	4.22	1.33	5.55
Burbank	6/9/2005	27	3.78	1.54	5.32
Burbank	6/12/2005	31	4.04	0.93	4.96
Burbank	6/15/2005	26	3.77	1.41	5.17
Burbank	6/18/2005	24	4.20	1.18	5.37
Burbank	6/21/2005	32	5.72	2.30	8.02
Burbank	6/24/2005	57	5.14	2.47	7.61
Burbank	6/27/2005	31	4.51	1.87	6.37
Burbank	6/30/2005	39	6.67	3.13	9.79
Burbank	7/3/2005	38	5.46	1.34	6.79
Burbank	7/6/2005	42	5.75	3.02	8.78
Burbank	7/9/2005	41	5.08	1.53	6.61
Burbank	7/12/2005	46	6.40	2.95	9.35
Burbank	7/15/2005	48	7.13	2.96	10.09
Burbank	7/18/2005	41	6.24	2.36	8.59
Burbank	7/21/2005	36	6.68	2.50	9.18
Burbank	7/24/2005	30	4.76	1.00	5.76
Burbank	7/27/2005	34	5.23	1.88	7.11
Burbank	7/30/2005	31	6.00	1.84	7.84
Burbank	8/2/2005	41	5.29	2.41	7.70
Burbank	8/5/2005	45	7.12	3.17	10.29
Burbank	8/8/2005	36	5.96	2.21	8.17
Burbank	8/11/2005	41	5.65	2.10	7.75
Burbank	8/14/2005	29	4.11	0.88	4.99
Burbank	8/17/2005	27	5.51	2.05	7.56
Burbank	8/20/2005	29	4.49	2.10	6.59
Burbank	8/23/2005	45	6.46	2.54	8.99
Burbank	8/26/2005	48	8.30	4.32	12.62
Burbank	8/29/2005	46	9.84	3.32	13.16
Burbank	9/1/2005	47	6.51	3.21	9.72
Burbank	9/4/2005	28	6.69	1.34	8.03
Burbank	9/7/2005	34	6.29	3.70	9.99
Burbank	9/10/2005	19	3.80	0.90	4.70
Burbank	9/13/2005	31	4.07	1.84	5.91
Burbank	9/16/2005	35	4.69	1.81	6.50
Burbank	9/19/2005	55	7.91	2.84	10.75
Burbank	9/22/2005	47	8.25	4.15	12.40
Burbank	9/25/2005	46	7.18	1.95	9.13
Burbank	9/28/2005	37	8.59	3.15	11.74
Burbank	10/1/2005	44	9.26	1.46	10.72
Burbank	10/4/2005	39	7.95	2.90	10.85
Burbank	10/7/2005	35	8.79	1.98	10.77
Burbank	10/10/2005	42	7.23	3.60	10.84
Burbank	10/13/2005	39	8.87	3.30	12.17
Burbank	10/16/2005	14	3.19	0.82	4.01
Burbank	10/19/2005				
Burbank	10/22/2005	59	6.39	1.68	8.07
Burbank	10/25/2005	16	4.38	0.93	5.31
Burbank	10/28/2005	28	5.56	2.51	8.07
Burbank	10/31/2005	40	9.37	5.79	15.16

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
Burbank	11/3/2005	39	6.43	1.45	7.88
Burbank	11/6/2005	77	15.11	1.98	17.10
Burbank	11/9/2005	15	4.33	1.89	6.22
Burbank	11/12/2005	39	11.14	1.88	13.02
Burbank	11/15/2005	50	12.52	4.70	17.22
Burbank	11/18/2005	39	11.70	2.40	14.10
Burbank	11/18/2005	39	11.70	2.40	14.10
Burbank	11/21/2005	39	11.43	1.82	13.25
Burbank	11/24/2005				
Burbank	11/27/2005				
Burbank	11/30/2005	49	10.97	6.01	16.98
Burbank	12/3/2005	11	4.47	0.87	5.34
Burbank	12/6/2005	35	11.49	2.36	13.86
Burbank	12/9/2005	26	9.10	2.36	11.47
Burbank	12/12/2005	47	12.14	5.99	18.13
Burbank	12/15/2005	47	11.45	2.10	13.55
Burbank	12/18/2005	31	9.40	1.98	11.38
Burbank	12/21/2005	40	12.01	2.18	14.19
Burbank	12/24/2005	21	6.94	3.14	10.07
Burbank	12/27/2005	24	6.93	3.81	10.74
Burbank	12/30/2005	40	11.46	2.22	13.68
Burbank	1/2/2006	9	3.00	0.66	3.67
Burbank	1/5/2006	28	8.21	4.05	12.27
Burbank	1/8/2006	30	8.73	1.65	10.39
Burbank	1/11/2006	48	11.61	2.17	13.78
Burbank	1/14/2006	20	6.49	1.36	7.85
Burbank	1/17/2006	31	9.14	2.36	11.50
Burbank	1/20/2006	34	9.86	4.37	14.22
Burbank	1/23/2006	18	4.63	0.85	5.48
Burbank	1/26/2006	26	5.42	1.91	7.33
Burbank	1/29/2006	54	12.38	1.67	14.05
Burbank	2/1/2006	42	10.35	1.71	12.06
Burbank	2/4/2006	64	8.18	4.29	12.46
Burbank	2/7/2006	44	10.84	2.01	12.85
Burbank	2/10/2006	59	10.75	2.74	13.50
Burbank	2/13/2006	44	8.20	3.88	12.07
Burbank	2/16/2006	33	5.84	2.18	8.02
Burbank	2/19/2006				
Burbank	2/22/2006	37	8.44	4.23	12.67
Burbank	2/25/2006	46	9.28	3.35	12.63
Burbank	2/28/2006	13	3.64	0.84	4.48
Burbank	3/3/2006	19	6.69	1.29	7.99
Burbank	3/6/2006	25	4.90	2.58	7.48
Burbank	3/9/2006	34	5.77	1.13	6.90
Burbank	3/12/2006	14	5.08	1.90	6.98
Burbank	3/15/2006	24	4.56	1.83	6.39
Burbank	3/18/2006	15	4.99	1.66	6.65
Burbank	3/21/2006	14	3.90	1.34	5.25
Burbank	3/24/2006	32	6.98	2.93	9.91
Burbank	3/27/2006	30	3.79	1.56	5.34

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
Burbank	3/30/2006	20	5.08	0.96	6.04
Burbank	4/2/2006	26	6.89	2.41	9.29
Burbank	4/5/2006	16	3.74	1.37	5.11
Burbank	4/8/2006				
Burbank	4/11/2006				
Burbank	4/14/2006	14	3.36	1.47	4.82
Burbank	4/17/2006	17	4.14	1.45	5.59
Burbank	4/20/2006	35	6.54	3.03	9.57
Burbank	4/23/2006	12	2.78	0.88	3.66
Burbank	4/26/2006	15	3.38	1.01	4.39
Burbank	4/29/2006	39	4.42	1.88	6.30
Burbank	5/2/2006	44	5.15	1.99	7.13
Burbank	5/5/2006	29	3.78	1.49	5.27
Burbank	5/8/2006	53	5.95	2.10	8.05
Burbank	5/11/2006	68	6.05	3.03	9.08
Burbank	5/14/2006	48	5.94	1.63	7.58
Burbank	5/17/2006	67	5.78	3.80	9.57
Burbank	5/20/2006	31	4.85	1.50	6.36
Burbank	5/23/2006	18	4.21	1.85	6.06
Burbank	5/26/2006	46	4.99	1.51	6.50
Burbank	5/29/2006	26	5.69	1.77	7.46
Burbank	6/1/2006	48	7.63	3.42	11.04
Burbank	6/4/2006	35	5.40	2.10	7.50
Burbank	6/7/2006	46	5.01	2.12	7.14
Burbank	6/10/2006	28	4.40	1.24	5.65
Burbank	6/13/2006	20	4.38	1.23	5.61
Burbank	6/16/2006	42	7.16	2.62	9.79
Burbank	6/19/2006				
Burbank	6/22/2006				
Burbank	6/25/2006				
Fernangeles	6/3/2005	28	4.06	1.24	5.29
Fernangeles	6/6/2005	30	4.63	1.38	6.01
Fernangeles	6/9/2005	32	4.11	1.89	6.00
Fernangeles	6/12/2005	33	4.04	0.98	5.02
Fernangeles	6/15/2005	28	4.32	1.84	6.16
Fernangeles	6/18/2005	26	4.43	1.53	5.95
Fernangeles	6/21/2005	43	7.70	2.42	10.12
Fernangeles	6/24/2005	36	5.39	2.24	7.63
Fernangeles	6/27/2005	41	5.65	1.91	7.55
Fernangeles	6/30/2005	48	6.96	3.26	10.22
Fernangeles	7/3/2005	14	5.38	1.38	6.76
Fernangeles	7/6/2005	42	5.54	2.65	8.19
Fernangeles	7/9/2005	45	5.04	1.77	6.82
Fernangeles	7/12/2005	48	7.09	2.97	10.05
Fernangeles	7/15/2005	51	6.29	3.49	9.78
Fernangeles	7/18/2005	41	6.34	2.18	8.53
Fernangeles	7/21/2005	43	6.77	3.06	9.83
Fernangeles	7/24/2005	32	5.56	0.98	6.54
Fernangeles	7/27/2005	32	4.69	1.67	6.36
Fernangeles	7/30/2005	34	6.23	1.80	8.03

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
Fernangeles	8/2/2005	37	5.44	2.15	7.59
Fernangeles	8/5/2005	56	9.35	2.82	12.17
Fernangeles	8/8/2005	33	5.04	2.27	7.31
Fernangeles	8/11/2005	40	5.43	2.19	7.61
Fernangeles	8/14/2005	27	3.78	1.00	4.79
Fernangeles	8/17/2005	37	6.30	3.02	9.32
Fernangeles	8/20/2005	36	6.38	2.22	8.61
Fernangeles	8/23/2005	56	5.89	3.22	9.12
Fernangeles	8/26/2005	51	8.88	2.77	11.65
Fernangeles	8/29/2005	53	9.53	2.97	12.51
Fernangeles	9/1/2005	53	7.73	2.40	10.13
Fernangeles	9/4/2005	32	7.22	1.23	8.45
Fernangeles	9/7/2005	49	7.24	3.78	11.02
Fernangeles	9/10/2005	17	3.48	1.02	4.50
Fernangeles	9/13/2005	40	4.80	1.93	6.73
Fernangeles	9/16/2005				
Fernangeles	9/19/2005	59	7.90	2.48	10.38
Fernangeles	9/22/2005				
Fernangeles	9/25/2005	42	7.64	1.53	9.17
Fernangeles	9/28/2005	43	6.14	1.41	7.55
Fernangeles	10/1/2005	75	19.97	2.07	22.04
Fernangeles	10/4/2005	48	6.89	1.48	8.36
Fernangeles	10/7/2005	57	10.14	1.83	11.97
Fernangeles	10/10/2005	56	8.16	2.48	10.64
Fernangeles	10/13/2005	50	9.73	1.82	11.55
Fernangeles	10/16/2005	16	3.33	0.70	4.03
Fernangeles	10/19/2005	35	8.80	1.83	10.63
Fernangeles	10/22/2005	63	6.05	3.06	9.11
Fernangeles	10/25/2005	18	4.70	1.14	5.85
Fernangeles	10/28/2005	31	5.08	2.77	7.86
Fernangeles	10/31/2005	40	8.73	1.85	10.57
Fernangeles	11/3/2005	42	6.55	1.47	8.02
Fernangeles	11/6/2005	54	9.57	3.26	12.83
Fernangeles	11/9/2005	16	3.93	1.19	5.12
Fernangeles	11/12/2005	29	6.96	2.68	9.63
Fernangeles	11/15/2005	51	10.02	4.02	14.04
Fernangeles	11/18/2005	48	9.11	2.46	11.57
Fernangeles	11/21/2005				
Fernangeles	11/24/2005	42	9.45	2.05	11.50
Fernangeles	11/27/2005	15	3.14	0.28	3.42
Fernangeles	11/30/2005	56	11.36	2.46	13.82
Fernangeles	12/3/2005	8	2.98	0.42	3.40
Fernangeles	12/6/2005	35	8.03	3.61	11.65
Fernangeles	12/9/2005	20	5.33	1.92	7.25
Fernangeles	12/12/2005	49	9.04	3.96	13.00
Fernangeles	12/15/2005				
Fernangeles	12/18/2005				
Fernangeles	12/21/2005	41	6.51	3.58	10.09
Fernangeles	12/24/2005	23	5.31	2.30	7.61
Fernangeles	12/27/2005	26	5.59	2.91	8.50

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
Fernangeles	12/27/2005	26	5.59	2.91	8.50
Fernangeles	12/30/2005	44	7.61	3.73	11.35
Fernangeles	1/2/2006	9	2.34	0.37	2.70
Fernangeles	1/5/2006	38	8.47	1.75	10.22
Fernangeles	1/8/2006	15	3.60	0.85	4.45
Fernangeles	1/11/2006	50	9.05	1.93	10.98
Fernangeles	1/14/2006	20	4.62	1.22	5.85
Fernangeles	1/17/2006	30	6.00	2.63	8.62
Fernangeles	1/20/2006	19	4.28	1.46	5.74
Fernangeles	1/23/2006	34	4.12	0.44	4.57
Fernangeles	1/26/2006	28	4.47	1.66	6.13
Fernangeles	1/29/2006	34	6.72	1.32	8.04
Fernangeles	2/1/2006	39	6.87	3.35	10.22
Fernangeles	2/4/2006	38	6.95	1.82	8.77
Fernangeles	2/7/2006				
Fernangeles	2/10/2006				
Fernangeles	2/13/2006	38	7.09	2.87	9.96
Fernangeles	2/16/2006	29	4.56	1.35	5.92
Fernangeles	2/19/2006	9	3.67	1.05	4.72
Fernangeles	2/22/2006	31	6.48	2.04	8.52
Fernangeles	2/25/2006	36	7.97	1.64	9.61
Fernangeles	2/28/2006	11	3.08	0.67	3.75
Fernangeles	3/3/2006	13	3.59	1.31	4.90
Fernangeles	3/6/2006	26	5.98	2.79	8.77
Fernangeles	3/9/2006	31	4.85	2.35	7.19
Fernangeles	3/12/2006	10	3.99	1.46	5.45
Fernangeles	3/15/2006	29	5.10	1.86	6.97
Fernangeles	3/18/2006	14	4.15	1.30	5.44
Fernangeles	3/21/2006	12	3.32	1.30	4.61
Fernangeles	3/24/2006	36	7.26	3.02	10.28
Fernangeles	3/27/2006	25	4.24	1.65	5.88
Fernangeles	3/30/2006	21	4.21	2.05	6.26
Fernangeles	4/2/2006	22	5.09	1.22	6.31
Fernangeles	4/5/2006	14	2.88	0.94	3.82
Fernangeles	4/8/2006	17	5.17	1.44	6.60
Fernangeles	4/11/2006	19	3.60	1.81	5.41
Fernangeles	4/14/2006	14	3.27	1.66	4.93
Fernangeles	4/17/2006	21	3.32	1.36	4.68
Fernangeles	4/20/2006	33	6.14	2.24	8.37
Fernangeles	4/23/2006	13	2.70	0.80	3.50
Fernangeles	4/26/2006	16	3.26	1.13	4.39
Fernangeles	4/29/2006	44	4.52	2.10	6.62
Fernangeles	5/2/2006	44	5.05	2.12	7.17
Fernangeles	5/5/2006	36	4.21	2.10	6.31
Fernangeles	5/8/2006	61	6.71	2.88	9.59
Fernangeles	5/11/2006	65	5.90	2.93	8.83
Fernangeles	5/14/2006	49	5.69	1.75	7.44
Fernangeles	5/17/2006	57	5.09	3.07	8.16
Fernangeles	5/20/2006	30	4.26	1.56	5.81
Fernangeles	5/23/2006	18	3.99	1.89	5.88

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
Fernangeles	5/26/2006	47	4.56	2.10	6.66
Fernangeles	5/29/2006	26	5.00	1.32	6.32
Fernangeles	6/1/2006	53	7.87	3.06	10.92
Fernangeles	6/4/2006	30	5.56	1.42	6.99
Fernangeles	6/7/2006	46	4.88	2.53	7.40
Fernangeles	6/10/2006	25	3.56	0.84	4.40
Fernangeles	6/13/2006	23	4.55	1.43	5.99
Fernangeles	6/16/2006	46	7.27	2.93	10.19
Fernangeles	6/19/2006	40	5.27	2.19	7.46
Fernangeles	6/22/2006				
Fernangeles	6/25/2006				
Fire Station	10/28/2005				
Fire Station	10/31/2005	29	7.19	1.50	8.69
Fire Station	11/3/2005	36	4.74	2.52	7.26
Fire Station	11/6/2005	46	9.09	1.48	10.57
Fire Station	11/9/2005	17	3.11	1.70	4.81
Fire Station	11/12/2005				
Fire Station	11/15/2005	29	5.07	1.79	6.86
Fire Station	11/18/2005				
Fire Station	11/21/2005	23	4.38	1.05	5.43
Fire Station	11/24/2005	35	8.45	1.77	10.22
Fire Station	11/27/2005				
Fire Station	11/30/2005				
Fire Station	12/3/2005	7	2.66	0.45	3.12
Fire Station	12/6/2005	23	5.96	1.31	7.27
Fire Station	12/9/2005	13	3.92	0.92	4.84
Fire Station	12/12/2005	34	7.41	1.54	8.96
Fire Station	12/15/2005	40	7.17	3.37	10.54
Fire Station	12/18/2005	27	6.38	2.11	8.49
Fire Station	12/21/2005	24	5.84	1.99	7.83
Fire Station	12/24/2005	19	5.32	0.98	6.30
Fire Station	12/27/2005	25	6.39	2.88	9.27
Fire Station	12/30/2005	34	7.84	1.60	9.44
Fire Station	1/2/2006	6	2.43	0.58	3.01
Fire Station	1/5/2006	20	5.31	1.21	6.53
Fire Station	1/8/2006	12	3.56	0.74	4.29
Fire Station	1/11/2006	39	6.29	2.90	9.19
Fire Station	1/14/2006	18	3.76	0.93	4.69
Fire Station	1/17/2006	20	5.18	1.27	6.45
Fire Station	1/20/2006	14	3.78	1.20	4.97
Fire Station	1/23/2006	40	4.98	0.84	5.81
Fire Station	1/26/2006	19	3.88	0.96	4.84
Fire Station	1/29/2006	33	6.04	1.24	7.28
Fire Station	2/1/2006	31	5.97	1.53	7.50
Fire Station	2/4/2006	36	7.69	1.53	9.21
Fire Station	2/7/2006	20	0.25	0.00	0.25
Fire Station	2/10/2006	47	7.18	4.48	11.66
Fire Station	2/13/2006	23	4.97	1.86	6.83
Fire Station	2/16/2006	19	3.59	1.32	4.90
Fire Station	2/19/2006	6	3.31	0.67	3.98

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
Fire Station	2/22/2006	18	4.49	1.75	6.23
Fire Station	2/25/2006	26	6.15	2.41	8.55
Fire Station	2/28/2006	10	2.65	1.02	3.67
Fire Station	3/3/2006	11	3.36	1.41	4.77
Fire Station	3/6/2006	23	4.81	2.52	7.33
Fire Station	3/9/2006	24	4.27	2.01	6.27
Fire Station	3/12/2006	8	4.05	1.29	5.34
Fire Station	3/15/2006	22	4.20	1.46	5.66
Fire Station	3/18/2006	11	3.43	0.89	4.32
Fire Station	3/21/2006	10	2.64	1.01	3.64
Fire Station	3/24/2006	22	4.80	1.58	6.38
Fire Station	3/27/2006	26	3.94	1.92	5.86
Fire Station	3/30/2006	16	3.35	1.26	4.62
Fire Station	4/2/2006	19	4.93	1.20	6.14
Fire Station	4/5/2006				
Fire Station	4/8/2006	12	3.57	1.17	4.75
Fire Station	4/11/2006	17	3.50	1.44	4.93
Fire Station	4/14/2006	12	2.97	1.48	4.46
Fire Station	4/17/2006	18	3.04	0.68	3.72
Fire Station	4/20/2006	31	5.60	1.96	7.56
Fire Station	4/23/2006	12	2.37	0.79	3.16
Fire Station	4/26/2006	15	2.99	1.06	4.05
Fire Station	4/29/2006	46	4.63	2.24	6.88
Fire Station	5/2/2006	43	4.70	2.48	7.19
Fire Station	5/5/2006	32	3.81	1.89	5.70
Fire Station	5/8/2006	54	5.89	2.51	8.41
Fire Station	5/11/2006	65	5.92	2.94	8.85
Fire Station	5/14/2006	48	5.79	1.60	7.38
Fire Station	5/17/2006	63	5.87	3.92	9.79
Fire Station	5/20/2006	32	5.04	2.05	7.10
Fire Station	5/23/2006	19	4.56	2.74	7.30
Fire Station	5/26/2006	48	5.42	2.20	7.63
Fire Station	5/29/2006	22	4.81	1.30	6.11
Fire Station	6/1/2006	45	8.15	3.34	11.48
Fire Station	6/1/2006	45	8.15	3.34	11.48
Fire Station	6/4/2006	29	6.16	1.43	7.58
Fire Station	6/4/2006	29	6.16	1.43	7.58
Fire Station	6/7/2006	48	5.24	3.01	8.25
Fire Station	6/10/2006	27	4.12	1.53	5.65
Fire Station	6/13/2006	23	4.74	1.99	6.73
Fire Station	6/16/2006	41	7.38	3.14	10.52
Fire Station	6/19/2006	44	5.46	2.79	8.25
Fire Station	6/22/2006	53	6.42	3.09	9.50
Fire Station	6/25/2006	39	9.02	2.59	11.61
LAUSD	8/23/2005	58	8.41	2.97	11.38
LAUSD	8/26/2005	69	11.83	3.97	15.80
LAUSD	8/29/2005	51	10.61	3.17	13.78
LAUSD	9/1/2005	53	8.77	2.42	11.19
LAUSD	9/4/2005				
LAUSD	9/7/2005	54	9.95	3.41	13.37

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
LAUSD	9/10/2005	19	3.94	0.95	4.89
LAUSD	9/13/2005	32	4.62	2.49	7.11
LAUSD	9/16/2005	31	5.41	1.56	6.96
LAUSD	9/19/2005	55	8.52	2.36	10.88
LAUSD	9/22/2005	46	8.69	4.27	12.95
LAUSD	9/25/2005	35	6.56	1.26	7.82
LAUSD	9/28/2005	55	7.49	1.81	9.30
LAUSD	10/1/2005	72	22.83	2.18	25.00
LAUSD	10/4/2005	46	7.53	1.59	9.12
LAUSD	10/7/2005	49	9.35	2.10	11.45
LAUSD	10/10/2005	51	8.43	2.42	10.85
LAUSD	10/13/2005	70	12.63	1.76	14.38
LAUSD	10/16/2005	17	3.32	0.63	3.94
LAUSD	10/19/2005	22	7.25	1.34	8.60
LAUSD	10/22/2005	55	5.91	2.58	8.49
LAUSD	10/25/2005	17	4.73	1.10	5.83
LAUSD	10/28/2005	27	5.48	1.58	7.05
LAUSD	10/31/2005	52	9.91	1.63	11.53
LAUSD	11/3/2005	35	5.53	1.64	7.16
LAUSD	11/6/2005	53	9.83	2.26	12.09
LAUSD	11/9/2005	13	3.62	1.01	4.63
LAUSD	11/12/2005	30	6.91	1.70	8.62
LAUSD	11/15/2005	52	9.76	3.57	13.32
LAUSD	11/18/2005	54	9.94	1.59	11.53
LAUSD	11/21/2005	44	8.95	3.22	12.17
LAUSD	11/24/2005	38	9.13	1.66	10.79
LAUSD	11/27/2005	18	4.23	0.66	4.89
LAUSD	11/30/2005	45	7.59	4.95	12.54
LAUSD	12/3/2005	13	4.11	1.02	5.13
LAUSD	12/6/2005	44	10.46	4.30	14.77
LAUSD	12/9/2005	15	4.67	1.83	6.49
LAUSD	12/12/2005	37	8.65	1.50	10.15
LAUSD	12/15/2005	56	11.69	3.60	15.29
LAUSD	12/18/2005	27	6.41	1.25	7.66
LAUSD	12/21/2005	52	9.12	3.57	12.68
LAUSD	12/24/2005	23	6.46	1.40	7.86
LAUSD	12/27/2005	33	7.79	3.70	11.49
LAUSD	12/30/2005	48	9.52	4.05	13.57
LAUSD	1/2/2006	5	2.31	0.54	2.85
LAUSD	1/5/2006	37	9.35	1.73	11.08
LAUSD	1/8/2006	16	3.88	0.80	4.68
LAUSD	1/11/2006	52	8.81	3.98	12.78
LAUSD	1/14/2006	15	4.12	1.38	5.50
LAUSD	1/17/2006	30	5.77	2.99	8.76
LAUSD	1/20/2006	29	5.67	2.33	8.00
LAUSD	1/23/2006	20	3.74	0.69	4.43
LAUSD	1/26/2006	22	3.81	0.87	4.69
LAUSD	1/29/2006	38	5.81	2.47	8.28
LAUSD	2/1/2006	34	7.27	1.78	9.05
LAUSD	2/4/2006	45	7.45	3.06	10.50

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
LAUSD	2/7/2006	39			
LAUSD	2/10/2006	59	8.82	3.75	12.57
LAUSD	2/13/2006	49	9.26	3.40	12.66
LAUSD	2/16/2006	27	3.97	1.69	5.66
LAUSD	2/19/2006	6	3.56	0.67	4.23
LAUSD	2/22/2006	22	4.99	1.90	6.89
LAUSD	2/25/2006	40	8.23	2.83	11.07
LAUSD	2/28/2006	11	2.98	1.01	3.99
LAUSD	3/3/2006	11	3.22	1.22	4.44
LAUSD	3/6/2006	21	4.92	2.72	7.65
LAUSD	3/9/2006	31	4.78	2.10	6.88
LAUSD	3/12/2006	8	3.50	1.08	4.58
LAUSD	3/15/2006	27	5.40	1.97	7.37
LAUSD	3/18/2006	12	4.70	1.50	6.21
LAUSD	3/21/2006	20	4.43	1.60	6.03
LAUSD	3/24/2006	36	7.73	3.25	10.98
LAUSD	3/27/2006	24	4.22	1.59	5.80
LAUSD	3/30/2006	23	4.26	1.98	6.24
LAUSD	4/2/2006	22	5.75	1.40	7.15
LAUSD	4/5/2006	16	2.83	1.14	3.96
LAUSD	4/8/2006	18	4.36	1.84	6.20
LAUSD	4/11/2006	14	3.36	1.43	4.79
LAUSD	4/14/2006	12	3.21	1.82	5.03
LAUSD	4/17/2006	37	5.31	2.22	7.52
LAUSD	4/20/2006	35	7.14	2.56	9.70
LAUSD	4/23/2006	11	2.87	0.77	3.64
LAUSD	4/26/2006	14	2.97	0.81	3.78
LAUSD	4/29/2006	38	4.44	2.48	6.92
LAUSD	5/2/2006	41	4.76	2.21	6.97
LAUSD	5/5/2006	27	3.74	1.51	5.25
LAUSD	5/8/2006	49	5.31	2.47	7.78
LAUSD	5/11/2006	61	6.10	3.40	9.50
LAUSD	5/14/2006	40	5.84	1.53	7.37
LAUSD	5/17/2006	54	6.62	2.97	9.59
LAUSD	5/20/2006	33	5.41	1.81	7.22
LAUSD	5/23/2006	28	4.86	2.24	7.10
LAUSD	5/26/2006	47	5.04	2.12	7.17
LAUSD	5/29/2006	23	5.31	1.15	6.46
LAUSD	6/1/2006	45	8.40	2.70	11.10
LAUSD	6/4/2006	29	6.39	1.51	7.90
LAUSD	6/7/2006	50	5.79	3.06	8.84
LAUSD	6/10/2006	25	3.85	1.15	5.00
LAUSD	6/13/2006	34	6.48	1.96	8.43
LAUSD	6/16/2006	51	7.15	3.56	10.71
LAUSD	6/19/2006	43	6.37	2.13	8.51
LAUSD	6/22/2006	46	5.53	2.69	8.22
LAUSD	6/25/2006	41	8.53	2.07	10.60
Poly High	2/13/2006	35	6.89	2.63	9.52
Poly High	2/16/2006	26	4.12	1.46	5.57
Poly High	2/19/2006	6	3.49	1.01	4.50

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
Poly High	2/22/2006	26	6.33	2.37	8.70
Poly High	2/25/2006	33	6.98	3.42	10.40
Poly High	2/28/2006	9	3.03	0.87	3.91
Poly High	3/3/2006	12	3.75	1.54	5.29
Poly High	3/6/2006	19	4.41	2.44	6.85
Poly High	3/9/2006	27	4.28	2.13	6.40
Poly High	3/12/2006	10	4.16	1.82	5.98
Poly High	3/15/2006	22	4.42	1.63	6.04
Poly High	3/18/2006	12	3.48	0.94	4.42
Poly High	3/21/2006	10	3.07	1.26	4.33
Poly High	3/24/2006	25	5.91	2.42	8.33
Poly High	3/27/2006	22	3.37	1.53	4.90
Poly High	3/30/2006	18	4.02	1.81	5.83
Poly High	4/2/2006	19	5.49	1.35	6.84
Poly High	4/5/2006	10	2.87	0.81	3.68
Poly High	4/8/2006	13	5.18	1.37	6.56
Poly High	4/11/2006	13	3.11	1.22	4.33
Poly High	4/14/2006	11	3.04	1.29	4.33
Poly High	4/17/2006	16	3.71	1.69	5.40
Poly High	4/20/2006	27	5.95	1.87	7.82
Poly High	4/23/2006	12	2.41	0.68	3.09
Poly High	4/26/2006	13	2.52	0.65	3.16
Poly High	4/29/2006	36	4.47	2.00	6.47
Poly High	5/2/2006	37	4.51	1.84	6.35
Poly High	5/5/2006	29	3.84	1.82	5.66
Poly High	5/8/2006	51	5.89	2.43	8.33
Poly High	5/11/2006	56	5.59	2.60	8.19
Poly High	5/14/2006	45	6.12	1.59	7.71
Poly High	5/17/2006	55	5.36	3.02	8.38
Poly High	5/20/2006	29	4.56	1.30	5.86
Poly High	5/23/2006	15	4.08	1.66	5.74
Poly High	5/26/2006	42	4.77	1.82	6.59
Poly High	5/29/2006	23			
Poly High	6/1/2006	47	7.93	3.61	11.54
Poly High	6/4/2006	30	5.93	1.53	7.46
Poly High	6/7/2006	44	5.22	2.61	7.83
Poly High	6/10/2006	24	3.60	1.03	4.63
Poly High	6/13/2006	20	4.61	1.60	6.21
Poly High	6/16/2006	37	6.87	2.71	9.58
Poly High	6/19/2006				
Poly High	6/22/2006	67	6.55	3.02	9.57
Poly High	6/25/2006	36	8.52	2.09	10.61
Stonehurst	8/23/2005	67	8.09	2.29	10.38
Stonehurst	8/26/2005	62	10.71	1.91	12.61
Stonehurst	8/29/2005	60	11.56	2.15	13.72
Stonehurst	9/1/2005	62	9.17	2.07	11.24
Stonehurst	9/4/2005	63	10.07	1.06	11.13
Stonehurst	9/7/2005	77	11.33	1.89	13.22
Stonehurst	9/10/2005	24	4.11	0.90	5.01
Stonehurst	9/13/2005	38	4.91	1.00	5.90

Appendix B
PM10 and Carbon Analysis

Site Name	Date	PM10, μg/m^3	OC, μg/m^3	EC, μg/m^3	TC, μg/m^3
Stonehurst	9/16/2005	38	5.22	1.36	6.58
Stonehurst	9/19/2005	68	10.01	2.06	12.07
Stonehurst	9/22/2005	37	8.51	2.63	11.14
Stonehurst	9/25/2005	44	7.77	1.43	9.20
Stonehurst	9/28/2005	52	9.03	1.04	10.06
Stonehurst	10/1/2005	74	18.71	1.88	20.60
Stonehurst	10/4/2005	45	6.91	1.03	7.94
Stonehurst	10/7/2005	64	11.74	1.49	13.23
Stonehurst	10/10/2005	51	7.86	1.25	9.11
Stonehurst	10/13/2005	67	9.39	1.96	11.34
Stonehurst	10/16/2005	19	3.71	0.58	4.30
Stonehurst	10/19/2005	28	7.83	1.33	9.16
Stonehurst	10/22/2005	59	5.65	3.28	8.93
Stonehurst	10/25/2005	15	4.29	0.94	5.22
Stonehurst	10/28/2005	25	4.48	2.22	6.70
Stonehurst	10/31/2005	45	8.14	1.88	10.02
Stonehurst	11/3/2005	36	6.20	1.43	7.63
Stonehurst	11/6/2005	62	12.27	1.71	13.98
Stonehurst	11/9/2005	12	3.50	1.24	4.73
Stonehurst	11/12/2005	29	7.57	1.82	9.39
Stonehurst	11/15/2005				
Stonehurst	11/18/2005	42	8.47	1.36	9.83
Stonehurst	11/21/2005	42	6.84	1.51	8.35
Stonehurst	11/24/2005	50	10.78	1.59	12.37
Stonehurst	11/27/2005	24	4.49	0.68	5.18
Stonehurst	11/30/2005	47	10.57	1.98	12.55
Stonehurst	12/3/2005	7	3.37	0.66	4.03
Stonehurst	12/6/2005	32	7.93	1.32	9.25
Stonehurst	12/9/2005	13	4.56	1.30	5.86
Stonehurst	12/12/2005	44	9.76	2.11	11.87
Stonehurst	12/15/2005	40	9.04	1.78	10.82
Stonehurst	12/18/2005	35	8.81	2.84	11.65
Stonehurst	12/21/2005	50	9.26	2.07	11.33
Stonehurst	12/24/2005	32	7.21	1.40	8.61
Stonehurst	12/27/2005	30	8.99	1.88	10.87
Stonehurst	12/30/2005	35	8.32	3.24	11.56
Stonehurst	1/2/2006	6	2.25	0.30	2.55
Stonehurst	1/5/2006	26	6.84	1.41	8.24
Stonehurst	1/8/2006	14	3.34	0.46	3.80
Stonehurst	1/11/2006	44	9.81	2.00	11.80
Stonehurst	1/14/2006	16	4.35	0.83	5.18
Stonehurst	1/17/2006	25	6.89	2.38	9.28
Stonehurst	1/20/2006	17	4.20	1.31	5.51
Stonehurst	1/23/2006				
Stonehurst	1/26/2006	23	4.65	1.29	5.94
Stonehurst	1/29/2006	65	8.92	1.49	10.41
Stonehurst	2/1/2006	40	7.08	2.28	9.36
Stonehurst	2/4/2006	48	7.44	4.35	11.78
Stonehurst	2/7/2006	51	7.54	1.43	8.98

Appendix C

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
6/3/2005	Burbank	0.07
6/6/2005	Burbank	0.05
6/9/2005	Burbank	0.15
6/12/2005	Burbank	0.06
6/15/2005	Burbank	0.10
6/18/2005	Burbank	0.07
6/21/2005	Burbank	0.11
6/24/2005	Burbank	0.11
6/27/2005	Burbank	0.07
6/30/2005	Burbank	0.17
7/3/2005	Burbank	0.09
7/6/2005	Burbank	0.19
7/9/2005	Burbank	0.20
7/12/2005	Burbank	0.20
7/15/2005	Burbank	0.20
7/18/2005	Burbank	0.14
7/21/2005	Burbank	0.25
7/24/2005	Burbank	0.15
7/27/2005	Burbank	0.05
7/30/2005	Burbank	0.06
8/2/2005	Burbank	0.33
8/5/2005	Burbank	0.19
8/8/2005	Burbank	0.16
8/11/2005	Burbank	0.30
8/14/2005	Burbank	0.07
8/17/2005	Burbank	0.19
8/20/2005	Burbank	0.19
8/23/2005	Burbank	0.25
8/26/2005	Burbank	0.23
8/29/2005	Burbank	0.17
9/1/2005	Burbank	0.17
9/4/2005	Burbank	0.22
9/7/2005	Burbank	
9/10/2005	Burbank	0.07
9/13/2005	Burbank	0.09
9/16/2005	Burbank	0.03
9/19/2005	Burbank	0.16
9/22/2005	Burbank	0.35
9/25/2005	Burbank	0.05
9/28/2005	Burbank	0.35
10/1/2005	Burbank	0.12
10/4/2005	Burbank	0.25
10/7/2005	Burbank	0.11
10/10/2005	Burbank	0.07
10/13/2005	Burbank	0.10
10/16/2005	Burbank	0.03
10/19/2005	Burbank	0.16
10/22/2005	Burbank	0.01
10/25/2005	Burbank	0.10
10/28/2005	Burbank	0.10
10/31/2005	Burbank	0.18

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
11/3/2005	Burbank	0.13
11/6/2005	Burbank	0.09
11/9/2005	Burbank	0.05
11/12/2005	Burbank	0.05
11/15/2005	Burbank	0.36
11/18/2005	Burbank	0.16
11/18/2005	Burbank	0.16
11/21/2005	Burbank	0.38
11/24/2005	Burbank	0.17
11/27/2005	Burbank	0.09
11/30/2005	Burbank	0.26
12/3/2005	Burbank	0.08
12/6/2005	Burbank	0.23
12/9/2005	Burbank	0.13
12/12/2005	Burbank	0.14
12/15/2005	Burbank	0.12
12/18/2005	Burbank	0.06
12/21/2005	Burbank	0.20
12/24/2005	Burbank	0.10
12/27/2005	Burbank	0.05
12/30/2005	Burbank	0.03
1/2/2006	Burbank	
1/5/2006	Burbank	0.16
1/8/2006	Burbank	0.10
1/11/2006	Burbank	0.21
1/14/2006	Burbank	0.16
1/17/2006	Burbank	0.19
1/20/2006	Burbank	0.25
1/23/2006	Burbank	0.05
1/26/2006	Burbank	0.08
1/29/2006	Burbank	0.03
2/1/2006	Burbank	0.19
2/4/2006	Burbank	0.05
2/7/2006	Burbank	0.67
2/10/2006	Burbank	0.19
2/13/2006	Burbank	0.44
2/16/2006	Burbank	0.12
2/19/2006	Burbank	0.05
2/22/2006	Burbank	0.22
2/25/2006	Burbank	0.10
2/28/2006	Burbank	0.13
3/3/2006	Burbank	0.06
3/6/2006	Burbank	0.08
3/9/2006	Burbank	0.10
3/12/2006	Burbank	
3/15/2006	Burbank	0.16
3/18/2006	Burbank	0.06
3/21/2006	Burbank	0.11
3/24/2006	Burbank	0.26
3/27/2006	Burbank	0.22

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
3/30/2006	Burbank	0.07
4/2/2006	Burbank	0.06
4/5/2006	Burbank	0.07
4/8/2006	Burbank	0.06
4/11/2006	Burbank	0.10
4/14/2006	Burbank	0.04
4/17/2006	Burbank	0.13
4/20/2006	Burbank	0.12
4/23/2006	Burbank	ND
4/26/2006	Burbank	0.06
4/29/2006	Burbank	0.03
5/2/2006	Burbank	0.05
5/5/2006	Burbank	0.08
5/8/2006	Burbank	0.07
5/11/2006	Burbank	
5/14/2006	Burbank	0.03
5/17/2006	Burbank	
5/20/2006	Burbank	0.02
5/23/2006	Burbank	0.05
5/26/2006	Burbank	0.03
5/29/2006	Burbank	0.02
6/1/2006	Burbank	0.03
6/4/2006	Burbank	0.03
6/7/2006	Burbank	0.03
6/10/2006	Burbank	0.06
6/13/2006	Burbank	0.07
6/16/2006	Burbank	0.05
6/19/2006	Burbank	0.01
6/22/2006	Burbank	0.04
6/25/2006	Burbank	0.02
6/3/2005	SV, Fernangeles	0.11
6/6/2005	SV, Fernangeles	0.07
6/9/2005	SV, Fernangeles	0.23
6/12/2005	SV, Fernangeles	0.09
6/15/2005	SV, Fernangeles	0.28
6/18/2005	SV, Fernangeles	0.27
6/21/2005	SV, Fernangeles	0.17
6/24/2005	SV, Fernangeles	0.20
6/27/2005	SV, Fernangeles	0.14
6/30/2005	SV, Fernangeles	0.13
7/3/2005	SV, Fernangeles	0.15
7/6/2005	SV, Fernangeles	0.35
7/9/2005	SV, Fernangeles	0.28
7/12/2005	SV, Fernangeles	0.25
7/15/2005	SV, Fernangeles	0.19
7/18/2005	SV, Fernangeles	0.10
7/21/2005	SV, Fernangeles	0.22
7/24/2005	SV, Fernangeles	0.08
7/27/2005	SV, Fernangeles	0.13
7/30/2005	SV, Fernangeles	0.08

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
8/2/2005	SV, Fernangeles	0.14
8/5/2005	SV, Fernangeles	0.25
8/8/2005	SV, Fernangeles	0.19
8/11/2005	SV, Fernangeles	0.16
8/14/2005	SV, Fernangeles	0.04
8/17/2005	SV, Fernangeles	0.13
8/20/2005	SV, Fernangeles	0.19
8/23/2005	SV, Fernangeles	0.20
8/26/2005	SV, Fernangeles	0.46
8/29/2005	SV, Fernangeles	0.10
9/1/2005	SV, Fernangeles	0.12
9/4/2005	SV, Fernangeles	0.08
9/7/2005	SV, Fernangeles	
9/10/2005	SV, Fernangeles	0.07
9/13/2005	SV, Fernangeles	0.11
9/16/2005	SV, Fernangeles	0.07
9/19/2005	SV, Fernangeles	0.23
9/22/2005	SV, Fernangeles	0.21
9/25/2005	SV, Fernangeles	0.11
9/28/2005	SV, Fernangeles	0.12
10/1/2005	SV, Fernangeles	0.08
10/4/2005	SV, Fernangeles	0.28
10/7/2005	SV, Fernangeles	0.28
10/10/2005	SV, Fernangeles	0.28
10/13/2005	SV, Fernangeles	0.25
10/16/2005	SV, Fernangeles	0.03
10/19/2005	SV, Fernangeles	0.38
10/22/2005	SV, Fernangeles	0.02
10/25/2005	SV, Fernangeles	0.09
10/28/2005	SV, Fernangeles	0.15
10/31/2005	SV, Fernangeles	0.28
11/3/2005	SV, Fernangeles	0.10
11/6/2005	SV, Fernangeles	0.09
11/9/2005	SV, Fernangeles	0.08
11/12/2005	SV, Fernangeles	0.12
11/15/2005	SV, Fernangeles	0.61
11/18/2005	SV, Fernangeles	0.76
11/21/2005	SV, Fernangeles	
11/24/2005	SV, Fernangeles	0.20
11/27/2005	SV, Fernangeles	0.04
11/30/2005	SV, Fernangeles	0.20
12/3/2005	SV, Fernangeles	0.06
12/6/2005	SV, Fernangeles	0.26
12/9/2005	SV, Fernangeles	0.17
12/12/2005	SV, Fernangeles	0.22
12/15/2005	SV, Fernangeles	0.33
12/18/2005	SV, Fernangeles	0.04
12/21/2005	SV, Fernangeles	0.71
12/24/2005	SV, Fernangeles	0.02
12/27/2005	SV, Fernangeles	0.13

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
12/30/2005	SV, Fernangeles	0.18
1/2/2006	SV, Fernangeles	0.02
1/5/2006	SV, Fernangeles	
1/8/2006	SV, Fernangeles	0.05
1/11/2006	SV, Fernangeles	0.90
1/14/2006	SV, Fernangeles	0.03
1/17/2006	SV, Fernangeles	0.31
1/20/2006	SV, Fernangeles	0.17
1/23/2006	SV, Fernangeles	0.12
1/26/2006	SV, Fernangeles	0.20
1/29/2006	SV, Fernangeles	0.09
2/1/2006	SV, Fernangeles	
2/4/2006	SV, Fernangeles	0.13
2/7/2006	SV, Fernangeles	0.65
2/10/2006	SV, Fernangeles	0.71
2/13/2006	SV, Fernangeles	0.46
2/16/2006	SV, Fernangeles	0.12
2/19/2006	SV, Fernangeles	0.05
2/22/2006	SV, Fernangeles	0.66
2/25/2006	SV, Fernangeles	0.36
2/28/2006	SV, Fernangeles	0.15
3/3/2006	SV, Fernangeles	0.08
3/6/2006	SV, Fernangeles	0.16
3/9/2006	SV, Fernangeles	0.20
3/12/2006	SV, Fernangeles	
3/15/2006	SV, Fernangeles	0.18
3/18/2006	SV, Fernangeles	0.06
3/21/2006	SV, Fernangeles	0.07
3/24/2006	SV, Fernangeles	0.26
3/27/2006	SV, Fernangeles	0.09
3/30/2006	SV, Fernangeles	0.04
4/2/2006	SV, Fernangeles	
4/5/2006	SV, Fernangeles	0.05
4/8/2006	SV, Fernangeles	0.16
4/11/2006	SV, Fernangeles	0.13
4/14/2006	SV, Fernangeles	0.06
4/17/2006	SV, Fernangeles	0.03
4/17/2006	SV, Fernangeles	0.12
4/20/2006	SV, Fernangeles	0.05
4/23/2006	SV, Fernangeles	ND
4/26/2006	SV, Fernangeles	0.04
4/29/2006	SV, Fernangeles	0.05
5/2/2006	SV, Fernangeles	0.05
5/5/2006	SV, Fernangeles	0.28
5/8/2006	SV, Fernangeles	0.17
5/11/2006	SV, Fernangeles	0.06
5/14/2006	SV, Fernangeles	0.01
5/17/2006	SV, Fernangeles	0.15
5/20/2006	SV, Fernangeles	0.02
5/23/2006	SV, Fernangeles	0.05

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
5/26/2006	SV, Fernangeles	0.08
5/29/2006	SV, Fernangeles	0.11
6/1/2006	SV, Fernangeles	0.07
6/4/2006	SV, Fernangeles	0.04
6/7/2006	SV, Fernangeles	ND
6/10/2006	SV, Fernangeles	0.03
6/13/2006	SV, Fernangeles	0.07
6/16/2006	SV, Fernangeles	0.16
6/19/2006	SV, Fernangeles	0.03
6/22/2006	SV, Fernangeles	0.04
6/25/2006	SV, Fernangeles	0.02
10/28/2005	SV, Fire Station	0.11
10/31/2005	SV, Fire Station	0.23
11/3/2005	SV, Fire Station	0.12
11/6/2005	SV, Fire Station	0.08
11/9/2005	SV, Fire Station	0.09
11/12/2005	SV, Fire Station	0.07
11/15/2005	SV, Fire Station	0.11
11/18/2005	SV, Fire Station	0.06
11/21/2005	SV, Fire Station	0.06
11/24/2005	SV, Fire Station	0.07
11/27/2005	SV, Fire Station	0.02
11/30/2005	SV, Fire Station	0.31
12/3/2005	SV, Fire Station	0.02
12/6/2005	SV, Fire Station	0.08
12/9/2005	SV, Fire Station	0.11
12/12/2005	SV, Fire Station	0.05
12/15/2005	SV, Fire Station	0.14
12/18/2005	SV, Fire Station	0.05
12/21/2005	SV, Fire Station	0.08
12/24/2005	SV, Fire Station	0.02
12/27/2005	SV, Fire Station	0.03
12/30/2005	SV, Fire Station	0.08
1/2/2006	SV, Fire Station	0.02
1/5/2006	SV, Fire Station	0.02
1/8/2006	SV, Fire Station	0.08
1/11/2006	SV, Fire Station	0.05
1/14/2006	SV, Fire Station	0.04
1/17/2006	SV, Fire Station	0.06
1/20/2006	SV, Fire Station	0.16
1/23/2006	SV, Fire Station	
1/26/2006	SV, Fire Station	0.09
1/29/2006	SV, Fire Station	0.04
2/1/2006	SV, Fire Station	0.05
2/4/2006	SV, Fire Station	0.03
2/7/2006	SV, Fire Station	0.04
2/10/2006	SV, Fire Station	0.22
2/13/2006	SV, Fire Station	0.02
2/16/2006	SV, Fire Station	0.08
2/19/2006	SV, Fire Station	0.02

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
2/22/2006	SV, Fire Station	0.18
2/25/2006	SV, Fire Station	0.05
2/28/2006	SV, Fire Station	0.04
3/3/2006	SV, Fire Station	0.00
3/6/2006	SV, Fire Station	0.04
3/9/2006	SV, Fire Station	0.09
3/12/2006	SV, Fire Station	
3/15/2006	SV, Fire Station	0.09
3/18/2006	SV, Fire Station	0.04
3/21/2006	SV, Fire Station	0.24
3/24/2006	SV, Fire Station	0.06
3/27/2006	SV, Fire Station	0.11
3/30/2006	SV, Fire Station	
4/2/2006	SV, Fire Station	0.07
4/5/2006	SV, Fire Station	0.03
4/8/2006	SV, Fire Station	0.07
4/11/2006	SV, Fire Station	0.04
4/14/2006	SV, Fire Station	
4/17/2006	SV, Fire Station	0.06
4/20/2006	SV, Fire Station	0.07
4/23/2006	SV, Fire Station	ND
4/26/2006	SV, Fire Station	0.05
4/29/2006	SV, Fire Station	ND
5/2/2006	SV, Fire Station	0.03
5/5/2006	SV, Fire Station	0.03
5/8/2006	SV, Fire Station	ND
5/11/2006	SV, Fire Station	0.02
5/14/2006	SV, Fire Station	0.01
5/17/2006	SV, Fire Station	0.06
5/20/2006	SV, Fire Station	0.03
5/23/2006	SV, Fire Station	0.07
5/26/2006	SV, Fire Station	0.06
5/29/2006	SV, Fire Station	0.02
6/1/2006	SV, Fire Station	0.47
6/1/2006	SV, Fire Station	0.07
6/4/2006	SV, Fire Station	0.43
6/4/2006	SV, Fire Station	0.03
6/7/2006	SV, Fire Station	0.04
6/10/2006	SV, Fire Station	0.01
6/13/2006	SV, Fire Station	0.08
6/16/2006	SV, Fire Station	0.11
6/19/2006	SV, Fire Station	0.03
6/22/2006	SV, Fire Station	0.21
6/25/2006	SV, Fire Station	0.03
8/23/2005	SV, LAUSD	0.14
8/26/2005	SV, LAUSD	0.39
8/29/2005	SV, LAUSD	0.30
9/1/2005	SV, LAUSD	0.90
9/4/2005	SV, LAUSD	4.85
9/7/2005	SV, LAUSD	

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
9/10/2005	SV, LAUSD	0.10
9/13/2005	SV, LAUSD	0.32
9/16/2005	SV, LAUSD	0.08
9/19/2005	SV, LAUSD	0.31
9/22/2005	SV, LAUSD	0.29
9/25/2005	SV, LAUSD	0.11
9/28/2005	SV, LAUSD	0.26
10/1/2005	SV, LAUSD	0.15
10/4/2005	SV, LAUSD	0.28
10/7/2005	SV, LAUSD	0.43
10/10/2005	SV, LAUSD	0.51
10/13/2005	SV, LAUSD	0.51
10/16/2005	SV, LAUSD	0.05
10/19/2005	SV, LAUSD	0.19
10/22/2005	SV, LAUSD	0.07
10/25/2005	SV, LAUSD	0.20
10/28/2005	SV, LAUSD	0.22
10/31/2005	SV, LAUSD	5.22
11/3/2005	SV, LAUSD	0.20
11/6/2005	SV, LAUSD	1.47
11/9/2005	SV, LAUSD	0.65
11/12/2005	SV, LAUSD	0.11
11/15/2005	SV, LAUSD	0.39
11/18/2005	SV, LAUSD	1.44
11/21/2005	SV, LAUSD	0.52
11/24/2005	SV, LAUSD	0.11
11/27/2005	SV, LAUSD	0.19
11/30/2005	SV, LAUSD	0.64
12/3/2005	SV, LAUSD	0.25
12/6/2005	SV, LAUSD	3.11
12/9/2005	SV, LAUSD	0.28
12/12/2005	SV, LAUSD	0.52
12/15/2005	SV, LAUSD	0.61
12/18/2005	SV, LAUSD	0.23
12/21/2005	SV, LAUSD	1.15
12/24/2005	SV, LAUSD	0.06
12/27/2005	SV, LAUSD	0.27
12/30/2005	SV, LAUSD	0.22
1/2/2006	SV, LAUSD	0.03
1/5/2006	SV, LAUSD	0.34
1/8/2006	SV, LAUSD	0.79
1/11/2006	SV, LAUSD	3.19
1/14/2006	SV, LAUSD	0.35
1/17/2006	SV, LAUSD	0.82
1/20/2006	SV, LAUSD	0.89
1/23/2006	SV, LAUSD	0.33
1/26/2006	SV, LAUSD	0.34
1/29/2006	SV, LAUSD	0.35
2/1/2006	SV, LAUSD	0.14
2/4/2006	SV, LAUSD	0.19

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
2/7/2006	SV, LAUSD	0.33
2/10/2006	SV, LAUSD	0.56
2/13/2006	SV, LAUSD	0.29
2/16/2006	SV, LAUSD	0.54
2/19/2006	SV, LAUSD	0.10
2/22/2006	SV, LAUSD	0.46
2/25/2006	SV, LAUSD	0.37
2/28/2006	SV, LAUSD	0.88
3/3/2006	SV, LAUSD	0.16
3/6/2006	SV, LAUSD	0.26
3/9/2006	SV, LAUSD	0.24
3/12/2006	SV, LAUSD	0.29
3/15/2006	SV, LAUSD	0.36
3/18/2006	SV, LAUSD	0.09
3/21/2006	SV, LAUSD	0.32
3/24/2006	SV, LAUSD	0.33
3/27/2006	SV, LAUSD	0.88
3/30/2006	SV, LAUSD	0.23
4/2/2006	SV, LAUSD	0.09
4/5/2006	SV, LAUSD	0.12
4/8/2006	SV, LAUSD	0.19
4/11/2006	SV, LAUSD	0.17
4/14/2006	SV, LAUSD	0.15
4/17/2006	SV, LAUSD	0.45
4/20/2006	SV, LAUSD	0.07
4/23/2006	SV, LAUSD	ND
4/26/2006	SV, LAUSD	ND
4/29/2006	SV, LAUSD	0.03
5/2/2006	SV, LAUSD	0.06
5/5/2006	SV, LAUSD	0.06
5/8/2006	SV, LAUSD	ND
5/11/2006	SV, LAUSD	0.22
5/14/2006	SV, LAUSD	ND
5/17/2006	SV, LAUSD	0.32
5/20/2006	SV, LAUSD	0.06
5/23/2006	SV, LAUSD	0.31
5/26/2006	SV, LAUSD	2.54
5/29/2006	SV, LAUSD	0.05
6/1/2006	SV, LAUSD	0.15
6/4/2006	SV, LAUSD	0.06
6/7/2006	SV, LAUSD	0.08
6/10/2006	SV, LAUSD	0.03
6/13/2006	SV, LAUSD	0.23
6/16/2006	SV, LAUSD	0.51
6/19/2006	SV, LAUSD	0.05
6/22/2006	SV, LAUSD	0.17
6/25/2006	SV, LAUSD	0.05
2/13/2006	SV, Poly High	0.20
2/16/2006	SV, Poly High	0.10
2/19/2006	SV, Poly High	0.06

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
2/22/2006	SV, Poly High	
2/25/2006	SV, Poly High	
2/28/2006	SV, Poly High	
3/3/2006	SV, Poly High	
3/6/2006	SV, Poly High	0.10
3/9/2006	SV, Poly High	0.15
3/12/2006	SV, Poly High	0.03
3/15/2006	SV, Poly High	0.19
3/18/2006	SV, Poly High	
3/21/2006	SV, Poly High	0.07
3/24/2006	SV, Poly High	0.23
3/27/2006	SV, Poly High	0.12
3/30/2006	SV, Poly High	0.06
4/2/2006	SV, Poly High	0.04
4/5/2006	SV, Poly High	0.04
4/8/2006	SV, Poly High	0.04
4/11/2006	SV, Poly High	0.07
4/14/2006	SV, Poly High	0.06
4/17/2006	SV, Poly High	0.07
4/20/2006	SV, Poly High	ND
4/23/2006	SV, Poly High	0.04
4/26/2006	SV, Poly High	0.05
4/29/2006	SV, Poly High	ND
5/2/2006	SV, Poly High	0.04
5/5/2006	SV, Poly High	0.06
5/8/2006	SV, Poly High	0.05
5/11/2006	SV, Poly High	0.02
5/14/2006	SV, Poly High	0.03
5/17/2006	SV, Poly High	0.05
5/20/2006	SV, Poly High	0.03
5/23/2006	SV, Poly High	0.07
5/26/2006	SV, Poly High	0.02
5/29/2006	SV, Poly High	0.02
6/1/2006	SV, Poly High	0.12
6/4/2006	SV, Poly High	0.14
6/7/2006	SV, Poly High	0.02
6/10/2006	SV, Poly High	0.03
6/13/2006	SV, Poly High	0.02
6/16/2006	SV, Poly High	0.11
6/19/2006	SV, Poly High	0.04
6/22/2006	SV, Poly High	0.02
6/25/2006	SV, Poly High	0.05
8/23/2005	SV, Stonehurst	0.28
8/26/2005	SV, Stonehurst	0.24
8/29/2005	SV, Stonehurst	0.34
9/1/2005	SV, Stonehurst	0.08
9/4/2005	SV, Stonehurst	0.07
9/7/2005	SV, Stonehurst	0.31
9/10/2005	SV, Stonehurst	0.10
9/13/2005	SV, Stonehurst	0.06

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
9/16/2005	SV, Stonehurst	0.14
9/19/2005	SV, Stonehurst	0.23
9/22/2005	SV, Stonehurst	0.31
9/25/2005	SV, Stonehurst	0.10
9/28/2005	SV, Stonehurst	0.06
10/1/2005	SV, Stonehurst	0.27
10/4/2005	SV, Stonehurst	0.16
10/7/2005	SV, Stonehurst	0.17
10/10/2005	SV, Stonehurst	0.08
10/13/2005	SV, Stonehurst	0.16
10/16/2005	SV, Stonehurst	0.05
10/19/2005	SV, Stonehurst	
10/22/2005	SV, Stonehurst	0.07
10/25/2005	SV, Stonehurst	0.09
10/28/2005	SV, Stonehurst	0.09
10/31/2005	SV, Stonehurst	0.19
11/3/2005	SV, Stonehurst	0.09
11/6/2005	SV, Stonehurst	0.06
11/9/2005	SV, Stonehurst	0.03
11/12/2005	SV, Stonehurst	0.06
11/15/2005	SV, Stonehurst	0.52
11/18/2005	SV, Stonehurst	0.28
11/21/2005	SV, Stonehurst	0.16
11/24/2005	SV, Stonehurst	0.11
11/27/2005	SV, Stonehurst	0.10
11/30/2005	SV, Stonehurst	0.18
12/3/2005	SV, Stonehurst	0.03
12/6/2005	SV, Stonehurst	0.20
12/9/2005	SV, Stonehurst	0.11
12/12/2005	SV, Stonehurst	0.16
12/15/2005	SV, Stonehurst	0.11
12/18/2005	SV, Stonehurst	0.01
12/21/2005	SV, Stonehurst	0.13
12/24/2005	SV, Stonehurst	0.05
12/27/2005	SV, Stonehurst	0.07
12/30/2005	SV, Stonehurst	0.07
1/2/2006	SV, Stonehurst	0.05
1/5/2006	SV, Stonehurst	0.07
1/8/2006	SV, Stonehurst	0.03
1/11/2006	SV, Stonehurst	0.27
1/14/2006	SV, Stonehurst	0.04
1/17/2006	SV, Stonehurst	0.22
1/20/2006	SV, Stonehurst	0.08
1/23/2006	SV, Stonehurst	
1/26/2006	SV, Stonehurst	0.12
1/29/2006	SV, Stonehurst	0.05
2/1/2006	SV, Stonehurst	0.11
2/4/2006	SV, Stonehurst	0.13
2/7/2006	SV, Stonehurst	0.13

Appendix C
Hexavalent Chromium (ng/M^3)

Date	Station	Cr6+ (ng/M^3)
6/7/2006	Fire Station 77	0.08
6/10/2006	Fire Station 77	3.70
6/13/2006	Fire Station 77	0.21
6/16/2006	Fire Station 77	1.02
6/19/2006	Fire Station 77	0.11
6/22/2006	Fire Station 77	0.40
6/25/2006	Fire Station 77	0.14
6/28/2006	Fire Station 77	0.08
7/1/2006	Fire Station 77	0.39
7/4/2006	Fire Station 77	0.69
7/19/2006	Fire Station 77	0.28
7/22/2006	Fire Station 77	0.34
7/25/2006	Fire Station 77	0.25
7/28/2006	Fire Station 77	0.13
8/7/2006	Fire Station 77	0.31
8/7/2006	Fire Station 77	0.06

Fire Station 77 near Superior Plating Inc.

Appendix D

Appendix D
Selected Compounds Report

Station		Benzene	1,3-Butadiene	Methylene Chloride
	Units of Conc	ppb	ppb	ppb
Burbank	Duration	6/3/05-6/25/06	6/3/05-6/25/06	6/3/05-6/25/06
Burbank	Min	0.11	0.00	0.03
Burbank	Max	1.93	0.62	2.81
Burbank	Avg	0.69	0.11	0.34
Burbank	# of samples	121	121	121
SV, Fernangeles	Duration	6/3/05-6/13/06	6/3/05-6/13/06	6/3/05-6/13/06
SV, Fernangeles	Min	0.00	0.01	0.04
SV, Fernangeles	Max	1.11	0.86	0.88
SV, Fernangeles	Avg	0.47	0.19	0.27
SV, Fernangeles	# of samples	116	116	116
SV, Fire Station	Duration	11/3/05-6/25/06	11/3/05-6/25/06	11/3/05-6/25/06
SV, Fire Station	Min	0.13	0.00	0.01
SV, Fire Station	Max	1.07	2.41	0.87
SV, Fire Station	Avg	0.45	0.14	0.24
SV, Fire Station	# of samples	78	78	78
SV, LAUSD	Duration	8/23/05-6/25/06	8/23/05-6/25/06	8/23/05-6/25/06
SV, LAUSD	Min	0.00	0.00	0.04
SV, LAUSD	Max	0.96	0.54	4.10
SV, LAUSD	Avg	0.46	0.15	0.30
SV, LAUSD	# of samples	98	98	98
SV, Poly High	Duration	2/16/06-6/25/06	2/16/06-6/25/06	2/16/06-6/25/06
SV, Poly High	Min	0.13	0.00	0.06
SV, Poly High	Max	0.78	0.17	0.35
SV, Poly High	Avg	0.34	0.05	0.16
SV, Poly High	# of samples	41	41	41
SV, Stonehurst	Duration	9/10/05-2/7/06	9/10/05-2/7/06	9/10/05-2/7/06
SV, Stonehurst	Min	0.08	0.03	0.05
SV, Stonehurst	Max	1.00	0.49	4.10
SV, Stonehurst	Avg	0.49	0.19	0.31
SV, Stonehurst	# of samples	49	49	49

Appendix D
Selected Compounds Report

Station		Vinyl Chloride	Formaldehyde	Acetaldehyde
	Units of Conc	ppb	ppb	ppb
Burbank	Duration	6/3/05-6/25/06	6/3/05-6/25/06	6/3/05-6/25/06
Burbank	Min	0.00	0.54	0.31
Burbank	Max	0.02	7.71	4.06
Burbank	Avg	0.00	3.86	1.91
Burbank	# of samples	121	130	130
SV, Fernangeles	Duration	6/3/05-6/13/06	6/3/05-6/25/06	6/3/05-6/25/06
SV, Fernangeles	Min	0.00	0.80	0.27
SV, Fernangeles	Max	0.01	9.43	3.54
SV, Fernangeles	Avg	0.00	3.96	1.66
SV, Fernangeles	# of samples	116	126	126
SV, Fire Station	Duration	11/3/05-6/25/06	10/28/05-6/25/06	10/28/05-6/25/06
SV, Fire Station	Min	0.00	0.81	0.33
SV, Fire Station	Max	0.00	7.20	3.19
SV, Fire Station	Avg	0.00	2.66	1.30
SV, Fire Station	# of samples	78	80	80
SV, LAUSD	Duration	8/23/05-6/25/06	8/23/05-6/25/06	8/23/05-6/25/06
SV, LAUSD	Min	0.00	0.30	0.28
SV, LAUSD	Max	0.00	8.14	4.62
SV, LAUSD	Avg	0.00	3.08	1.59
SV, LAUSD	# of samples	98	102	102
SV, Poly High	Duration	2/16/06-6/25/06	2/13/06-6/25/06	2/13/06-6/25/06
SV, Poly High	Min	0.00	0.82	0.40
SV, Poly High	Max	0.01	6.86	2.93
SV, Poly High	Avg	0.00	2.65	1.24
SV, Poly High	# of samples	41	45	45
SV, Stonehurst	Duration	9/10/05-2/7/06	8/23/05-2/7/06	8/23/05-2/7/06
SV, Stonehurst	Min	0.00	0.71	0.30
SV, Stonehurst	Max	0.00	8.14	3.91
SV, Stonehurst	Avg	0.00	3.09	1.72
SV, Stonehurst	# of samples	49	53	53

Appendix D
Selected Compounds Report

Station		Carbon Tetrachloride	1,2-Dichloro propane
	Units of Conc	ppb	ppb
Burbank	Duration	6/3/05-6/25/06	6/3/05-6/25/06
Burbank	Min	0.06	0.00
Burbank	Max	0.13	0.02
Burbank	Avg	0.09	0.00
Burbank	# of samples	121	121
SV, Fernangeles	Duration	6/3/05-6/13/06	6/3/05-6/13/06
SV, Fernangeles	Min	0.03	0.00
SV, Fernangeles	Max	0.10	0.00
SV, Fernangeles	Avg	0.07	0.00
SV, Fernangeles	# of samples	116	116
SV, Fire Station	Duration	11/3/05-6/25/06	11/3/05-6/25/06
SV, Fire Station	Min	0.05	0.00
SV, Fire Station	Max	0.09	0.00
SV, Fire Station	Avg	0.07	0.00
SV, Fire Station	# of samples	78	78
SV, LAUSD	Duration	8/23/05-6/25/06	8/23/05-6/25/06
SV, LAUSD	Min	0.05	0.00
SV, LAUSD	Max	0.09	0.00
SV, LAUSD	Avg	0.07	0.00
SV, LAUSD	# of samples	98	98
SV, Poly High	Duration	2/16/06-6/25/06	2/16/06-6/25/06
SV, Poly High	Min	0.05	0.00
SV, Poly High	Max	0.10	0.00
SV, Poly High	Avg	0.06	0.00
SV, Poly High	# of samples	41	41
SV, Stonehurst	Duration	9/10/05-2/7/06	9/10/05-2/7/06
SV, Stonehurst	Min	0.06	0.00
SV, Stonehurst	Max	0.09	0.00
SV, Stonehurst	Avg	0.07	0.00
SV, Stonehurst	# of samples	49	49

Appendix D
Selected Compounds Report

Station		Perchloro ethylene	Chloroform	Trichloro ethylene
	Units of Conc	ppb	ppb	ppb
Burbank	Duration	6/3/05-6/25/06	6/3/05-6/25/06	6/3/05-6/25/06
Burbank	Min	0.00	0.00	0.00
Burbank	Max	0.79	0.13	0.13
Burbank	Avg	0.09	0.05	0.02
Burbank	# of samples	121	121	121
SV, Fernangeles	Duration	6/3/05-6/13/06	6/3/05-6/13/06	6/3/05-6/13/06
SV, Fernangeles	Min	0.00	0.01	0.00
SV, Fernangeles	Max	0.31	0.08	0.20
SV, Fernangeles	Avg	0.08	0.04	0.02
SV, Fernangeles	# of samples	116	116	116
SV, Fire Station	Duration	11/3/05-6/25/06	11/3/05-6/25/06	11/3/05-6/25/06
SV, Fire Station	Min	0.00	0.01	0.00
SV, Fire Station	Max	0.37	0.07	0.04
SV, Fire Station	Avg	0.05	0.02	0.01
SV, Fire Station	# of samples	78	78	78
SV, LAUSD	Duration	8/23/05-6/25/06	8/23/05-6/25/06	8/23/05-6/25/06
SV, LAUSD	Min	0.01	0.01	0.00
SV, LAUSD	Max	0.23	0.07	0.26
SV, LAUSD	Avg	0.07	0.03	0.02
SV, LAUSD	# of samples	98	98	98
SV, Poly High	Duration	2/16/06-6/25/06	2/16/06-6/25/06	2/16/06-6/25/06
SV, Poly High	Min	0.01	0.01	0.00
SV, Poly High	Max	0.09	0.07	0.02
SV, Poly High	Avg	0.04	0.03	0.00
SV, Poly High	# of samples	41	41	41
SV, Stonehurst	Duration	9/10/05-2/7/06	9/10/05-2/7/06	9/10/05-2/7/06
SV, Stonehurst	Min	0.00	0.01	0.00
SV, Stonehurst	Max	0.15	0.07	0.26
SV, Stonehurst	Avg	0.06	0.03	0.01
SV, Stonehurst	# of samples	49	49	49

Appendix D
Selected Compounds Report

Station		Chrome VI	Organic Carbon	Elemental Carbon
	Units of Conc	ng/m^3	$\mu g/m^3$	$\mu g/m^3$
Burbank	Duration	6/3/05-6/25/06	6/3/05-6/25/06	6/3/05-6/25/06
Burbank	Min	0.01	2.78	0.66
Burbank	Max	0.67	15.11	6.01
Burbank	Avg	0.13	6.73	2.26
Burbank	# of samples	125	122	122
SV, Fernangeles	Duration	6/3/05-6/25/06	6/3/05-6/25/06	6/3/05-6/25/06
SV, Fernangeles	Min	0.01	2.34	0.28
SV, Fernangeles	Max	0.90	19.97	4.02
SV, Fernangeles	Avg	0.17	5.92	2.01
SV, Fernangeles	# of samples	123	122	122
SV, Fire Station	Duration	10/28/05-6/25/06	10/28/05-6/25/06	10/28/05-6/25/06
SV, Fire Station	Min	0.00	0.25	0.00
SV, Fire Station	Max	0.47	9.09	4.48
SV, Fire Station	Avg	0.08	5.03	1.77
SV, Fire Station	# of samples	76	77	77
SV, LAUSD	Duration	8/23/05-6/25/06	8/23/05-6/25/06	8/23/05-6/25/06
SV, LAUSD	Min	0.03	2.31	0.54
SV, LAUSD	Max	5.22	22.83	4.95
SV, LAUSD	Avg	0.50	6.51	2.11
SV, LAUSD	# of samples	98	101	101
SV, Poly High	Duration	2/13/06-6/25/06	2/13/06-6/25/06	2/13/06-6/25/06
SV, Poly High	Min	0.02	2.41	0.65
SV, Poly High	Max	0.23	8.52	3.61
SV, Poly High	Avg	0.07	4.75	1.83
SV, Poly High	# of samples	38	43	43
SV, Stonehurst	Duration	8/23/05-2/7/06	8/23/05-2/7/06	8/23/05-2/7/06
SV, Stonehurst	Min	0.01	2.25	0.30
SV, Stonehurst	Max	0.52	18.71	4.35
SV, Stonehurst	Avg	0.14	7.64	1.66
SV, Stonehurst	# of samples	55	55	55

Appendix D
Selected Compounds Report

Station		Total Carbon	PM_{10}	Cadmium
	Units of Conc	$\mu g/m^3$	$\mu g/m^3$	ng/m^3
Burbank	Duration	6/3/05-6/25/06	6/3/05-6/25/06	6/3/05-6/25/06
Burbank	Min	3.66	9	1.0
Burbank	Max	18.13	77	4.6
Burbank	Avg	8.99	35	1.4
Burbank	# of samples	122	122	90
SV, Fernangeles	Duration	6/3/05-6/25/06	6/3/05-6/25/06	6/3/05-6/25/06
SV, Fernangeles	Min	2.70	8	1.0
SV, Fernangeles	Max	22.04	75	5.0
SV, Fernangeles	Avg	7.93	35	1.6
SV, Fernangeles	# of samples	122	122	95
SV, Fire Station	Duration	10/28/05-6/25/06	10/28/05-6/25/06	10/28/05-6/25/06
SV, Fire Station	Min	0.25	6	1.0
SV, Fire Station	Max	11.66	65	5.9
SV, Fire Station	Avg	6.80	28	1.47
SV, Fire Station	# of samples	77	77	60
SV, LAUSD	Duration	8/23/05-6/25/06	8/23/05-6/25/06	8/23/05-6/25/06
SV, LAUSD	Min	2.85	5	1.0
SV, LAUSD	Max	25.00	72	3.7
SV, LAUSD	Avg	8.62	35	1.4
SV, LAUSD	# of samples	101	102	78
SV, Poly High	Duration	2/13/06-6/25/06	2/13/06-6/25/06	2/13/06-6/25/06
SV, Poly High	Min	3.09	6	1.0
SV, Poly High	Max	11.54	67	2.7
SV, Poly High	Avg	6.58	27	1.4
SV, Poly High	# of samples	43	44	22
SV, Stonehurst	Duration	8/23/05-2/7/06	8/23/05-2/7/06	8/23/05-2/7/06
SV, Stonehurst	Min	2.55	6	1.0
SV, Stonehurst	Max	20.60	77	3.8
SV, Stonehurst	Avg	9.30	40	1.5
SV, Stonehurst	# of samples	55	55	23

Appendix D
Selected Compounds Report

Station		Manganese	Arsenic	Nickel
	Units of Conc	ng/m^3	ng/m^3	ng/m^3
Burbank	Duration	6/3/05-6/25/06	6/3/05-6/25/06	6/3/05-6/25/06
Burbank	Min	1.2	0.2	0.4
Burbank	Max	128.4	2.7	10.3
Burbank	Avg	23.1	0.7	3.6
Burbank	# of samples	90	90	90
SV, Fernangeles	Duration	6/3/05-6/25/06	6/3/05-6/25/06	6/3/05-6/25/06
SV, Fernangeles	Min	1.5	0.2	0.2
SV, Fernangeles	Max	56.3	1.9	7.3
SV, Fernangeles	Avg	23.2	0.6	2.5
SV, Fernangeles	# of samples	95	95	95
SV, Fire Station	Duration	10/28/05-6/25/06	10/28/05-6/25/06	10/28/05-6/25/06
SV, Fire Station	Min	0.5	0.2	0.2
SV, Fire Station	Max	49.3	2.0	10.6
SV, Fire Station	Avg	20.81	0.58	2.65
SV, Fire Station	# of samples	60	60	60
SV, LAUSD	Duration	8/23/05-6/25/06	8/23/05-6/25/06	8/23/05-6/25/06
SV, LAUSD	Min	2.6	0.2	0.2
SV, LAUSD	Max	89.0	8.2	9.3
SV, LAUSD	Avg	29.6	0.8	3.5
SV, LAUSD	# of samples	78	78	78
SV, Poly High	Duration	2/13/06-6/25/06	2/13/06-6/25/06	2/13/06-6/25/06
SV, Poly High	Min	2.7	0.2	0.2
SV, Poly High	Max	28.6	1.9	4.6
SV, Poly High	Avg	15.9	0.4	2.0
SV, Poly High	# of samples	22	22	22
SV, Stonehurst	Duration	8/23/05-2/7/06	8/23/05-2/7/06	8/23/05-2/7/06
SV, Stonehurst	Min	0.5	0.2	0.2
SV, Stonehurst	Max	66.8	2.3	6.2
SV, Stonehurst	Avg	30.5	0.8	2.6
SV, Stonehurst	# of samples	23	23	23

Appendix D
Selected Compounds Report

Station		Lead (Pb)
	Units of Conc	ng/m^3
Burbank	Duration	6/3/05-6/25/06
Burbank	Min	3.0
Burbank	Max	24.4
Burbank	Avg	9.9
Burbank	# of samples	90
SV, Fernangeles	Duration	6/3/05-6/25/06
SV, Fernangeles	Min	3.0
SV, Fernangeles	Max	46.4
SV, Fernangeles	Avg	8.8
SV, Fernangeles	# of samples	95
SV, Fire Station	Duration	10/28/05-6/25/06
SV, Fire Station	Min	3.0
SV, Fire Station	Max	43.1
SV, Fire Station	Avg	14.95
SV, Fire Station	# of samples	60
SV, LAUSD	Duration	8/23/05-6/25/06
SV, LAUSD	Min	3.0
SV, LAUSD	Max	22.1
SV, LAUSD	Avg	10.5
SV, LAUSD	# of samples	78
SV, Poly High	Duration	2/13/06-6/25/06
SV, Poly High	Min	3.0
SV, Poly High	Max	13.8
SV, Poly High	Avg	6.0
SV, Poly High	# of samples	22
SV, Stonehurst	Duration	8/23/05-2/7/06
SV, Stonehurst	Min	3.0
SV, Stonehurst	Max	26.6
SV, Stonehurst	Avg	10.4
SV, Stonehurst	# of samples	23