2010 Clean Communities Plan

(Formerly the Air Toxics Control Plan)

Working Together to Build Cleaner Communities

November 2010

AQMD

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD

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

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

MEMBERS:

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

JOHN J. BENOIT
Supervisor, Fourth District
Riverside County Representative

MICHAEL A. CACCIOTTI
Councilmember, City of South Pasadena
Cities Representative, Los Angeles County, Eastern Region

BILL CAMPBELL
Supervisor, Third District
County of Orange

JANE W. CARNEY
Senate Rules Committee Appointee

JOSIE GONZALES
Supervisor, Fifth District
San Bernardino County Representative

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

JOSEPH K. LYOU, Ph.D.
Governor's Appointee

JUDY MITCHELL
Councilmember, City of Rolling Hills Estates
Cities Representative, Los Angeles County, Western Region

JAN PERRY
Councilmember, City of Los Angeles

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

EXECUTIVE OFFICER:
BARRY R. WALLERSTEIN, D.Env.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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

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

Planning and Rules Manager
Planning, Rule Development, and Area Sources
Susan Nakamura

Authors: Cheryl Marshall – Program Supervisor
Eugene Kang – Air Quality Specialist
Tim Kobata – Air Quality Specialist

Preface

The 2010 Clean Communities Plan (CCP, formerly the Air Toxics Control Plan) is the result of a collaborative effort by SCAQMD staff with input from community representatives, business representatives, local government officials, and partnering government agencies. The CCP builds from the existing traditional regulatory approaches and incorporates new implementation approaches to address cumulative air toxics exposure in communities and neighborhoods throughout the South Coast Air Quality Management District (District).

The 2010 CCP utilizes a variety of implementation approaches and tools to address exposure to air toxics at the community level and develop solutions. The CCP is an “action” plan which identifies activities for the public, community representatives, agencies, elected officials, and the regulated industries to help identify air quality issues in their neighborhoods and work together to develop solutions.

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

LIST OF TABLES

LIST OF TABLES (continued)

LIST OF FIGURES

ACRONYMS

AB – Assembly Bill
AQMD – South Coast Air Quality Management District
AQMP – Air Quality Management Plan
ATCM – Air Toxics Control Measure
ATCP – Air Toxics Control Plan
BACT – Best Available Control Technology
CAA – Clean Air Act
Cal-EMA – California Emergency Management Agency
Cal-EPA – California Environmental Protection Agency
CARB – California Air Resources Board
CARE – US-EPA's Community Action for a Renewed Environment Program
CCP – Clean Communities Plan
CERP – Community Exposure Reduction Plan
CEQA – California Environmental Quality Act
CO – Carbon Monoxide
CUPA – Certified Unified Program Agencies
DOT – Department of Transportation
DPM – Diesel Particulate Matter from Internal Combustion Engines
DRRP – CARB Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles
DTSC – Department of Toxic Substances Control
EJ – Environmental Justice
HAP – Hazardous Air Pollutant
HRA – Health Risk Assessment
IGR – Intergovernmental Review
MATES – Multiple Air Toxics Exposure Study
NAAQS – National Ambient Air Quality Standard
NESHAPS – National Emission Standards for Hazardous Air Pollutants
NOx – Oxides of Nitrogen
OSHA – Occupational Safety and Health Administration
PM – Particulate Matter
SIP – State Implementation Plan
T-BACT – Toxic Best Available Control Technology
TAC – Toxic Air Contaminant
US-EPA – United States Environmental Protection Agency
VOC – Volatile Organic Compound

Executive Summary

Introduction

The 2010 Clean Communities Plan (CCP) is a planning document that outlines the overall control strategy for the South Coast Air Quality Management District's (AQMD's) air toxics control program. The plan is the continuing effort and update to both the Air Toxics Control Plan (ATCP) developed in 2000 and the subsequent Addendum in 2004. The 2010 CCP is comprised of traditional source-specific control measures and measures to address cumulative toxic impacts that affect neighborhoods and communities within the South Coast Air Quality Management District (District).

Public Process

A CCP working group was formed in the second half of 2008 in order to ensure that public input and comments were considered in the early development of the new measures. Members included representatives from communities, environmentalists, industry, the AQMD, and other government agencies. On April 2, 2010 the AQMD staff released the first draft of the CCP for public review. The AQMD staff reconvened the CCP working group to further discuss and receive additional input on the Draft CCP. The Revised Draft Clean Communities Plan was released at a Public Workshop held on September 28, 2010. Additional comments received after the Public Workshop were incorporated in the 2010 Clean Communities Plan to be presented to the Governing Board for approval in November 2010. As with previous versions of the ATCP, staff is seeking the Board's approval of the plan as a planning document for possible future actions. As a result, the Board's action is not binding and does not commit the AQMD to a definitive course of action.

Regulatory Progress

Federal, state, and AQMD rules, regulations, and programs have led to significant progress in reducing toxic air contaminant exposure. The AQMD's air toxics regulatory program regulates over 10,000 sources in the region such as, but not limited to, hexavalent chromium plating and finishing, hexavalent chromium spraying operations, perchloroethylene dry cleaners, benzene emissions from gasoline dispensing, and diesel-fueled stationary engines. In addition, the AQMD's regulatory program requires that every new and modified permitted source meet specific toxic requirements ensuring that these sources meet stringent air toxics requirements. During the past decade a number of local, state, and federal regulations have addressed diesel particulate emissions from idling trucks and school buses, fleet rules, locomotives, cargo handling equipment, heavy duty trucks, and transport refrigeration units to name a few.

Current District Average Cancer Risk

CARB and AQMD source-specific rules have markedly reduced exposure to toxic air contaminants. The results of the Multiple Air Toxics Exposure Studies (MATES II and MATES III) air quality monitoring have shown some regional reductions in exposure to key toxic air contaminants (TACs) and reduced cancer risk throughout the District. During the MATES III study period, the overall regional population

weighted estimated cancer risk from air toxics was approximately 853 in a million as compared to 931 in a million in MATES II. The greatest contributor to estimated cancer risk in both MATES II and III is diesel exhaust. In MATES III diesel exhaust accounts for 83% of the total estimated cancer risk from air toxics. MATES III is based on 2005 emissions inventory data and 2004-2006 monitoring data.

Many of the recently adopted diesel rules and regulations have implementation dates after 2005 and will not be fully implemented until 2010 and beyond. As a result, the reductions from diesel regulations are not realized in MATES III. Exposure reductions from implementation of current diesel regulations with future effective dates will occur as rules are fully implemented.

Future Population District Average Cancer Risk

The AQMD staff used projected toxic emissions estimates based on adopted rules and regulations with future effective compliance dates and short-term measures from the 2007 Air Quality Management Plan (AQMP). Based on these emissions projections, continued implementation of existing rules and regulations, and 2007 AQMP/State Implementation Plan (SIP) short-term measures, overall regional estimated risk from air toxics is expected to be reduced by 75 percent by 2023. Regionally, the 2023 population weighted estimated cancer risk from air toxics is expected to be approximately 210 in a million. Although many areas will have substantial reductions, the residual or remaining risk in some communities will be well above 200 in a million and of concern. Risk levels in between 2010 and 2023 are, as expected, much higher.

Chapter 1 of the September 2008 "Final Report, Multiple Air Toxics Exposure Study in the South Coast Air Basin, Mates-III, South Coast Air Quality Management District" provides the following discussion of perspectives of risk on pages 1-3 and 1-4:

> It may be useful to compare risks estimated from assessments of environmental exposures to the overall rates of health effects in the general population. For example, it is often estimated that the incidence of cancer over a lifetime in the U.S. population is about 1 in 4, to 1 in 3. This translates into a risk of about 300,000 in a million. It has been also estimated that the bulk of cancers from known risk factors are associated with lifestyle factors such as tobacco use, diet, and being overweight. One such study, the Harvard Report on Cancer Prevention, estimated that of cancers associated with known risk factors, about 30% were related to tobacco, about 30% were related to diet and obesity, and about 2% were associated with environmental pollution related exposures.

Limitations of Data Results

Because MATES III is based on regional modeling and shows average risk over a fairly large area, some neighborhoods and communities with elevated risk may not be identified. In addition, areas may show elevated health risk that is due to pollution transport from nearby areas. However, impacts from toxic emissions are generally localized and most heavily affect nearby receptors. Therefore, the 2010 CCP will go beyond the MATES III findings and take a closer look at toxic exposure at the community level.

Need for the Clean Communities Plan

AQMD rules, along with state and federal rules and regulations establish the foundation of the AQMD's air toxics regulatory program. These rules and regulations reduce air toxics from

thousands of sources throughout the District. However, even with an existing broad-based air toxics regulatory program, there are areas throughout the District where there are clusters of toxic emitting sources that, when combined together, can have substantial cumulative effects on neighborhoods. In addition, although the results of MATES II and MATES III have shown regional reductions in exposure to key TACs and reduced cancer risk throughout the District, future projections of MATES III show unacceptable cancer risk levels regionally. Local health risks in some communities are expected to be even more concentrated and elevated. Therefore, in addition to the traditional District-wide approach to air toxic programs, the CCP will include measures to address localized effects and cumulative impacts in communities and neighborhoods.

Clean Communities Plan Approach

The 2010 CCP builds upon the 2000 ATCP and 2004 Addendum to the ATCP. The CCP will continue to utilize traditional source-specific rules to address air toxics, but put greater emphasis on cumulative effects and neighborhood and community air-related issues.

The solution for cumulative air quality impacts is multi-faceted. The complexity is that the issues and solutions are community-specific. The CCP utilizes a variety of implementation approaches and tools to address exposure to air toxics at the community level and develop solutions. During the past several years, AQMD has realized the need for further action at the community level and has worked with highly impacted communities through Town Hall meetings, public outreach, and its compliance program. The CCP is designed as an "action" plan that calls for action by the public, community representatives, agencies, elected officials, and the regulated industries to help identify air quality issues in their neighborhoods and work together to develop solutions.

The CCP includes a pilot measure that will work with two communities to develop a Community Exposure Reduction Plan (CERP) that is tailored to the issues within those specific communities. Solutions to individual issues identified in each community will vary. Lessons learned from the CERP development will be formulated into a guidance document for other communities to follow when developing their own CERP. To address cumulative impacts throughout the District, the CCP provides a variety of implementation approaches to address existing high emitting toxic sources, encourage informed land use decisions for future projects, education and outreach programs for the public and agencies, and enhanced compliance programs.

Document Format

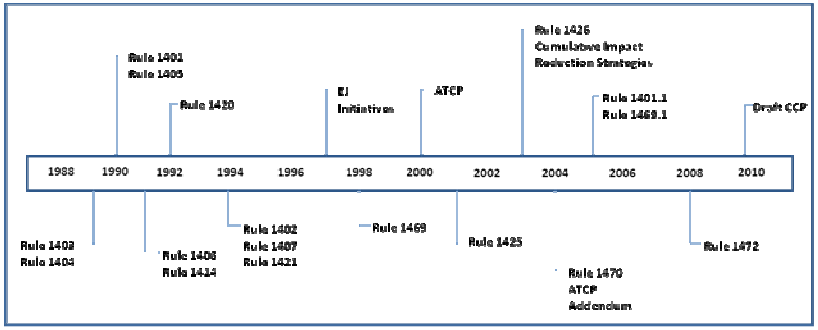
Chapter 1 of this document provides background information on toxic air contaminants (TACs) and summarizes federal, state, and local regulatory efforts to reduce air toxics exposure, including the 2000 Air Toxics Control Plan and its 2004 Addendum. Chapter 2 describes the progress made in reducing exposure to TACs in the District. A discussion on AQMD's Multiple Air Toxics Exposure Studies has been included with key findings relating to regional risk posed by various TACs within the District. Also included are historical, current, and projected air toxic levels, based on data and analyses of AQMD toxic inventories, AQMP and ATCP-related emission reductions, and risk models. Chapter 3 describes the measures and implementation approaches for the CCP and how they are integrated. It also details the specific measures of the CCP. Chapter 4 includes the implementation schedule for each of the measures presented in Chapter 3.

Chapter 1: Background

Introduction

The AQMD's air toxics program began in 1990 with the adoption of Rule 1401 – New Source Review of Toxic Air Contaminants. In 1994, Rule 1402 - Control of Toxic Air Contaminants from Existing Sources, which incorporates the state AB2588 Toxics "Hot Spots" Program, was adopted. During the past two decades, much of the focus has been on regulating individual source categories that emit a specific toxic air contaminant. The AQMD's air toxics program currently has 15 source-specific rules that target toxic emission reductions. In addition, criteria pollutant source-specific rules such as some coating and solvent rules also achieve concurrent air toxics emission reductions. Figure 1-1 shows the development of AQMD's air toxics program.

Figure 1-1
Development Timeline of AQMD's Air Toxics Program



During the past decade, the AQMD's Air Toxics Control Plan and Cumulative Impact Reduction Strategies have been strong influences in the AQMD's air toxics regulatory program as they provided the structure for the AQMD's current air toxics program. The following provides an overview of these two plans and the AQMD's regulatory program.

2000 Air Toxics Control Plan (ATCP)

In March 2000, the AQMD's Governing Board approved the Air Toxics Control Plan (ATCP) which was the first comprehensive plan in the nation to guide future toxic rulemaking and programs. The ATCP was developed to lay out the AQMD's air toxics control program which built upon existing federal, state, and local toxic control programs as well as co-benefits from implementation of State Implementation Plan (SIP) measures. The concept for the plan was an outgrowth of the Environmental Justice principles and the Environmental Justice Initiatives adopted by the Governing Board in October 1997. Monitoring studies and air toxics regulations that were created from these initiatives emphasized the need for a more systematic approach to reducing toxic air contaminants. The intent of the plan was to reduce exposure to air toxics in an equitable and cost-effective manner that promotes clean, healthful air in the District. The plan proposed control strategies to reduce toxic air contaminants in the District implemented between years 2000 and 2010 through cooperative efforts of the AQMD, local governments, CARB and US-EPA.

2003 Cumulative Impact Reduction Strategies

The AQMD's Governing Board approved a cumulative impacts reduction strategy in September 2003. The resulting 25 cumulative impacts strategies were a key element of the 2004 Addendum to the ATCP. The strategies included rules, policies, funding, education, and cooperation with other agencies. Some of the key AQMD accomplishments related to the cumulative impacts reduction strategies were:

- Rule 1401.1 which set more stringent health risk requirements for new and relocated facilities near schools
- Rule 1470 which established diesel PM emission limits and other requirements for diesel-fueled engines
- Rule 1469.1 which regulated chrome spraying operations
- Rule 410 which addresses odors from transfer stations and material recovery facilities
- Intergovernmental Review comment letters for CEQA documents
- AQMD's land use guidance document
- Additional protection in toxics rules for sensitive receptors, such as more stringent requirements for chrome plating operations and diesel engines located near schools

2004 Addendum to the ATCP

The Addendum to the ATCP (Addendum) was published by the AQMD in 2004 and served as a status report regarding implementation of the various mobile and stationary source strategies in the 2000 ATCP and introduced new measures to further address air toxics. The main elements of the Addendum were to:

- address the progress made in implementation of the 2000 ATCP control strategies;
- provide a historical perspective of air toxic emissions and current air toxic levels;
- incorporate the Cumulative Impact Reduction Strategies approved by the Board in 2003 and additional measures identified in the 2003 AQMP;
- project future air toxic levels to the extent feasible; and
- summarize future efforts to develop the next ATCP.

Significant progress has been made in implementing most of the AQMD strategies from the 2000 ATCP and the 2004 Addendum. The California Air Resources Board (CARB) has also made notable progress in mobile source measures via its Diesel Risk Reduction Plan, especially for goods movement-related sources, while the US-EPA continues to implement their air toxic programs applicable to stationary sources as discussed below.

Federal Toxics Regulatory Programs

Under Section 112 of the Clean Air Act (CAA), US-EPA is required to regulate sources that emit one or more of the 187 federally listed hazardous air pollutants (HAPs)[1]. In order to implement the CAA, approximately 100 National Emission Standards for Hazardous Air Pollutants (NESHAPs) have been

[1] Hazardous air pollutant (HAP) is the term used in the Clean Air Act for air toxics which are pollutants that are known or suspected of causing cancer or other serious health effects. The federal HAPs are listed on the US-EPA website at http://www.epa.gov/ttn/atw/orig189.html. The State of California adopted the original list of 189 HAPs from the Clean Air Act (Title 17 CCR 93000-93001) and refers to them as toxic air contaminants (TACs). In addition to the original list, the state identifies additional TACs using the procedure in H&S Code Sections 39660-39664.

promulgated by US-EPA for major sources (sources emitting greater than 10 tons per year of a single HAP or greater than 25 tons per year of multiple HAPs). The AQMD can either directly implement NESHAPs or adopt rules that contain requirements at least as stringent as the NESHAP requirements. However, since NESHAPs often apply to sources in the District that are controlled, many of the sources that would have been subject to federal requirements already comply or are exempt.

In addition to the major source NESHAPs, US-EPA has also controlled HAPs from urban areas by developing Area Source NESHAPs under their Urban Air Toxics Strategy. US-EPA defines an area source as a source that emits less than 10 tons annually of any single hazardous air pollutant or less than 25 tons annually of a combination of hazardous air pollutants. The Clean Air Act (CAA) requires the US-EPA to identify a list of at least 30 air toxics that pose the greatest potential health threat in urban areas. US-EPA is further required to identify and establish a list of area source categories that represent 90 percent of the emissions of the 30 urban air toxics associated with area sources, for which Area Source NESHAPs are to be developed under the CAA. US-EPA has identified a total of 70 area source categories with regulations promulgated for more than 30 categories so far. Appendix A lists key NESHAPs recently adopted or amended by US-EPA.

The federal toxics program recognizes diesel engine exhaust as a health hazard, however, diesel particulate matter itself is not one of their listed toxic air contaminants. Rather, each toxic compound in the speciated list of compounds in exhaust is considered separately. Although there are no specific NESHAP regulations for diesel PM, diesel particulate emission reductions are realized through federal regulations including diesel fuel standards and emission standards for stationary, marine, and locomotive engines; and idling controls for locomotives.

State Air Toxics Regulatory Program

The California air toxics program was based on the CAA and the original federal list of hazardous air pollutants. The state program was established in 1983 under the Toxic Air Contaminant Identification and Control Act, Assembly Bill (AB) 1807, Tanner. Under the state program, toxic air contaminants are identified through a two-step process of risk identification and risk management. This two-step process was designed to protect residents from the health effects of toxic substances in the air.

As part of its risk management efforts, CARB has passed state Air Toxic Control Measures (ATCMs) to address air toxics from mobile and stationary sources. Some key ATCMs for stationary sources include reductions of benzene emissions from service stations, hexavalent chromium emissions from chrome plating, perchloroethylene emissions from dry cleaning, ethylene oxide emissions from sterilizers, and multiple air toxics from the automotive painting and repair industries.

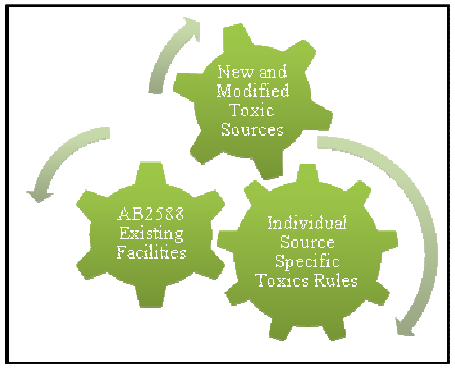
Many of CARB's recent ATCMs are part of the CARB Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (DRRP) which was adopted in September 2000 (http://www.arb.ca.gov/diesel/documents/rrpapp.htm) with the goal of reducing diesel particulate matter emissions from compression ignition engines and associated health risk by 75

percent by 2010 and 85 percent by 2020. The DRRP includes strategies to reduce emissions from new and existing engines through the use of ultra-low sulfur diesel fuel, add-on controls, and engine replacement. In addition to stationary source engines, the plan addresses diesel PM emissions from mobile sources such as trucks, buses, construction equipment, locomotives, and ships. Appendix A lists key ATCMs recently adopted or amended by CARB.

AQMD's Toxics Regulatory Program

The AQMD's current toxics regulatory program is composed of three major components: rules that address new and modified toxic sources, AB2588 facilities (existing toxic sources), and source-specific toxic rules which can be an equipment or industry category. Figure 1-2 provides an overview of these three components of the AQMD's toxics regulatory program.

Figure 1-2: AQMD's Existing Regulatory Program



New and Modified Toxic Emitting Sources

The AQMD has two rules addressing new and modified sources. Rule 1401 sets health risk thresholds for air toxic emissions from new, modified, and relocated sources. The rule lists nearly 300 TACs that are evaluated during the AQMD's permitting process for new, modified or relocated sources. During the past decade, more than 80 compounds have been added or had risk values amended. The addition of diesel particulate matter from diesel-fueled internal combustion engines as a TAC in March 2008 was the most significant of recent amendments to the rule.

Rule 1401.1 sets risk thresholds for new and relocated facilities near schools. The requirements are more stringent than those for other air toxics rules in order to provide additional protection to school children.

Existing Toxic Emitting Facilities (AB2588)

Rule 1402 sets health risk thresholds for existing facilities. Depending upon facility-wide air toxic emissions, the program requires emissions inventories, health risk assessments (HRAs), public notices, public meetings, and/or risk reduction. The AB2588 Toxics "Hot Spots" Program is implemented through Rule 1402. There are currently about 600 facilities in the AQMD's AB2588 program. Since 1992 when the state Health and Safety Code incorporated a risk reduction requirement in the program, the AQMD has reviewed and approved over 300 HRAs, 44 facilities were required to do a public notice, and 21 facilities were subject to risk reduction. Currently, over 96 percent of the facilities in the program have cancer risks below ten in a million and over 98 percent have acute and chronic hazard indices of less than one.

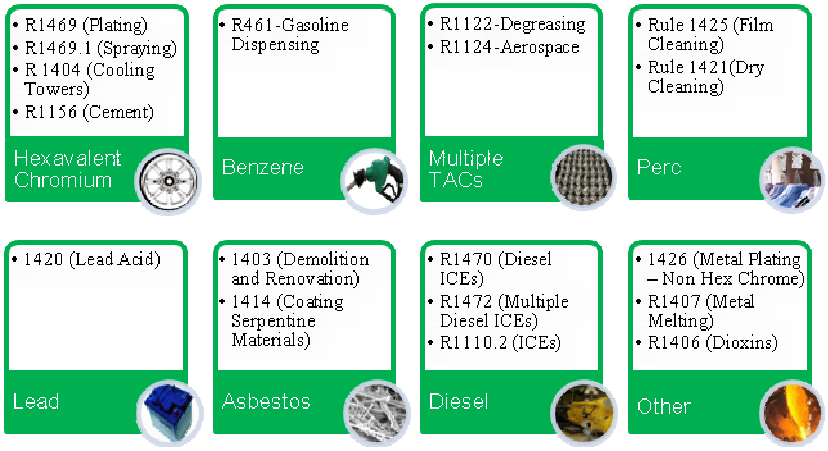
Source-Specific Rules and Regulations

The 2000 Air Toxics Control Plan and 2003 Cumulative Impacts Strategies were two documents that influenced the

AQMD's rulemaking efforts during the past decade. Source-specific rules address either a source or industry category.

Under the AQMD's toxic regulatory program there are 15 source-specific rules that target toxic emission reductions that regulate over 10,000 sources such as metal finishing, spraying operations, dry cleaners, film cleaning, gasoline dispensing, and diesel-fueled stationary engines to name a few. In addition, other source-specific rules targeting criteria pollutant reductions also reduce toxic emissions, such as Rule 461 which reduces benzene emissions from gasoline dispensing and Rule 1124 which reduces perchloroethylene, trichloroethylene, and methylene chloride emissions from aerospace operations. Figure 1-3 provides a summary of the source-specific rule and targeted toxic air contaminant.

Figure 1-3
AQMD's Source-Specific Toxics Rules



In addition to the AQMD's stationary source-specific rules, the AQMD's toxics regulatory program includes a series of rules to address diesel emissions from certain types of mobile source fleets in the District.

Other AQMD Programs to Address Toxics

Exposure to air toxics emissions is also addressed through other AQMD programs such as environmental justice, projects that undergo California Environmental Quality Act (CEQA) review, AB2766 subvention funding projects, and Carl Moyer. These programs are summarized below.

AQMD's CEQA Intergovernmental Review Program

The AQMD staff, through its Intergovernmental Review (IGR) provides comments to lead agencies on air quality analyses and mitigation measures in CEQA documents. The following are some key programs and tools that have been developed more recently to strengthen air quality analyses, specifically as they relate to exposure of mobile source air toxics:

- AQMD's Mobile Source Committee approved the "Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions" (August 2002). This document provides guidance for analyzing cancer risks from diesel particulate matter from truck idling and movement (e.g., truck stops, warehouse and distribution centers, or transit centers), ship hotelling at ports, and train idling.
- Cal-EPA and CARB's "Air Quality and Land Use Handbook: A Community Health Perspective" (April 2005), provides recommended siting distances for incompatible land uses.
- Western Riverside Council of Governments Air Quality Task Force developed a policy document titled, "Good

Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities" (September 2005). This document provides guidance to local government on preventive measures to reduce neighborhood exposure to toxic air contaminants from warehousing facilities.

Environmental Justice (EJ)

Environmental justice has long been a focus of the AQMD. In 1990, the AQMD formed an Ethnic Community Advisory Group that was recently restructured as the Environmental Justice Advisory Group (EJAG). EJAG's mission is to advise and assist AQMD in protecting and improving public health in AQMD's most impacted communities through the reduction and prevention of air pollution.

In 1997 the Governing Board adopted four guiding principles and ten initiatives (http://www.aqmd.gov/ej/history.htm) to ensure environmental equity. In 1997 the Governing Board expanded the initiatives to include the "Children's Air Quality Agenda" focusing on the disproportionate impacts of poor air quality on children. Some key initiatives that have been implemented were the MATES II and MATES III studies; the Clean Fleet Rules, the Cumulative Impacts strategies; funding for lower emitting technologies under the Carl Moyer Program; the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning; a guidance document on Air Quality Issues in School Site Selection; and the 2000 Air Toxics Control Plan and its 2004 Addendum. Key initiatives focusing on communities and residents include the Clean Air Congress; the Clean School Bus Program; Asthma and Air Quality Consortium; Brain and Lung Tumor and Air Pollution Foundation; air quality presentations to schools and community and civic groups; and Town Hall meetings.

Technological and scientific projects and programs have been a large part of the AQMD's EJ program since its inception. Over time, the EJ program's focus on public education, outreach, and opportunities for public participation have greatly increased. Public education materials and other resources for the public are available on the AQMD's website (www.AQMD.gov) and examples of ways the public can get involved can be found at http://www.aqmd.gov/ej/getting_involved.htm.

AB 2766 Subvention Funds

AB2766 subvention funds, money collected by the state as part of vehicle registration and passed through to the AQMD, is used to fund projects of local cities that reduce motor vehicle air pollutants. The Clean Fuels Program, funded by a surcharge on motor vehicle registrations in the AQMD, reduces TAC emissions through co-funding projects to develop and demonstrate low-emission clean fuels and advanced technologies, and to promote commercialization and deployment of promising or proven technologies in Southern California.

Carl Moyer Program

Another program that targets diesel emission reductions is the Carl Moyer program which provides grants for projects that achieve early or extra emission reductions beyond what is required by regulations. Examples of eligible projects include cleaner on-road, off-road, marine, locomotive, and stationary agricultural pump engines. Other endeavors of the AQMD's Technology Advancement Office help to reduce diesel PM emissions through co-funding research and demonstration projects of clean technologies, such as low-emitting locomotives.

Chapter 2: Progress to Date and Future Projections

Regulatory Progress

Results of the Multiple Air Toxics Exposure Studies (MATES) have helped to guide the AQMD's air toxics regulatory program. The 2000 ATCP identified a list of ten toxic air contaminants (TACs) based on the results of the second Multiple Air Toxics Exposure Study (MATES II) conducted in 1998 and 1999 that were primarily responsible for cancer risk in the AQMD. Of this list of ten, six TACs contributed to over 90 percent of the average risk in the District. These six TACs and their contribution to risk, based on the MATES II study, are as follows:

Table 2-1
Top Six MATES II Contributors to Cancer Risk

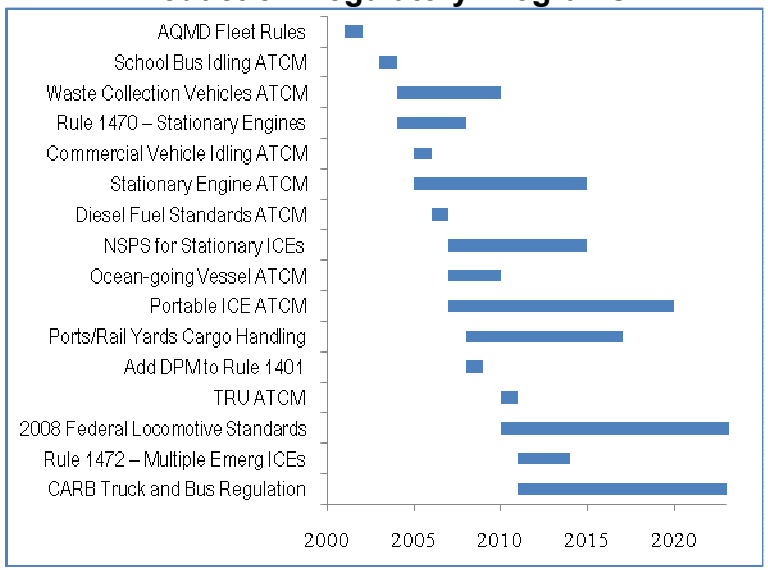
Toxic Air Contaminant	Risk Contribution (%)
Diesel particulate	72.0
1,3-butadiene	8.4
Benzene	6.5
Formaldehyde	2.0
Hexavalent chromium	1.8
Perchloroethylene	0.8

The above toxic air contaminants were the focus of many of the measures in the 2000 ATCP. The AQMD and CARB have aggressively adopted and amended regulations to reduce these TACs. The following provides an overview of the progress in adopting regulatory and other programs to address these six TACs during the past 10 years.

Diesel Particulate Matter

Significant regulatory progress has been made to reduce diesel particulate from stationary and mobile sources. Figure 2-1 provides a summary of regulatory programs that have been adopted since the 2000 ATCP to address diesel particulate emissions. Figure 2-1 shows the implementation start date and when the rule or regulation is at full implementation. Most rules and regulations have an initial implementation date after 2005 and will not be fully implemented until 2010 and beyond.

Figure 2-1
Implementation Timeline of Diesel PM Emission Reduction Regulatory Programs



The following summarizes key AQMD, state, and federal diesel regulatory programs that have been adopted during the last decade.

AQMD's Stationary Diesel-Fueled Engines
In April 2004 the AQMD's Governing Board adopted Rule 1470 which affects approximately 4,900 facilities with diesel-fueled engines and implements the state ATCM for stationary diesel-fueled engines. Rule 1470 establishes requirements for new and existing stationary diesel-fueled engines. Implementation of Rule 1470 is expected to reduce diesel PM emissions by 73 tons per year or more by 2020.

In March 2008 diesel PM from internal combustion engines was added to the list of TACs for Rules 1401 and 1402. At the same time, Rule 1472 was adopted to address facilities with multiple emergency diesel engines. In addition to these toxics rules, Rule 1110.2, which sets oxides of nitrogen (NOx), volatile organic compound (VOC), and carbon monoxide (CO) emission limits for gaseous- and liquid-fueled engines, was amended in 2008. Implementation of amended Rule 1110.2 essentially eliminates use of new stationary prime diesel engines due to the stringency of NOx emission limits.

AQMD's Clean Fleet Rules
AQMD's Clean Fleet Program has reduced diesel PM emissions from mobile sources through rules for street sweepers, public fleet vehicles, buses, refuse vehicles, school buses, and airport ground access vehicles. The fleet rules result in reductions of diesel PM emissions by requiring replacement of fleet vehicles with alternative-fueled vehicles.

CARB's Diesel Risk Reduction Plan
CARB's Diesel Risk Reduction Plan (DRRP) proposed the development of new emissions standards for new stationary and mobile diesel-fueled engines, retrofit requirements for in-use engines, and requirements for ultra low-sulfur content diesel fuel needed by the advanced diesel PM emission controls. Emission standards for new diesel-fueled engines take a phased-in approach to allow time for development of engine technology. Ultra low-sulfur fuel requirements were effective in 2006, allowing adequate time for fuel reformulation and for refineries to re-tool and produce the fuel in sufficient quantities. Add-on controls for existing engines require the use of ultra-low sulfur fuel, so implementation dates for these requirements were developed based on the availability of the fuel. In addition, the process for developing each new air toxics regulation is lengthy in order to ensure that requirements are feasible and cost effective and to allow full public participation.

Many ATCMs for diesel-fueled engines have been adopted by CARB as a result of the Diesel Risk Reduction Plan. Diesel PM emissions sources addressed by ATCMs so far include:

- Stationary Engines
- Portable Engines
- School Bus Idling
- Solid Waste Collection Vehicles
- Transport Refrigeration Units
- Commercial Motor Vehicle Idling
- Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards
- Ocean-going Vessels within California Waters

US-EPA's Diesel Emission Reductions
During the past 10 years, US-EPA has addressed diesel emissions through several regulations and programs. In addition to diesel fuel standards, US-EPA sets emission standards for on-road diesel fueled engines used in trucks and buses. US-EPA also promulgated emission standards for stationary diesel engines, including PM standards, in July 2006 (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines). More stringent NOx and PM emission standards for locomotives and marine engines were adopted in May 2008 (Control of Emissions of Air Pollution from Locomotive Engines and Marine Compression-Ignition Engines Less Than 30 Liters per Cylinder).

Summary of Regulatory Progress of AQMD Source – Specific Rules for Key TACs

Table 2-2 summarizes source-specific toxic rules that have been adopted or amended during the past 10 years, the number of affected sources, and emission reductions, if quantified. The AQMD's air toxics regulatory program is as or more stringent than state and federal air toxics programs. As such, many of the AQMD's rules incorporate requirements from state ATCMs and federal NESHAPs.

Hexavalent Chromium

Other key accomplishments have been with amendments to Rule 1469 which affects 130 chromium plating and chromic acid anodizing facilities. The 2003 amendments to Rule 1469 reduced hexavalent chromium emissions by 48 pounds per year. Rule 1469.1, a new rule for hexavalent chrome spraying operations, applies to 70 facilities and will reduce hexavalent chrome emissions by an estimated 85 percent.

Perchloroethylene from Dry Cleaning and Film Cleaning

In December 2002, the AQMD's Governing Board amended Rule 1421 which reduced perchloroethylene emissions from dry cleaners. Implementation of this rule affects approximately 2,100 dry cleaners throughout the District and is expected to result in approximately 850 tons of perchloroethylene emissions reduced by 2021. In addition, Rule 1425, adopted in 2001, affects 37 motion picture film cleaning facilities and reduced perchloroethylene emissions by 39.5 tons per year from film cleaning operations.

Benzene from Gasoline Dispensing and Reformulated Gasoline

Amendments to Rule 461 which require vapor recovery devices on gasoline dispensing nozzles are expected to reduce benzene emissions by about 35.9 tons per year affecting over 5,500 facilities. Benzene emissions are primarily from mobile sources and have been reduced by reformulated gasoline and vehicle turnover.

1,3-Butadiene and Formaldehyde

Formaldehyde and 1,3-butadiene emissions are products of fuel combustion. They are primarily attributable to mobile sources. CARB reformulated gasoline requirements and mobile source regulations addressed these TACs. Vehicle turnover has also reduced these TACs.

Other TACs

Source-specific rules for criteria pollutant reductions have also reduced air toxic emissions by eliminating their use in coatings and solvents. For example, a 2001 amendment to Rule 1124 which affects 237 aerospace facilities decreased emissions of methylene chloride, perchloroethylene, trichloroethylene, and

hexavalent chromium. Rules 1168 and 1171 also prohibit the use of methylene chloride and additionally prohibit the use of trichloroethylene in adhesive and sealant operations, and perchloroethylene in adhesive, sealant, and solvent cleaning operations. Rule 1426, a rule for metal finishing, reduces emissions of nickel and other toxic metals through improved housekeeping and recordkeeping requirements.

Table 2-2 – AQMD Air Toxics Control Regulations – Stationary Sources

Rule	Topic	Key Adoption / Amendment Dates	TAC	Affected Facilities	Estimated Reductions
1421	Dry Cleaning Operations*	12/6/2002 (amended)	Perchloroethylene	2100	849 tons total by 2021
1425	Motion Picture Film Labs	3/16/2001 (adopted)	Perchloroethylene	55	39.5 tons/yr (including NESHAP reductions)
1426	Metal Finishing	5/2/2003 (adopted)	Nickel, Cadmium, Lead, Copper, Chromic Acid	268	Not quantified
1469	Hexavalent Chromium Emissions from Chrome Plating Operations**	5/2/2003 (amended) 12/5/2008 (amended)	Hexavalent Chromium Hexavalent Chromium	~130	48 lbs/yr 0.87 lbs/yr
1469.1	Hexavalent Chromium Emissions from Spraying Operations	3/4/2005 (adopted)	Hexavalent Chromium	70	Baseline reduction of 85% (total emissions not quantified)
1470	Stationary Diesel-Fueled Engines***	4/2/2004 (adopted)	Diesel PM	4900	73 tons/yr or more by 2020
1472	Multiple Stationary Emergency Standby Diesel-Fueled IC Engines	3/7/2008 (adopted)	Diesel PM	~150	Not quantified
461	Gasoline Transfer and Dispensing	4/21/2000 (amended) 6/3/2005 (amended)	Benzene	~5500	35.9 tons/yr (benzene) 0.007 ton/yr (benzene)
1122	Degreasing Operations	5/9/2009 (amended)	Perchloroethylene, 1,1,1-Trichloroethane Trichloroethylene Methylene Chloride	251	295.7 tons/yr
1124	Aerospace Operations	9/21/2001 (amended)	Perchloroethylene Hexavalent Chromium Trichloroethylene Methylene Chloride	237	Facility's toxicity-weighted VOC and particulate emissions by 90 and 99 percent when Rule 1402 levels are exceeded
1156	Cement Manufacturing Facilities	3/6/2009 (amended)	Hexavalent Chromium	2	32 lbs/yr of total PM (hexavalent chromium not quantified)

*Implements ATCM for Emissions of Perchloroethylene Emissions from Dry Cleaning Systems, and the NESHAPS for Perchloroethylene Dry Cleaning Facilities
**Implements Hexavalent ATCM for Decorative and Hard Chrome Plating and Chromic Acid Anodizing Facilities
***Implements ATCM for Stationary Compression Ignition Engine

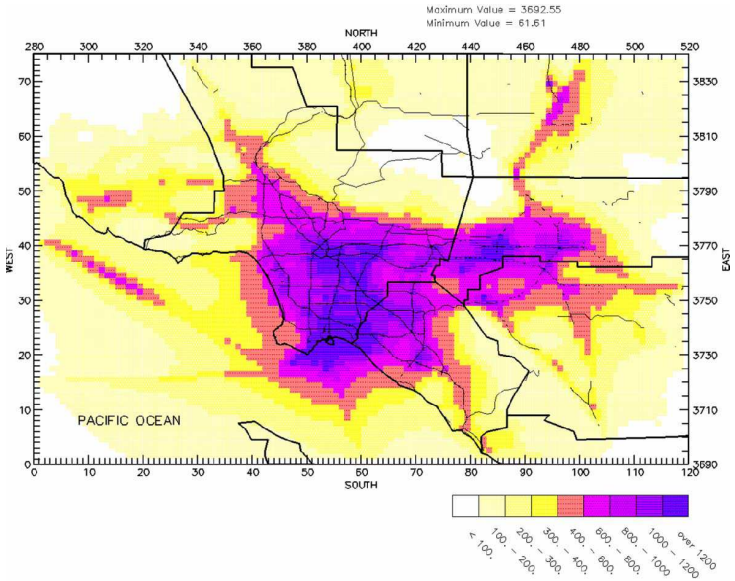
Current District Average Cancer Risk

In March 2006, the AQMD staff completed the Multiple Air Toxics Exposure Study III (MATES III)[2], a two-year toxic air contaminant monitoring and evaluation study conducted in the District. During the MATES III study period, the overall District estimated cancer risk from air toxics based on the fixed monitoring site data was approximately 1,200 per million as compared to 1,400 per million in MATES II. The overall District population weighted estimated cancer risk from air toxics was approximately 853 in a million as compared to 931 in a million in MATES II. The greatest contributor to cancer risk was diesel exhaust, accounting for an estimated 83 percent of the total.

MATES III is based on 2005 emissions inventory data and 2004-2006 monitoring data. Many of the recently adopted diesel rules and regulations have implementation dates after 2005 and will not be fully implemented until 2010 and beyond. As a result, the reductions from diesel regulations are not realized in MATES III. Exposure reductions from implementation of current diesel regulations with future effective dates will occur as rules are fully implemented.

Modeling analysis shows the highest estimated cancer risks from air toxics surrounds the port areas, with the highest grid cell risk of about 3,700 in a million. Following the ports, the next highest estimated risk is in the Central Los Angeles area extending southeast following the Interstate 5 Corridor. The highest grid cell cancer risk in a residential area is in Long Beach along the coast just northeast of the port, with about 2,900 in a million risk due to significant nearby diesel sources such as ships, trains, and trucks. Modeling analysis also showed pronounced exposure along freeways and near intermodal facilities. Figure 2-2 shows the MATES III modeled risk from all sources.

Figure 2-2
MATES III Modeled Risk from All Sources



As shown in Table 2-3 below, based on cancer potency weighting of the emissions inventory, the primary contributors to estimated cancer risk from air toxics were diesel particulate, benzene, 1,3 butadiene, hexavalent chromium, and formaldehyde. Other TACs contributed to less than one percent of the cancer risk.

[2] Final Report, Multiple Air Toxics Exposure Study in the South Coast Air Basin, Mates-III, South Coast Air Quality Management District, September 2008.

Table 2-3
2005 Risk from Simulated
Individual Toxic Air Contaminants

Toxic Compound	Cumulative Risk (per million)	Percent Contribution
Diesel	703.76	82.5
Benzene	44.53	5.2
1,3 Butadiene	30.45	3.6
Hexavalent Chromium	23.41	2.7
Primary Formaldehyde	11.78	1.4
Sec Formaldehyde	9.61	1.1

On-road and off-road mobile sources contribute nearly 93 percent of the potency weighted carcinogenic risks and stationary sources contribute about 7 percent. Carcinogenic emissions from on-road, point, and area source categories decreased by 12 percent, 66 percent, and 42 percent, respectively, and off-road carcinogenic emissions are essentially unchanged compared to MATES II.

Ambient levels of most substances measured were lower during the period of the MATES III study compared to that of the MATES II study of 1998-99, reflecting the success of various control strategies to reduce exposure to air toxics. Diesel PM emissions decreased by an estimated 2.5 percent from MATES II to MATES III, largely due to state and AQMD regulation of stationary diesel-fueled engines. Hexavalent chromium emissions were reduced by approximately 13 percent, largely due to amendments to the AQMD's chrome plating rule and the new rule for chrome spraying operations. A 50 percent reduction in benzene emissions and a 73 percent reduction in 1,3 butadiene emissions were seen and are attributed primarily to mobile source emission reductions associated with vehicle turnover and the use of reformulated gasoline. Perchloroethylene emissions have decreased by 78 percent, primarily because of 2002 amendments to the AQMD's perchloroethylene dry cleaning rule. Additional future perchloroethylene reductions are anticipated as Rule 1421 is fully implemented.

It should be noted that there are uncertainties in estimating risk. These uncertainties, as they relate to MATES III, are discussed in the Executive Summary (page ES-6) and in Chapter 1 of the September 2008 "Final Report, Multiple Air Toxics Exposure Study in the South Coast Air Basin, Mates-III, South Coast Air Quality Management District." The following is from pages ES-6 and ES-7 of the Executive Summary of MATES III:

> There are also uncertainties in the risk potency values used to estimate lifetime risk of cancer. This study used the unit risks for cancer potency established by OEHHA and the annual average concentration measured or modeled to calculate risk. This methodology has long been used to estimate the relative risks from exposure to air toxics in California and is useful as a yardstick to compare potential risks from varied sources and emissions and to assess any changes in risks over time that may be associated with changing air quality.
>
> The estimates of health risks are based on the state of current knowledge, and the process has undergone extensive scientific and public review. However, there is uncertainty associated with the processes of risk assessment. This uncertainty stems from the lack of

data in many areas necessitating the use of assumptions. The assumptions are consistent with current scientific knowledge, but are often designed to be conservative and on the side of health protection in order to avoid underestimation of public health risks.

As noted in the OEHHA risk assessment guidelines, sources of uncertainty, which may either overestimate or underestimate risk, include: (1) extrapolation of toxicity data in animals to humans, (2) uncertainty in the estimation of emissions, (3) uncertainty in the air dispersion models, and (4) uncertainty in the exposure estimates. Uncertainty may be defined as what is not known and may be reduced with further scientific studies. In addition to uncertainty, there is a natural range or variability in the human population in such properties as height, weight, and susceptibility to chemical toxicants.

Thus, the risk estimates should not be interpreted as actual rates of disease in the exposed population, but rather as estimates of potential risk, based on current knowledge and a number of assumptions. However, a consistent approach to risk assessment is useful to compare different sources and different substances to prioritize public health concerns.

Limitations of Data Results

MATES III uses regional air quality modeling of emissions inventories and monitoring data to calculate cancer risk. Under the MATES approach, toxic emissions are averaged over a 2 kilometer (km) by 2 kilometer grid. This approach provides a regional perspective of generally where there are elevated toxic emissions and risk throughout the District. This approach, however, does not capture clusters of emission sources concentrated within a small section of the 2 km by 2 km grid since these emissions will be averaged over the entire grid. This methodology may not adequately characterize exposure at a community level.

Because MATES III is based on regional modeling and shows average risk over a fairly large area, some neighborhoods and communities with elevated risk may not be identified. In addition, areas may show elevated health risk that is due to pollution transport from nearby areas. However, impacts from toxic emissions are generally localized and most heavily affect nearby receptors. Therefore, the 2010 CCP will go beyond the MATES III findings and take a closer look at toxic exposure at the community level. While conventional regulatory programs will continue to further reduce the overall community exposure, more needs to be done to address neighborhoods and communities which are more heavily impacted due to their proximity to multiple toxic sources.

Future Toxic Emission Projections

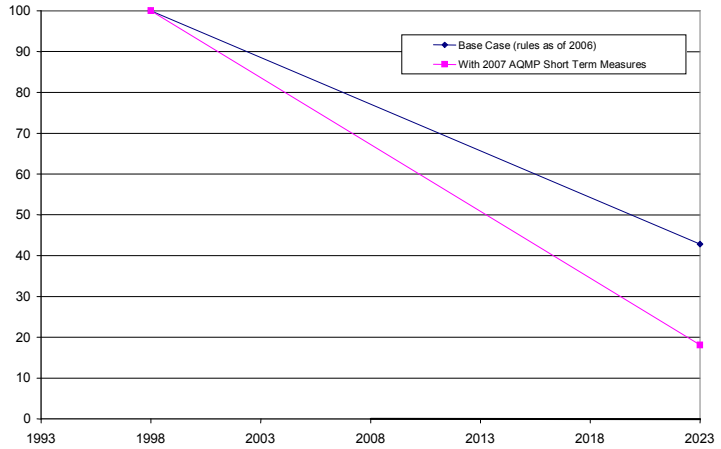
As previously discussed, many of the diesel PM reductions are not captured in MATES III as the rules and regulations will not be fully implemented until after 2005. The AQMD used 2002 reported stationary source emissions as the base year to develop emission inventories for past and future years. Additional emissions data obtained from CARB, California Department of Transportation, and the Southern California Association of Governments were included to produce a more accurate and comprehensive emissions inventory.

The AQMD staff projected future baseline emissions inventories from the 2002 base year accounting for emission

reductions and controls required by rules adopted as of June 30, 2006 and most CARB rules adopted by June 2005. Specific growth factors were then applied for factors such as population, industry, and motor vehicle activity. Toxic emissions for the selected years were then calculated by applying the latest CARB speciation profiles to the total organic gases and PM emissions.

Figure 2-3 shows projected reductions in toxic emissions from 1998 to 2023 using 1998 as the base year and including implementation of the 2007 AQMP Short Term Measures. Although the AQMP measures are primarily intended for criteria pollutant emission reduction, concurrent reductions are achieved for toxics emissions resulting from criteria pollutant reductions of total organic gases and PM. This co-benefit is also reflected in previous AQMP efforts.

Figure 2-3
Toxicity Weighted Emission Reductions from 1998 to 2023



Figures 2-4 through 2-6 show the percent contribution to District-wide risk for the largest contributors for 2005 and projected years 2014 and 2023, including implementation of the Short Term Measures in the 2007 AQMP.

Figure 2-4

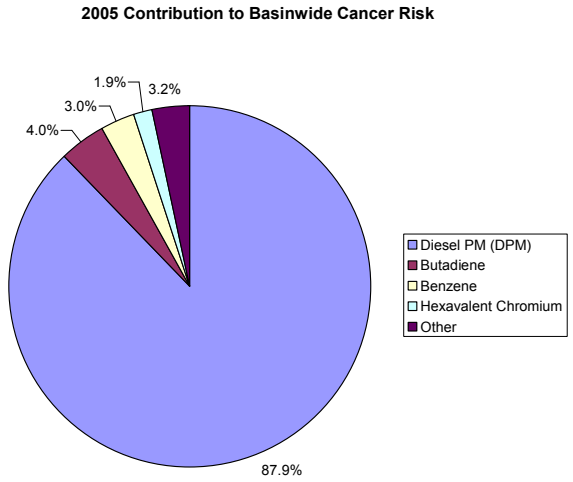


Figure 2-5

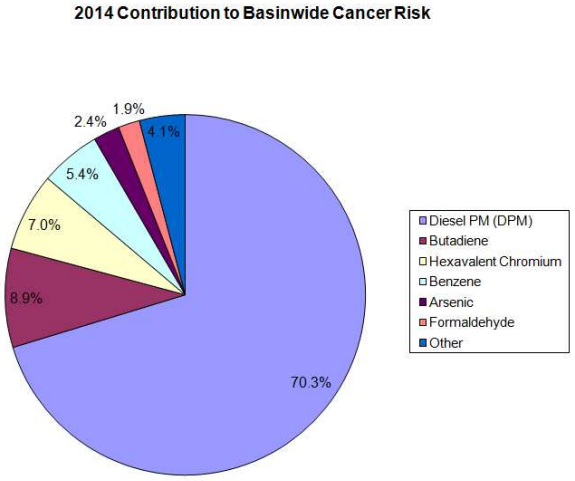
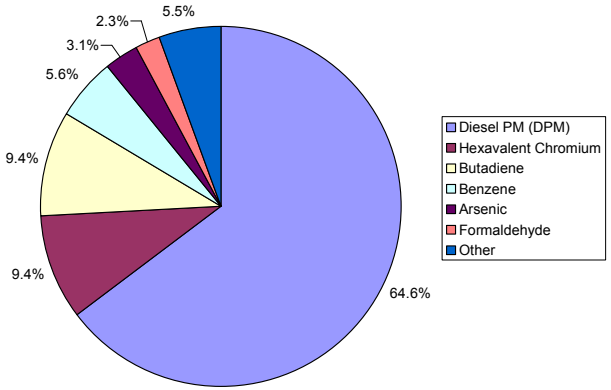


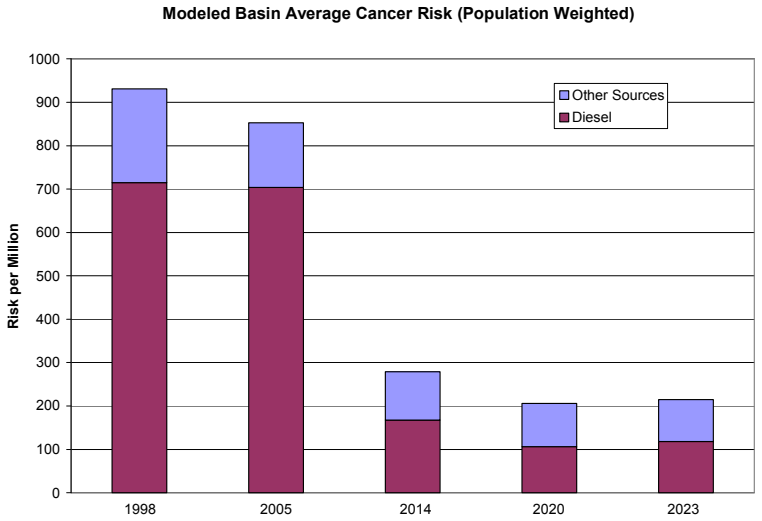
Figure 2-6



Modeled Future District Average Cancer Risk

Implementation of the AQMP, previous versions of the ATCP, and CARB programs have reduced toxic emissions during the past few years. However, these programs and regulations address toxic air pollution on a regional level. Figure 2-7 shows the modeled District average cancer risk for selected years.

Figure 2-7



Figures 2-8 through 2-10 show the modeled estimated risks distributed throughout the District for selected years. The figures show significant reductions in overall regional risk through 2023, however, the modeled District average risk is expected to be at 200 in a million. Although many areas will have substantial reductions, the residual or remaining risk in some areas is expected to still be elevated. In addition, there may be a need to accelerate reductions beyond existing regulations in some highly impacted communities.

Figure 2-8
1998 MATES III Model Estimated District Cancer Risk

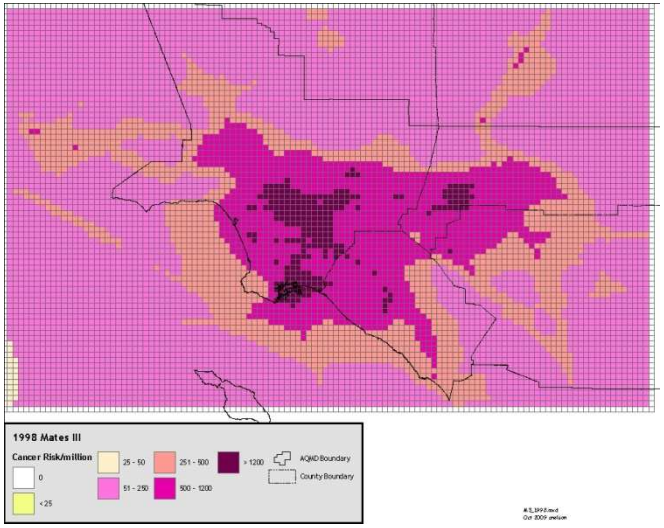


Figure 2-9
2005 MATES III Model Estimated District Cancer Risk

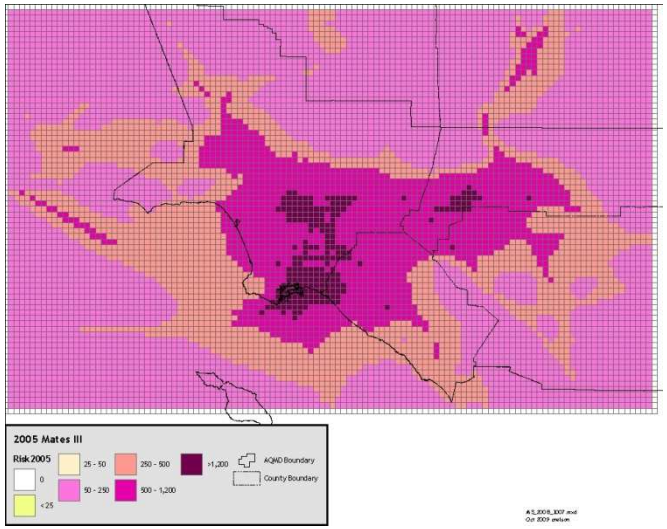
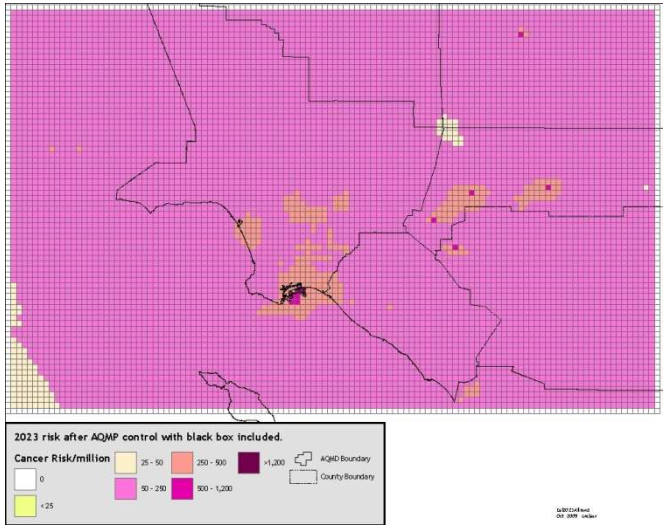


Figure 2-10
2023 Model Estimated District Cancer Risk



Need for the CCP

AQMD rules, along with state and federal rules and regulations establish the foundation of the AQMD's air toxics regulatory program. These rules and regulations reduce air toxics from thousands of sources throughout the District. However, even with an existing broad-based air toxics regulatory program there are areas throughout the District where there are clusters of toxic emitting sources that, when combined together, can have substantial cumulative effects on neighborhoods. In addition, although the results of MATES II and MATES III have shown regional reductions in exposure to key TACs and reduced cancer risk throughout the District, future projections of MATES III shows unacceptable cancer risk levels regionally. Local health risks in some communities are expected to be even more concentrated and elevated.

The 2010 CCP is needed to address toxic air pollution at localized areas of concern where higher cancer risk levels and other air-related issues exist. During the past several years, AQMD has realized the need for further action at the community level and has worked with highly impacted communities through Town Hall meetings, public outreach, and its compliance program. Therefore, in addition to the traditional District-wide approach to air toxic programs, the CCP will include measures to address localized effects and cumulative impacts in communities and neighborhoods. The approach of the CCP is to utilize a variety of implementation approaches and tools to address exposure to air toxics at the community level and develop solutions. The CCP is designed as an "action" plan that calls for action on behalf of the public, community representatives, agencies, elected officials, and regulated industries to help identify air quality issues in their neighborhoods and work together to develop solutions.

Chapter 3: CCP Measures

Introduction

The overall objective of the 2010 CCP is to reduce exposure to air toxics and air-related nuisances. The CCP utilizes a variety of different implementation approaches and includes measures that will continue to build on and strengthen existing source-specific rules while identifying new source-specific categories. In addition, a greater emphasis will be placed on addressing cumulative impacts in neighborhoods and communities. Other solutions focus on precautionary measures and public education in order to prevent exposure rather than mitigation. Improving communication within and among government agencies is another example of strategies proposed to provide more efficient infrastructure to address air toxic related problems. To reach the goal of creating "clean communities", the plan takes two approaches; a District-wide Approach, the more traditional approach, which benefits the entire South Coast Air Quality Management District, and a Community Approach which focuses on localized air quality issues and benefits communities and neighborhoods throughout the District.

The CCP is a planning document. The measures and implementation approaches are initial concepts. As measures are developed, staff may identify additional implementation approaches or implementation approaches identified will become more refined. If a regulatory approach is selected for implementation, the AQMD staff will analyze its legal authority, environmental impacts including greenhouse gas emissions, and socioeconomic impacts. In addition, the AQMD staff will develop measures through a public process.

Measures

Figure 3-1 shows the groups of measures that comprise the CCP. The individual CCP measures contain a brief description of an air quality issue, the purpose of the measure, and implementation approaches for each measure. The sidebars on the measures briefly summarize the objective and the implementation approaches. Many of the CCP measures are intended to work in coordination with other measures to provide a comprehensive approach to address air quality issues. Table 3-1 lists the measures in the CCP, briefly describes the implementation approach for each measure, and notes the relationship with other measures.

Figure 3-1
Clean Communities Plan Structure and Measures

TABLE 3-1
Summary of CCP Measures

Measure/Objective	Implementation Approach	Related Measures
Community Exposure Reduction Measures		
Community-01: Community Exposure Reduction Plan AQMD staff will develop Community Exposure Reduction Plans tailored to address air-related issues in specific communities.	Six-phase pilot study: • Phase 1: Selection of two pilot communities • Phase 2: Stakeholder Input • Phase 3: Investigation and Data Validation • Phase 4: Implementation of Immediate Action Items • Phase 5: Development of Community Exposure Reduction Plan • Phase 6: Implementation of Community Exposure Reduction Plan	• Community-02 • Community-03
Community-02: Community Guidance for Reducing Air Toxic Exposure Provide a process for communities and local governments to follow in developing Community Exposure Reduction Plans with AQMD assistance.	• Develop a process, somewhat similar to the process followed in the pilot study of Community-01, that will guide communities and local governments to develop CERPs with AQMD assistance • Update the process as experience is gained in developing CERPs	• Community-01 • Community-03 • Outreach-01
Community-03: Greening Communities through Accelerated Toxic Emission Reduction Projects for Existing Sources Reduce existing toxic emissions from older toxic emitting sources in residential communities disproportionately impacted by toxic emission sources.	• Identify disproportionately-impacted communities and assess cumulative impacts • Retrofit or replace existing toxic sources • Establish funding for emission reduction programs • Provide outreach and education for permitted and unpermitted sources of emissions	• Community-01 • Community-02 • Outreach-01
Community Participation Measures		
Participation-01: Clean Communities Pledge Develop a "Clean Communities Pledge" that will encourage local government participation in air quality training and outreach programs.	• Develop a "Clean Communities Pledge" • Recognize achievements of participating members	• Outreach-01 • Agency-01
Participation-02: Clean Schools Pledge Empower schools to take practical steps to reduce school children's exposure to air pollution. Increase participation and awareness of AQMD programs and guidelines among local school districts.	• Develop a "Clean Schools Pledge" • Advocate school participation in air quality-related programs • Recognize achievements of participating members	• Outreach-03

Measure/Objective	Implementation Approach	Related Measures
Participation-03: Enhanced AQMD Community Meetings Further engage the public to inform the AQMD of air quality issues in communities.	• Continue and enhance existing AQMD community meetings to include round table discussions to further understand community concerns	• Outreach-05
Communication and Outreach Measures		
Outreach-01: Clean Air Toolbox for Local Governments, Communities, and Schools Develop a series of guidance documents that communities can use for planning, making land use decisions, identifying clean air solutions, and key agency contacts for addressing air issues.	Develop a "Clean Air Toolbox" that includes: • "Proximity Matters" advisory document for planners • CARB's "Land Use Planning Handbook" • Educational and outreach materials	• Community-02 • Community-03 • Participation-01 • Agency-01
Outreach-02: Community Dialogue Improve public access to community-level air quality information by establishing an enhanced and open dialogue between local communities and the AQMD.	• "Ask AQMD" online forum • Electronic tools	N/A
Outreach-03: "Playing it Safe" Campaign Increase public awareness for parents, educators, coaches, and youth organizations of when outdoor activities should be curtailed due to air quality concerns. Provide education on the effects of exposure to different air quality situations. Provide sources of additional information.	• Develop a "Playing it Safe" campaign to provide information on the AQMD website on situations when outdoor activities should be curtailed and potential health effects for children • Develop outreach materials and provide info on AQMD website on situations when outdoor activities should be curtailed and potential health effects for children	• Participation-02
Outreach-04: Cleaner Choices to Reduce School Children's Exposure to Toxics Increase public awareness for parents, educators, and children to make daily choices that will reduce children's exposure to air toxics.	• Educational material development • Recommendations to reduce exposure to toxics	N/A
Outreach-05: Advocating Toxic-Free Choices Educate the public and increase awareness of ways to minimize or avoid toxic exposure through brochures and online Community Health Bulletins.	• Use several approaches including Community Health Bulletins on TACs, AQMD website enhancements, and brochures to proactively disseminate information to the public on health concerns from TACs and avoiding or minimizing exposure	• Participation-03

Measure/Objective	Implementation Approach	Related Measures
Outreach-06: Business Outreach and Assistance Increase outreach efforts of AQMD's Small Business Assistance Program. Enhance existing services for assistance on permitting and compliance. Develop additional resources available to all businesses.	• Add other means to disseminate information regarding AQMD's Small Business Assistance Program • Develop an air quality compliance outreach program • Develop an online forum on AQMD's website where the business community can communicate and share air quality solutions	• N/A
Agency Coordination Measures		
Agency-01: Promoting Better Land-Use Decisions Provide additional tools for local governments to be more proactive and make better informed land-use decisions.	• "Proximity Matters" advisory for planners • Siting requirements in source-specific toxic rules • "Reverse" CEQA analysis for sensitive land uses • Outreach and training • Early consultation for new projects • Preliminary site assessment • CEQA project tracking	• Participation-01 • Outreach-01
Agency-02: Multi-Agency Coordinated Response Improve multi-agency communication by combining jurisdictional efforts to solve complex cross-media issues. Improve agency coordination efforts to resolve air pollution related public health issues.	• Establish an "Interagency Task Force" • Establish process to address recurring issues • Develop an interagency information sharing system	• Stationary-04
Monitoring and Compliance Measures		
Compliance-01: Enhancements to AQMD's Compliance Program Assess compliance presence and response time. Identify mechanisms to improve feedback with the public for reported incidents.	• Assess how resources are deployed to improve compliance presence and response • Investigate the development of an enhanced tracking and feedback system • Agreements with other agencies	N/A
Compliance-02: Increased Public Awareness and Participation to Enhance Compliance Enhance AQMD's compliance program through additional public participation in compliance activities.	• Public education on air quality issues • Outreach to improve public awareness and participation • Enhanced air quality complaint reporting	N/A

Measure/Objective	Implementation Approach	Related Measures
Source Specific Measures		
Stationary-01: Lead Emissions Reduce lead exposure to the public from lead-related activities. Comply with the NAAQS for lead adopted in 2008.	• Action plan development • Amend Rule 1420 to address smaller lead-emitting facilities	N/A
Stationary-02: Lead Paint for Pre-1978 Structures Further reduce lead exposure to children from renovation or demolition of existing sources. Innovative approaches to reduce lead exposure. Assist in enforcing new US-EPA standard.	• Public outreach and online information • Determine feasibility of development of more stringent lead rules	N/A
Stationary-03: Identifying New Sources Proactively identify potential air toxic sources in the District through rigorous and systematic research methods.	Develop a multi-step approach for identifying sources emitting selected, highly toxic air contaminants including: • Literature searches • Evaluation of rare and exotic TACs • Investigative monitoring and sampling	N/A
Stationary-04: Alternative Assessment for Use of Acutely Hazardous Materials For new or modified sources, use CEQA process to evaluate substitution of acutely hazardous materials with less hazardous materials, where possible.	• Where applicable, during the permitting and CEQA review process, evaluate uses of acutely hazardous materials to identify where less hazardous alternatives can be substituted • Work with other agencies to ensure that substitutions do not duplicate and are not in conflict with other programs	• Agency-02
Stationary-05: Indirect Sources Develop approaches for reducing exposure to diesel PM from facilities with associated diesel-fueled vehicle emissions.	Multi-step approach to reduce diesel PM emissions from sources associated with diesel mobile source emissions: • Step 1: Establish applicability criteria • Step 2: Develop list of implementation options for diesel PM reduction • Step 3: Compliance Plan submittal • Step 4: Diesel Reduction Plan	N/A
Public Nuisance Measures		
Nuisance-01: Nuisance Rule Enhance effectiveness of AQMD Nuisance Rule 402.	• Evaluate and consider revisions to Rule 402 and "Policies and Procedures on Public Nuisance Investigation"	N/A

Measure/Objective	Implementation Approach	Related Measures
Nuisance-02: Source-Specific Nuisance Rules Address nuisance issues through industry-specific rules or programs.	• Identify persistent odor issues and develop industry-specific rules or programs to reduce odors • Conduct research on a systematic, scientifically-based odor nuisance resolution practice	N/A

COMMUNITY-01
Community Exposure Reduction Plan (Multiple TACs, other pollutants)

Measure Objective

- *AQMD staff will develop Community Exposure Reduction Plans tailored to address air-related issues in specific communities*

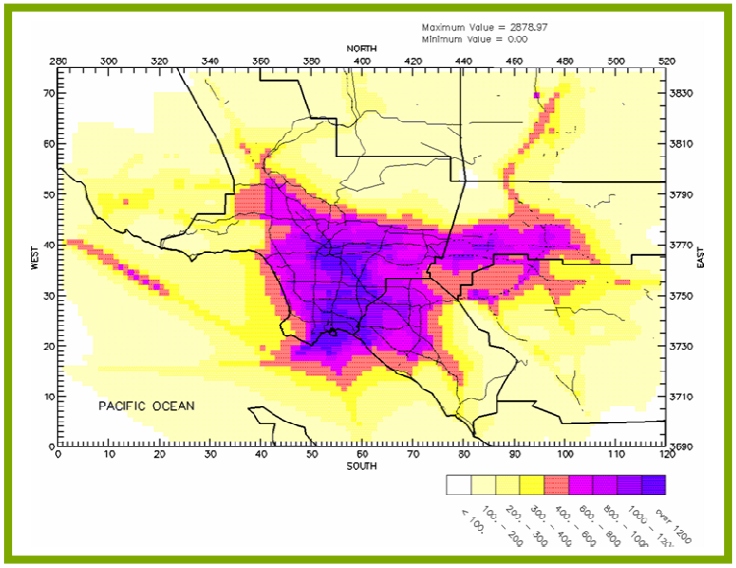
Implementation Approach

This measure will be implemented as a pilot study in the following six phases:

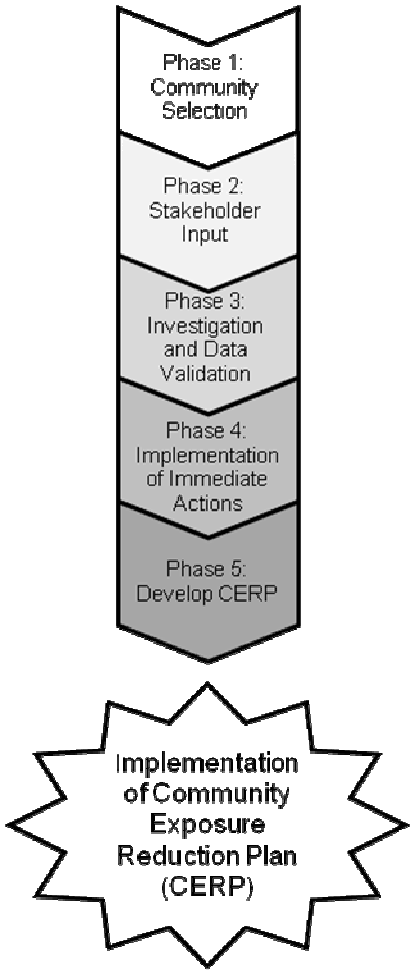
- *Phase 1: Community Selection for two Pilot Communities*
- *Phase 2: Stakeholder Input*
- *Phase 3: Investigation and Data Validation*
- *Phase 4: Implementation of Immediate Action Items*
- *Phase 5: Development of Community Exposure Reduction Plan*
- *Phase 6: Implementation of Community Exposure Reduction Plan*

Background

Toxic emissions throughout the District have been reduced through implementation of AQMD's air toxics regulatory program for source and industry categories such as chrome plating, dry cleaning, and gasoline dispensing, as well as more stringent state and federal fuel and tail pipe emission standards to reduce air toxic emissions from on- and off-road mobile sources. Reducing toxic air contaminants from these individual source categories has benefits to all communities. Some communities, however, may have a disproportionate number of toxic sources that are clustered together resulting in a higher concentration of toxic emissions. The combined effect or cumulative effect of toxic emissions on these communities can result in an elevated exposure to toxic air contaminants. Data from the AQMD's MATES III shows that in some communities the toxic emissions are more concentrated. In addition, through the AQMD's Complaint Response Program and Town Hall Meetings, the AQMD staff has learned that many neighborhoods face unique air pollution and toxic issues not identified through MATES or air monitoring data. This control measure is designed to address those specific issues for specified neighborhoods with elevated cumulative toxic emissions.



The concept of this measure would overlay on the AQMD's existing traditional air toxics regulatory program and is designed to address community-specific air toxics issues. This control measure will focus on individual communities where AQMD staff will work with community representatives to identify specific air-related issues and to develop solutions. Issues



that cross agency jurisdictions and responsibilities will also be addressed through enhanced cross-agency communication and designation of responsibilities discussed further in proposed CCP measure Agency-02. Through this interactive process, the AQMD staff will develop, with the input of the community, a Community Exposure Reduction Plan that will outline specific measures to be implemented for that community to reduce exposure to air toxics and minimize public nuisances.

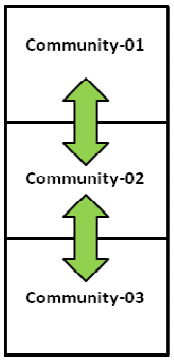
Implementation Approach

This measure will be implemented as a pilot study in six phases: Phase 1: Community Selection; Phase 2: Stakeholder Input; Phase 3: Investigation and Data Validation; Phase 4: Implementation of Immediate Actions; Phase 5: Development of Community Exposure Reduction Plan; and Phase 6: Implementation of Community Exposure Reduction Plan. The final product is a Community Exposure Reduction Plan containing specific elements to be implemented to reduce cumulative air toxic emissions in the community. Because this approach is tailored to an individual community, actual implementation is expected to vary based on the number, type, and extent of each community's air quality issues. This process is more resource intensive than a traditional source-specific regulatory approach, however, the result will be a customized plan to address issues specific to that community.

Phase 1: *Community Selection*

At the onset, the following two pilot communities are recommended: City of San Bernardino and Boyle Heights and surrounding areas. The selection of these two communities was based on health risk data from MATES III, emissions data from the AQMP, demographics, particulate matter (PM) emissions, areas with high concentrations of toxic-emitting facilities in close proximity to residential or sensitive receptors, history of complaints, known air pollution sources, and community-identified air quality issues. The willingness of the community to participate in the process of providing input, and developing and implementing an exposure reduction plan is important for this program to be successful. The AQMD staff will continue to work with other communities through the Community Guidance for Reducing Toxic Exposure measure (Community-02).

Related Measures



Phase 2: Stakeholder Input

Input from stakeholders in the community is critical in the identification of air quality related issues in a particular community. Meeting with community members, local businesses, and elected officials will help the District to better understand the air quality concerns of the community and prioritize potential solutions based on health impacts and community feedback. Partnering with local businesses early in the process helps to foster cooperation and to ensure measures are tailored to the specific needs of the community. Interaction with District staff will help to build an open line of communication, allowing for status updates of ongoing investigations and air pollution mitigation efforts, and enabling the community and businesses to actively participate in the ongoing improvement of their environment. This phase will be implemented through a variety of approaches as discussed below.

Neighborhood Walks

The AQMD staff will walk through the neighborhood to better understand air quality issues raised during the stakeholder input stage. Some stakeholders may join the AQMD staff during the neighborhood walks; however, the AQMD will be sensitive to residents and local businesses to ensure that the size and composition of the group is not intimidating. The AQMD staff believes that neighborhood walks are an important part of this process to better understand the air quality issues residents and businesses are facing on a daily basis. The walks will not be used for compliance audit purposes and will be used to allow AQMD staff to witness firsthand the neighborhood's air quality-related issues. This phase will give AQMD staff an understanding of the community's perspective and will help with the development of practical, real-world solutions to address the community's concerns. During the "Neighborhood Walks," AQMD staff will speak directly with community members near their homes and businesses to listen to individual issues about air quality. For the "neighborhood walks" the AQMD will not enter a business unannounced. This hands-on approach will allow the AQMD staff to gather valuable information about the community's air quality issues while providing an opportunity for local residents, local government, and businesses to voice their concerns directly to the AQMD in a more familiar and informal setting.

Community Exposure Reduction Plan (CERP) Website

The AQMD staff will also provide an electronic interface for community members to track the progress of the pilot program and ask questions. A website will be made available for community

members to view detailed information about their neighborhood's Community Exposure Reduction Plan (CERP). The community's CERP webpage will include information such as: key contacts at the AQMD; background information about the CERP process; information about the community and its history of air quality related issues; progress reports of ongoing investigation and/or mitigation efforts; notifications of upcoming community meetings and other events; written reports of findings from air monitoring, and health studies; and a summary of steps taken to address the community's air quality concerns. The CERP web page will give the community round-the-clock access to information about the air quality issues most important to them, will allow the community to ask the AQMD questions, and will enable community members to remain involved throughout the process of cleaning their community's air.

Phase 3: *Investigation and Data Validation*

In Phase 3, air quality-related issues will be sorted and prioritized. Any issues that require immediate action will go directly to Phase 4 and will be addressed and implemented before development of the Community Exposure Reduction Plan. For non-immediate actions, air quality issues will be sorted by those that are solely, partially, and not within the AQMD's jurisdiction. Sorting the issues by jurisdiction will help to identify additional agencies that the AQMD will be coordinating with to help identify solutions. Those issues that are solely and partially within the AQMD's jurisdiction will be further investigated. Where deemed necessary, further investigation can include, but is not limited to, additional analysis of existing controls, source of air issue, data collection and analysis, micro-scale monitoring, and identification of control strategies. This information will help AQMD staff to pinpoint air contaminants of concern and their sources so that a comprehensive exposure reduction plan can be developed to address those specific contaminants and sources.

The complexity and duration of the investigation phase will vary depending on the unique circumstances faced by each community. AQMD staff will work closely with the community and businesses, and partner with other agencies to determine the extent of the investigation phase. Efforts will be focused on identifying and quantifying specific air contaminants affecting the community, and where necessary, health surveys or risk assessments may be conducted to evaluate risks to public health. Where air quality issues cross other agency jurisdictions or responsibilities, the AQMD staff will coordinate multi-agency solutions.

***Phase 4:** Implementation of Immediate Actions*

This phase would begin implementation of actions found in Phases 2 and 3 that warrant immediate action. Air-related problems that require immediate attention may be characterized by issues resulting in significant health impacts to residential and sensitive receptors, rapid depletion or irreparable damage to natural resources within a community, and violation(s) of existing local, state, or federal air regulations. These immediate action items will later be recognized in the Community Exposure Reduction Plan for the community. For issues requiring immediate action that fall under the purview of other agencies, the AQMD will relay information and provide assistance, if necessary, to allow for timely resolution.

***Phase 5:** Development of Community Exposure Reduction Plan*

In this phase the AQMD staff will develop a Community Exposure Reduction Plan providing solutions that will address the localized air quality issues identified in Phases 1 through 4. The CERP will be developed through a public process which will include comments and suggestions from community members, academia, local governments, and local businesses. Issues brought up at various forums including public workshops and working group meetings will be addressed throughout the process to allow for a dynamic, comprehensive CERP. At a minimum, the CERP will include the geographical boundary of the selected community. The plan will also identify all air polluting sources (permitted, non-permitted, mobile, indirect, etc.) within the community, including their respective and most current TAC emissions inventory. A profile for compliance items such as complaint history and Notice to Comply/Notice of Violation information will also be included for each source or region within the community. Other information, such as relevant health studies may be included.

The CERP will ultimately recommend a number of general and community-specific control strategies that will be implemented to accomplish maximum toxic exposure reduction. General control strategies will include less complex solutions based on those found in AQMD's existing rules and regulations and CARB's Land Use Guidance Document. Community-specific control strategies will be the product of information derived from Phases 2 through 4. It is expected that some solutions may require the assistance and cooperation of local government or other agencies, such as local ordinances or zoning changes. This would be a collaborative process among all stakeholders to seek effective solutions. The San Pedro Bay Ports Clean Air Action Plan (CAAP) is an example of a community-based exposure reduction plan that incorporated a stakeholder

process. Some solutions may be technology-based, such as installation of pollution controls or fuel changes. Other solutions may be to seek funding to mitigate emissions where feasible, or require operational changes such as relocating a truck entrance, establishing buffer zones, or limiting operations during certain times of the day.

Phase 6: *Implementation of the CERP*

An implementation schedule for all control strategies within the AQMD's jurisdiction will be included in the first CERP developed under this pilot study. Once developed and approved, the CERP will be monitored by both the AQMD and the respective community through a feedback and resolution element in order to ensure timely progress and success of scheduled control strategies, and to make modifications to any portion of the CERP resulting from unforeseen or new issues that develop. AQMD staff will update the Stationary Source Committee and the Governing Board's Environmental Justice Advisory Committee on the CERP progress and solicit input regarding potential CERP modifications on an as needed basis.

In addition to implementation of measures, the CERP will also include ongoing efforts for the community. Ongoing efforts may include, but are not limited to, ambient air monitoring in the affected community; partnerships with public health agencies and/or universities to conduct additional health studies in impacted areas; agency coordination for air quality issues that cross agency jurisdictions; and more frequent inspections of facilities suspected of contributing to the community's air quality related concerns. AQMD partnerships with public health agencies and universities may include health surveys, or studies of air pollution-related health issues in impacted communities. Past health studies have been funded through grants or from other sources such as AQMD's Health Effects Research Fund upon approval of the Governing Board. Findings from these studies may be used to influence air quality related public health decisions, develop new air pollution reduction and/or health programs, increase knowledge of the relationship between air quality and public health, and to further support air quality improvement policies. In conjunction with other CERP elements, these studies will help to provide a comprehensive investigation and action plan to address the community's air quality concerns.

COMMUNITY-02
Community Guidance for Reducing Air Toxic Exposure

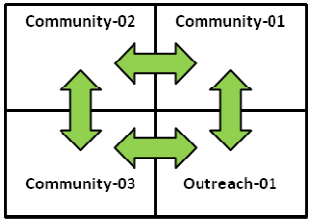
Measure Objective

- *Provide a process for communities and local governments to follow in developing Community Exposure Reduction Plans with AQMD assistance*

Implementation Approach

- *Develop a process, somewhat similar to the process followed in the pilot study of Community-01, that will guide communities and local governments to develop CERPs with AQMD assistance*
- *Update the process as experience is gained in developing CERPs*

Related Measures



Background

Under Community-01, the AQMD staff will work with the community, business representatives, and local government to develop a Community Exposure Reduction Plan (CERP) through the six step process described in Community-01. The objective of this measure is to develop a process, somewhat similar to the process used in Community-01, which can be used for other communities and local governments allowing them to develop their own Community Exposure Reduction Plans with assistance from the AQMD staff. This AQMD-assisted process can be used by communities with fewer, less complex air quality issues.

The AQMD staff will develop guidelines based on existing air quality information and knowledge gained from the pilot study. The AQMD-developed guidelines will provide general information and tools needed to guide other communities and local governments through the process of identifying air quality issues, gathering data, working with stakeholders, and developing a community-specific CERP with solutions tailored to their air-quality issues.

Implementation Approach

The AQMD staff will develop a process, based on the process used in the pilot study, to be used by local governments and communities. The AQMD staff will provide assistance as communities follow the process and develop a community-specific CERP. Tools provided will include those found in the Clean Air Toolbox in Outreach-01 as well as a handbook with a menu of options of solutions to various air quality issues.

Periodic updates to the process and the handbook will be made based on knowledge gained as other communities go through the CERP process. Updates will incorporate concepts, data, and successful solutions obtained from pilot CERPs under Community-01 and AQMD-assisted CERPs under this measure. The AQMD may also solicit suggestions for improving the process through AQMD's webpage, existing town hall meetings, and community meetings. Additionally, the handbook will include funding sources and grants such as US-EPA's Community Action for a Renewed Environment (CARE) program, to help implement solutions to various air quality issues.

COMMUNITY-03
Greening Communities through Accelerated Toxic Emission Reduction Projects for Existing Sources (Multiple TACs, other pollutants)

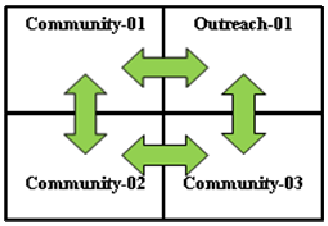
Measure Objective
- *Reduce existing toxic emissions from older toxic emitting sources in residential communities disproportionately impacted by toxic emission sources*

Implementation Approach
- *Identify disproportionately-impacted communities and assess cumulative impacts*
- *Retrofit or replace existing toxic sources*
- *Establish funding for emission reduction programs*
- *Provide outreach and education for permitted and unpermitted sources of emissions*

Background
Under the AQMD's permitting program, new, relocated, and modified sources must comply with AQMD's Regulation XIII for traditional air pollutants and risk requirements of Rule 1401 and Rule 1401.1 before a permit can be issued. Since Rule 1401 was adopted in 1990, existing sources may have permits that were issued prior to its adoption or before certain TACs were listed, and hence were not subject to a risk evaluation during permitting. If a source permitted before 1990 is modified, Rule 1401 would be triggered and a risk evaluation would be performed. Rule 1402 applies to existing facilities that emit toxic air contaminants and sets facility-wide health risk thresholds. Under Rule 1402, facilities may be required to submit inventories of air toxics if requested by the AQMD staff. Based on an estimate of the facility's health risks, additional requirements may include health risk assessments, public notification, and/or risk reduction.

During meetings of the CCP Working Group the AQMD staff received written comments requesting that the AQMD staff examine permitting practices to consider cumulative impacts for communities which are already heavily impacted by existing sources of toxic air pollution. It is the AQMD staff's understanding that some representatives from environmental and community groups desire a program that would prohibit new permits that result in toxic emissions in specific communities that cannot tolerate any new toxic sources due to its existing, elevated health risk. The AQMD staff is concerned that a program that limits new permits in certain areas may also eliminate the ability for newer, cleaner sources to replace older, higher polluting sources. Part of the AQMD's permitting process requires that new, relocated, and modified sources be evaluated under New Source Review regulations, be equipped with Best Available Control Technology (BACT), and meet specific toxic requirements. Another concern is that limiting new permits in certain areas may adversely affect the local economy of that community while providing little air quality benefit. Furthermore, since AQMD does not permit all emission sources (e.g., mobile sources), restricting AQMD permits in certain communities does not necessarily assure that there will be no increases in emissions. There is a need, however, to provide outreach and education for

Related Measures



permitted and unpermitted sources of emissions regarding the AQMD and ways to minimize impacts on the community. Assessing cumulative impacts in communities is also a concern of the AQMD, and staff will continue to work toward developing methodologies to quantitatively assess cumulative impacts. In addition, the AQMD staff will continue to monitor US-EPA's efforts to further address environmental justice issues in permitting.

Implementation Approach

Existing sources, particularly older sources, generally have higher emissions since new permitted sources must be equipped with the current BACT, and, if required under Rule 1401, BACT for toxic air contaminants (T-BACT). Instead of limiting new permits in highly impacted areas, the AQMD staff is recommending that this measure focus on existing, higher emitting sources, including those which are permitted and otherwise in compliance with applicable regulations. This measure seeks to encourage retrofitting existing sources with pollution control equipment or replacement of existing sources with cleaner sources, particularly in communities that are disproportionately impacted.

Retrofitting and Replacing Existing Toxic Sources

Under this control measure, emission reduction projects can be implemented that will reduce emissions from older, higher emitting sources through either retrofitting or replacing existing equipment with newer cleaner equipment in these highly impacted areas. Projects will likely focus on the highest emitting sources in the community that will produce the greatest benefit in reducing exposure to toxic air contaminants. In addition, these projects would reduce emissions beyond existing rules and regulations. The AQMD staff will take the lead on this measure.

This measure will coordinate with other programs such as, but not limited to, MATES III and AB2588 to prioritize communities in the District and emission reduction projects in highly impacted communities. This measure will be implemented with Community-01 and Community-02. Staff anticipates that during implementation of Community-01, emission reduction projects will be identified in these pilot study areas. As Community-02 is developed and implemented, it is likely that emission projects will be identified in these areas as well.

Establish Funding for Emission Reduction Programs
To help fund retrofit and replacement projects, funding opportunities will be explored via re-directing existing funding sources or identifying new funding sources, including state or federal grant programs, such as the US-EPA's Community Action for a Renewed Environment (CARE) program (additional tools and resources may be found on the US-EPA's CARE website at: http://www.epa.gov/care/basic.htm). Implementation of projects will be ongoing and based on funding. To further assist funding activities, the AQMD will develop and promote a "Good Neighbor Challenge" to challenge businesses to submit emission reduction proposals to the AQMD. The AQMD staff will explore the possibility of either co-funding or providing assistance in securing available federal or state grant and funding opportunities to implement selected emission reduction projects. Selection for awarding funding for proposals will be based on several factors including a project's total emission and exposure reduction potential, feasibility, completion time, and cost considerations. Another possible source of funding may come from penalties and fines received from violations of AQMD rules. To the extent feasible, monies would be used to fund projects in the community where the violation occurred.

Provide Outreach and Education for Permitted and Unpermitted Sources of Emissions
To help better educate sources on how to identify ways to minimize exposure to the community, the AQMD staff will work with permitted and unpermitted facilities. This could include meeting with the owners and training. The tools in the "Clean Air Toolbox" (Outreach-01) would also be used to educate the sources.

PARTICIPATION-01
Clean Communities Pledge

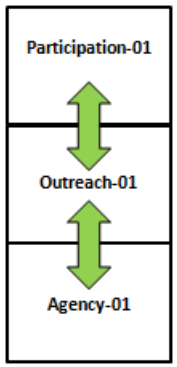
Measure Objective

- *AQMD to develop Clean Communities Pledge that will encourage local government participation in air quality training and outreach programs*

Implementation Approach

- *Develop a "Clean Communities Pledge" for local cities, counties, and other government agencies*
- *Recognize achievements of participating members*

Related Measures



Background

Implementation of the Clean Communities Plan will rely in part on participation by local government. The AQMD staff needs local government to participate in training and public outreach activities to better educate local government on air quality issues that they are in position to decide on. The objective of this measure is to ask local governments to take a "Clean Communities Pledge" that is simply their commitment to participate in training activities to increase awareness of compatible land uses, CEQA air quality analyses, air related health effects, and how AQMD can assist in addressing air-related nuisance complaints. The objective is to provide information to planners and decision makers so they can make better informed decisions in their community. In addition, as part of the Clean Communities Pledge, local government can help with outreach activities to inform their residents and businesses about AQMD programs and AQMD contact information regarding air quality, permits, or compliance issues. Local governments that take the Clean Communities Pledge will signal to their community a commitment to understand air quality issues and willingness to enhance activities to address such issues. The Clean Communities Pledge is an important aspect of the Clean Communities Plan as it will encourage local government participation in the implementation of the Clean Communities Plan.

Implementation Approach

Development of "Clean Communities Pledge"

The AQMD will develop a "Clean Communities Pledge" that local cities, counties, and other government agencies can voluntarily take that would include commitments to participate in various air quality training and outreach activities. To be recognized as taking the Clean Communities Pledge, the pledge must be approved either by government officials of the city or county such as, but not limited to, the City Council, Board of Supervisors, Planning Commission, etc.

Recognizing Participation and Achievements

Those cities and counties that take the Clean Communities Pledge would be recognized on the AQMD's website. In addition, cities and counties can submit information on how their

community is addressing air quality issues or air quality achievements made to reduce or prevent air quality problems within their community for posting on the website. Other incentives for participation would be developed.

PARTICIPATION-02
Clean Schools Pledge

Measure Objective

- *Empower schools to take practical steps to reduce school children's exposure to air pollution*
- *Increase participation and awareness of AQMD programs and guidelines among local school districts*

Implementation Approach

- *Develop a pledge for local school districts to express their commitment to participate in training and air quality improvement activities*
- *Advocate school participation in air quality-related programs*
- *Recognize achievements of participating members*

Background

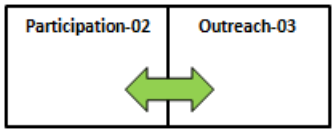
An important component of the Clean Communities Plan is reducing children's exposure to toxic air contaminants. Since children spend a substantial amount of time at school, it is important that school officials better recognize the critical role that clean air plays in children's health and development, and take action to reduce children's exposure to air pollution and help clean the air in their community. The AQMD staff needs school districts and individual schools to participate in training and public outreach activities to better educate school leaders on air quality issues that they are in position to decide on. The objective of this measure is to ask school districts and individual schools to take a "Clean Schools Pledge" that represents their commitment to participate in training activities to increase awareness of school siting issues, CEQA air quality analyses, air related health effects, and resources available to assist in improving the air quality in and around their schools. Participation in the "Clean Schools Pledge" will signal to the school community (parents, staff, students, etc.) a commitment to better understand air quality issues and willingness to participate in training and air quality improvement activities.

Implementation Approach

Development of "Clean Schools Pledge"

The AQMD will develop a "Clean Schools Pledge" for school districts and individual schools to voluntarily express their commitment to participate in training and air quality improvement activities. The "Clean Schools Pledge" will incorporate other AQMD air toxics education and outreach programs, such as the "Playing it Safe" campaign (Outreach-03). Simple solutions such as limiting school bus/delivery truck/automobile idling near schools, limiting outdoor school activities during periods of poor air quality, conducting outdoor school activities at times and locations where children will be least impacted by local air pollution (e.g., away from high traffic roads and avoiding peak traffic times), and replacing old diesel-fueled school buses with low-emitting buses, can make significant reductions in the amount of air pollutants children may be exposed to while at school. Other proactive steps, such as developing policies to avoid constructing schools near major roadways or industrial facilities, can also help to prevent and reduce children's exposure to toxic air contaminants.

Related Measures



Recognizing Participation and Achievements

Each school district or individual school that has taken the pledge would be recognized on AQMD's website which would also include additional information on specific efforts and achievements made to reduce or prevent air quality exposures at their schools.

PARTICIPATION-03
Enhanced AQMD Community Meetings

Measure Objective

- *Further engage the public to inform the AQMD of air quality issues in communities*

Implementation Approach

- *Continue and enhance existing AQMD community meetings to include round table discussions to further understand community concerns*

Related Measures

Background

There are many sources of information available that help the AQMD staff understand air-related issues that exist within a given community. From a compliance perspective, community air-impact evaluations may be based on facility compliance status, complaint information, and surveillance activity. Ambient air monitoring studies and TAC emissions inventories are some examples of scientific approaches that the AQMD utilizes to assess air quality within communities. These indicators, however useful, do not give a complete understanding of how the community stands in terms of air-related issues.

Input and accounts from community members who experience air-related issues on a daily basis, both known and unknown to the AQMD, are a good source to identify neighborhood air quality issues. The purpose of this measure is to continue engaging the public to better inform the AQMD of air quality issues.

Implementation Approach

This measure will further engage the public to inform the AQMD of community air-related issues through the enhancement of the current community meetings. Enhancements will be implemented by AQMD's Public Affairs Office through the proposal of a new community meeting format and process that would generate local gatherings of diverse groups of key stakeholders including residents, local business representatives, health agencies, universities, and public/private agencies. Initial concepts are to revise the current format for community meetings to include multiple interactive "round table" discussions that would take place within several smaller groups that include individuals from differing stakeholder groups in order to encourage community representatives to speak more openly in a more intimate and less formal setting. Among other goals, this meeting format would seek to elicit input and collaborative ideas for addressing air-related issues and also build support for action at local and state levels. In addition to collaborating with key stakeholder groups, these meetings may serve as an opportunity for AQMD staff to direct communities to additional resources for help in addressing other environmental issues, such as water quality or hazardous wastes. For example, grants from the US-EPA's Community Action for a Renewed Environment (CARE) program, a competitive grant program

that offers communities an innovative way to address the risks from multiple sources of toxic pollution in their environment, may help provide monetary support for communities working towards addressing multi-media environmental issues. Additional resources may be found on the US-EPA's CARE website at: http://www.epa.gov/care/basic.htm.

OUTREACH-01
Clean Air Toolbox for Local Governments, Communities, and Schools

Measure Objective

- *Develop a series of guidance documents that communities can use for planning, making land use decisions, identifying clean air solutions, and key agency contacts for addressing air issues*

Implementation Approach

- *Develop a "Clean Air Toolbox" that includes:*
  - *"Proximity Matters" advisory document for planners*
  - *CARB's "Land Use Planning Handbook"*
  - *Educational and outreach materials*

Background

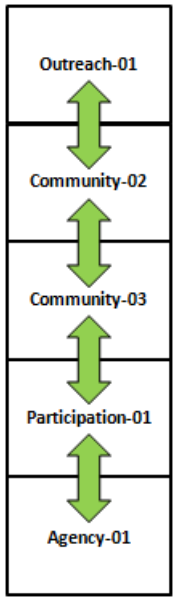
There is no single location for communities to access information when addressing local air quality issues. This measure proposes to develop a "Clean Air Toolbox" for local governments, communities, and schools that will include a series of informational and guidance documents such as "Proximity Matters" advisory document for planners (Agency-01); sample idling ordinances; and signage ideas for idling diesel sources. The modules in the toolbox can then be used to address any air quality issue that arises. The toolbox can be used for planning, making land use decisions, identifying clean air solutions, and contacting key agencies.

Implementation Approach

The "Clean Air Toolbox" will provide a single location on the AQMD website where up-to-date information can be made available. Links will be provided to documents available throughout the AQMD website. The toolbox will be a general resource for local governments, communities, and the general public to reference when addressing air quality issues. For example, the toolbox can be used by local governments for general plans or land use decisions; school districts when siting new schools or renovating; and communities for identifying or finding solutions to local air quality issues. The toolbox would also be used to educate facilities that are sources of toxic emissions of ways to minimize impacts on the community (Community-03 and Participation-01). Examples of modules that may be provided in the toolbox include:

- CARB's "Land Use Planning Handbook: A Community Health Perspective"
- "Proximity Matters" advisory document (Agency-01)
- AQMD's "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning"
- AQMD's "Air Quality Issues in Site Selection Guidance Document"
- Risk communication document
- Educational and outreach materials
- Handbook with menu of options of solutions for air quality issues (Community-02)

Related Measures



- AQMD regulations and permitting requirements
- AQMD and other agency contact information

The toolbox will be updated periodically. Additional modules will be added as needs are identified and new materials are developed.

OUTREACH-02
Community Dialogue

Measure Objective

- *Improve public access to community-level air quality information by establishing an open dialogue between local communities and the AQMD*

Implementation Approach

- *Institute the "Ask AQMD" forum to address public inquiries and concerns*
- *Enhance existing web-based tools including the MATES III interactive map, to include more detailed information regarding toxic air contaminants and source-specific emissions and development of new tools to improve two-way communication with communities*

Background

As public awareness of air quality issues increases, there is a need for enhanced public access to information regarding the impacts of air quality on specific communities. Existing District tools provided for public use, such as the Facility INformation Detail (FIND) system, MATES III Carcinogenic Risk Interactive Map, and the 1-800-CUT-SMOG® hotline, allow the public to find facility-specific data related to compliance history and air emissions and information on cancer risk as well as providing a method to report air quality complaints. A web inquiry system is provided to answer questions from the public. An AQMD application for the iPhone™ has been developed for the public to provide enhanced access to real-time and forecasted air quality levels for user-selected areas, air quality news, calendar of AQMD events, and mechanisms to report smoking vehicles. These existing tools are good methods to help the public obtain air quality information and report concerns, however, their current format does not allow for an exchange of information between the AQMD staff and affected communities.

This measure seeks to enhance the AQMD's communication with the public by creating an open dialogue and flow of information between communities and AQMD staff. The concept is to provide more opportunities for the public to ask air quality related questions and the AQMD staff to respond. This is a more casual and accessible type of approach where the public can make inquiries about air issues in their community.

Implementation Approach

"Ask AQMD" Forum

One approach to establish a dialogue between the public and AQMD is to develop an "Ask AQMD" webpage within the AQMD's website to enhance the existing web inquiry system and allow the public to submit questions and concerns regarding air quality issues in their communities. Responses to public questions and concerns will be sent directly to the requestor via email. In addition, general information and responses to commonly asked questions will be posted on the webpage. Complaints and air quality incidents will still be reported via the District's 1-800-CUT-SMOG hotline, but other informational requests may be submitted to the

"Ask AQMD" forum via email or directly through the AQMD website. Multiple questions or concerns regarding a specific community or topic will be used as a trigger for a public outreach effort such as a town hall meeting, news release, or other means of disseminating information to the public. This online tool will provide a convenient outlet for the public to express concerns about the air quality in their community, and will enable the District to respond to and address community concerns in an expedient manner.

Electronic Tools

Another method of facilitating dialogue with the public is to enhance the AQMD's online tools available for the public to find information about the air quality in their community. Existing tools, such as FIND, will be evaluated to determine what steps could be taken to make them more user-friendly by redesigning the format, providing on-line tutorials, and translation into multiple languages. Enhancements to the MATES III interactive risk map will help the public access more detailed information regarding cancer risk in their communities. Some concepts to enhance the MATES III interactive map include information that identifies the toxic air contaminants (TACs) being emitted within each geographical area, sources contributing to the cancer risk in the area, and health information regarding the TACs identified on the map. Individuals can then utilize this information in conjunction with the District's FIND system to retrieve detailed compliance history and air emissions data for facilities in their specific neighborhood. Users will be able to pinpoint which TACs are contributing to risk in their community, which sources are emitting the TACs of concern, and the health risks associated with the pollutants in their community. In addition, new electronic tools may be developed to improve two-way communication with communities using avenues such as webinars, cell phones, and other multi-media tools.

OUTREACH-03
"Playing it Safe" Campaign *(All Pollutants)*

Measure Objective
- *Increase public awareness for parents, educators, coaches, and youth organizations of when outdoor activities should be curtailed due to air quality concerns*
- *Provide education on the effects of exposure to different air quality situations*
- *Provide sources of additional information*

Implementation Approach
- *Develop a "Playing it Safe" campaign*
- *Develop outreach materials and provide information on AQMD website on situations when outdoor activities should be curtailed and potential health effects for children*

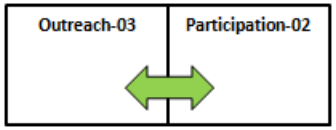
Background
Participating in outdoor activities during wild fires, high wind days, or near a construction site can increase children's exposure to fine particulates, some of which are toxic. Depending on the source of pollution and the meteorological conditions, conducting outdoor activities, particularly strenuous activities, may be harmful to children, especially for those with respiratory diseases. Children may be more susceptible to the harmful effects of air pollution than adults because their respiratory systems are still developing and they breathe more air per pound of body weight. Fine particles can lodge in the lungs and cause irritation or other effects. Over the long-term they can cause decreased lung function and can lead to diseases such as asthma, bronchitis, emphysema, and possibly cancer. Short term exposures can result in health problems such as eye irritation, respiratory irritation, and headaches. A need exists for greater awareness of circumstances when outdoor activities should be curtailed due to harmful air quality conditions.

Implementation Approach
This measure will be used in conjunction with the "Clean Schools Pledge" (Participation-02) to provide a more proactive approach to communicating with parents, educators, coaches, and youth organizations to increase awareness of health effects of air quality and when there is a need to curtail outdoor activities.

"Playing it Safe" Campaign
The objective of this control strategy is to develop a "Playing it Safe" campaign to increase public awareness of certain types of air quality situations where outdoor activities should be curtailed and to increase awareness of the potential health effects for children. These situations are generally temporary in nature, so providing a proactive public outreach and education program will be more health protective than providing notification during or after the air quality event.

Outreach Material Development and Website Enhancements
The AQMD staff would develop educational material for parents, educators, coaches, and youth organizations providing

Related Measures



specific information on when outdoor activities should be curtailed. Educational materials will include a "Playing it Safe" brochure with key information about specific air quality situations to be aware of, potential health effects, and tips for "Playing it Safe." This control strategy will also include updated information on the AQMD website and where additional information can be obtained. Information will include children's health advisories which will also be disseminated through available networking services such as Facebook, Twitter, and text and email alerts.

OUTREACH-04
Cleaner Choices to Reduce School Children's Exposure to Toxics *(All TACs)*

Measure Objective
- *Increase public awareness for parents, educators, and children to make daily choices that will reduce children's exposure to air toxics*

Implementation Approach
- *Develop education materials for parents, educators, and children on how to reduce exposure to toxic substances*
- *Provide practical recommendations on how the public can reduce their exposure to toxics*

Background
There are a variety of toxic sources that surround children in their daily lives. Some examples include consumer products containing toxic compounds; toxic diesel particulate matter from idling diesel school buses; toxic exhaust fumes from vehicles on nearby freeways; pesticides; and commercial and industrial businesses conducting processes resulting in toxic emissions.

Agency regulatory efforts have helped to decrease toxic levels from a variety of sources that children may be exposed to. For example, the Department of Toxic Substances Control regulates toxic chemicals in consumer products, the Department of Pesticide Regulation regulates pesticides, and CARB regulates idling of diesel-fueled vehicles. However, exposure to some of these sources can simply be eliminated or reduced through use of cleaner less-polluting products or avoidance of some sources. The objective of this control measure is to increase awareness of these types of sources and to educate parents, teachers, administrators, and children of cleaner less-polluting choices to reduce children's exposure to harmful air toxics.

Implementation Approach
Educational Material Development
The AQMD staff will develop educational brochures for parents and educators that identify sources of toxic air pollution that may be harmful to children, such as diesel exhaust from idling diesel buses; gasoline exhaust from idling cars; diesel exhaust from portable diesel generators used for school events such as carnivals or sporting events; and lead paint from buildings. Brochures will also explain associated health problems resulting from both short and long term exposures, such as eye and respiratory irritation, asthma, and lung damage from exposure to diesel exhaust and neurological damage from lead paint.

Recommendations to Reduce Exposure to Toxics
In addition, this control strategy will include recommendations to keep children safe from

exposure to toxics by providing a list of safe pesticides, school supplies, other consumer products, and toxic-free cleaning products through AQMD's "Clean Air Choices" certification program. This measure will include recommendations regarding the benefits of carpooling, clean-fueled school buses, and ideas for safer walking routes to avoid certain types of toxic emitting businesses such as gasoline stations, rail yards, active construction sites, and busy highways.

OUTREACH-05
Advocating Toxic-Free Choices (All TACs)

Measure Objective

- *Educate the public and increase awareness of ways to minimize or avoid toxic exposure through brochures and online Community Health Bulletins on TACs*

Implementation Approach

- *Use several approaches including Community Health Bulletins, AQMD website enhancements, and brochures to proactively disseminate information to the public on health concerns from TACs and avoiding or minimizing exposure*

Background

People are exposed to toxic air contaminants on a daily basis from a variety of different pollution sources and chemicals. Some types of pollution sources are not as well known to the general public, such as living near a freeway or exposure to mercury from handling a broken fluorescent light bulb. This measure seeks to better inform the public of sources of toxic air contaminants and their health impacts, so the public can make more informed decisions to protect themselves and their families.

The public may or may not be aware of potential exposure from such activities as refueling their cars, breathing fumes from diesel trucks, or exercising outdoors during episodes of poor air quality. In addition, the public may not be aware of exposure to toxic air contaminants from nearby industrial sources, roadways, and ports. The objective of this measure is to increase awareness of these types of sources and educate the public so they can make better informed decisions.

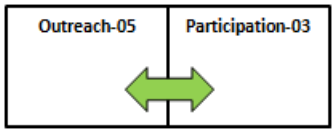
Implementation Approach

This measure will be used in conjunction with the Enhanced Community Meetings (Participation-03) to provide a more proactive approach to educate the public regarding exposure to toxic air contaminants and ways to minimize exposure. Several approaches will be used to educate the public and increase awareness of ways to minimize or avoid exposure to toxic air contaminants.

Community Health Bulletins and AQMD Website Enhancements

Community Health Bulletins on specific TACs will be developed. The health bulletins will be posted on the District's website and accessible via links on the MATES III Carcinogenic Risk Interactive Map. The public will be able to use the MATES interactive map to find out which TACs are contributing to the cancer risk in a specific area and how those TACs can impact the air quality in their community. The Health Bulletins will include information regarding individual

Related Measures



TACs, including a summary of health effects associated with the TAC, potential sources of the TAC, and suggestions for simple actions residents can take to help reduce their exposure. Health Bulletins will help to raise community awareness of risks associated with TACs and will provide practical actions that can be taken to minimize exposure.

Communities near Pollution Sources
Communities that are imbedded amongst industrial and commercial sources and/or freeways and busy highways have unique air quality challenges. The AQMD staff will develop other materials that will provide advice to community members on how to minimize exposure and steps they can take to help improve air quality in their neighborhood, such as scheduling outdoor activities during non-business hours or choosing routes for walking or biking that avoid areas of highest exposure.

Other Educational Materials
The AQMD staff will develop a brochure with suggestions for avoiding or minimizing exposure, such as not standing near the nozzle when refueling automobiles; using electric rather than gas-powered gardening equipment; avoiding exposure to idling diesel trucks; and proper disposal of hazardous household items such as batteries, fluorescent light bulbs, and electronics. Another educational brochure could provide the public with suggestions on avoiding or minimizing exposure to air toxics when selecting a place to live. Practical ideas for residents to ask about their residence may include questions regarding proximity to freeways or major roads; proximity to industrial facilities that emit toxic air contaminants; the age of the house; and whether lead paint and/or asbestos building materials are present. This information will enable residents to assess general air quality in and around their prospective new home and identify potential air quality hazards. Other opportunities to disseminate these messages to the public could include public service announcements on radio, television, the AQMD website, and AQMD telephone line "hold" messages.

OUTREACH-06
Business Outreach and Assistance

Measure Objective
- *Increase outreach efforts of AQMD's Small Business Assistance Program*
- *Enhance existing services for assistance on permitting and compliance*
- *Develop additional resources available to all businesses*

Implementation Approach
- *Add other means to disseminate information regarding AQMD's Small Business Assistance Program*
- *Develop an air quality compliance outreach program*
- *Develop an online forum on AQMD's website where the business community can communicate and share air quality solutions*

Background
The AQMD Small Business Assistance Office helps small business owners and operators to comply with AQMD Rules and Regulations, permitting requirements, and provides assistance on how to conduct recordkeeping through a variety of services offered. Other services include assistance on resolving AQMD fee-related disputes, providing information to businesses regarding available grants, and assistance with the AQMD variance process. These free services are provided onsite, by phone or email, and at AQMD Headquarters, and are offered to eligible businesses with 100 or fewer employees or with annual gross revenues up to $5 million. Various small business events are also attended and/or hosted throughout the year to provide additional communication opportunities between business owners and AQMD staff.

The objective of this measure is to increase efforts for outreach to businesses to improve compliance with AQMD rules and regulations, to allow businesses to become more familiar with AQMD requirements, and to reduce emissions from business. This measure is designed for all businesses, with focus on outreach to small businesses located in impacted areas, and would encourage communication and sharing of air quality solutions.

Implementation Approach
Currently, outreach of AQMD's existing small business assistance service is carried through a variety of methods. These include providing presentations and/or information via visits to chambers of commerce, trade associations, and economic development entities, through attendance at business-friendly community events, via the AQMD website and AQMD iPhone application. Further outreach is provided through handouts at small business events, field compliance staff's distribution of pamphlets to small businesses when conducting inspections and complaint investigations, and through public notices included as supplements to mailouts.

Enhanced Outreach
As part of this initiative, the Public Advisor will continue its current efforts, as well as increase efforts, by making information available through public service announcements on television, radio, YouTube, and AQMD telephone line "hold" messages. The Public Advisor will

additionally conduct an assessment of its current role and function to determine if additional steps need to be taken to meet the needs of the business community. AQMD staff will work with businesses, where appropriate, to develop outreach material for compliance with AQMD rules, pollution prevention process changes, material substitution, and other methods to encourage pollution prevention practices. AQMD staff will also reach out to contact businesses within the two pilot communities of Community-01 in order to seek out input from businesses to better determine their financial needs for compliance. AQMD staff would then utilize the information gathered to craft programs directly responsive to those needs, to facilitate the reduction of emissions from businesses. AQMD's Legislative & Public Affairs Division (L&PA) will additionally enhance awareness of the AQMD Ombudsmen to facilitate business retention, and will brief federal and state legislators and regulatory agencies to inform them of the CCP efforts, showcase successes, and advocate for adequate funding for all elements of the CCP, particularly in regards to incentives for business compliance.

Air Quality Compliance

Staff will develop additional assistance materials that provide frequently asked questions and answers specific to different business categories. Staff will also enhance existing assistance materials through the development of an air quality compliance outreach program that will be available on the AQMD website and accessible to all businesses. In addition to existing available tools on guidance for permit applications, the program will include:

- AQMD rule summaries;
- "What to Expect During an AQMD Inspection";
- Best practices guidance document, with empahsis on pollution prevention; and
- Tips on compliance.

Online Business Assistance Forum

Staff will also look into developing a forum on the AQMD website where business owners can discuss and share solutions to compliance issues based on experience. The forum will also allow for interaction with the AQMD for popular issues, topics, and questions that are posed to staff. The AQMD will explore opportunities to showcase technologies that can help facilities. In addition, facilities that pioneer new Best Available Control Technologies standards can be highlighted on AQMD's website and other media.

AGENCY-01
Promoting Better Land-Use Decisions

Measure Objective

- *Provide additional tools for local governments to be more proactive and make better informed land-use decisions*

Implementation Approach

- *"Proximity Matters" advisory to planners*
- *Siting requirements in source specific toxic rules*
- *"Reverse" CEQA Analysis for Sensitive Land Uses*
- *Outreach and training*
- *Early consultation for new projects*
- *Preliminary site assessment*
- *CEQA project tracking*

Background

Through its Intergovernmental Review (IGR) program, the AQMD staff comments on other lead agencies' California Environmental Quality Act (CEQA) projects. The AQMD staff reviews and provides comments on the adequacy of the air quality analysis and mitigation measures in the CEQA document. The AQMD staff also informs lead agencies about incompatible land uses where sensitive receptors, such as schools and residences, may be exposed to toxic air contaminants. The AQMD staff often references the California Air Resources Board's "Land Use Planning Handbook: A Community Health Perspective" which recommends siting distances for sensitive receptors and various land uses. For example, designing a project with a buffer zone between sensitive receptors and freeways can substantially reduce the exposure to toxic air contaminants. As shown in Figure 3-2, the cancer risk is significantly reduced by distancing receptors 1,000 to 1,500 feet from the freeway.[3] Once a land use decision is made and the project is built, reducing the exposure to neighborhoods or communities to toxic emissions becomes more difficult. The AQMD staff believes that the CEQA process can be a preventative approach to inform lead agencies about incompatible land uses, allowing the lead agency to modify the design of the project before it is approved and built.

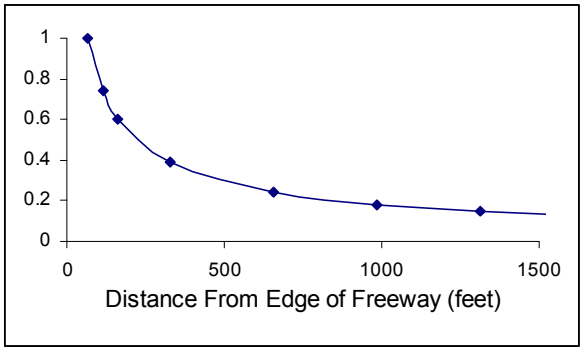
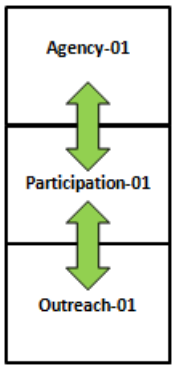


Figure 3-2: Relative Cancer Risk from Freeway as a Function of Downwind Distance

In general, CEQA requires that impacts imposed from the proposed project on the surrounding environment be evaluated. CEQA includes additional requirements for schools. CEQA requires

[3] Rochelle S. Green, Svetlana Smorodinsky, Janice J. Kim, Robert McLauglin, Bart Ostro, Proximity of California Public Schools to Busy Roads, Environmental Health Perspectives, January 2004

Related Measures



that new schools evaluate the impacts imposed from the proposed school project on the surrounding environment, and the health risk at the school from hazardous emitting facilities within ¼ mile of the proposed school site and freeways and busy traffic corridors within 500 feet of the school boundary. Thus, for schools, CEQA requires that the lead agency evaluate the "outward" impacts that the proposed school imposes on the surrounding environment and the "inward" impacts that surrounding sources could impose on the proposed school.

Implementation Approach

This measure will consist of a variety of enhancements to the AQMD's existing programs to assist local government and schools to make informed land use planning decisions to minimize exposure of toxic air contaminants to sensitive receptors. A summary of these enhancements is as follows:

"Proximity Matters" Advisory to Planners

The AQMD staff will further enhance CARB's siting recommendations to add additional source categories and update recommendations if needed. An advisory document called "Proximity Matters" will be developed for planners that incorporates principles of the CARB's "Air Quality and Land Use Handbook: A Community Health Perspective" and additional information to reduce exposure to toxic air contaminants. This advisory document will include technical information, in a user friendly format, regarding air toxics, health effects, and the importance of buffer zones.

Siting Requirements in Source-Specific Toxic Rules

Some of AQMD's toxics rules and CARB's Air Toxics Control Measures (ATCMs) specify siting requirements for certain new toxic sources such as minimum distances for new toxic sources relative to sensitive receptors. The AQMD staff will continue to evaluate other toxic rules to update siting recommendations as necessary. The AQMD staff will consolidate siting recommendations from existing toxics rules for sensitive land uses and will make this information available on its website for local planning agencies, school districts, and the public.

"Reverse" CEQA Analysis for Sensitive Land Uses

During the past few years, some lead agencies with residential development projects have conducted health risk assessments to evaluate the "inward" impacts that existing surrounding sources, such as freeways, may impose on the proposed residential development projects. This "reverse-type" CEQA analysis of the potential effects of the surrounding environment on the

proposed project is currently required where impacts may occur for school projects. Other sensitive land uses, such as residential developments should be required to conduct a reverse CEQA analysis. The AQMD staff will, as directed by the Governing Board at its May 2009 retreat, provide comments that request lead agencies to conduct the "reverse" CEQA analysis for sensitive land use projects.

AQMD staff will also look into using other types of health assessments and studies as possible additional information to quantify air-related health impacts from a project. Some examples include studies on air-related non-cancer health effects. In recent years, studies relating to exposure of ultrafine particles formed from vehicle tailpipe emissions along areas of vehicle traffic have been of concern. When inhaled, ultrafine particles are deposited along human airways and easily migrate due to their minute size, to the central nervous system and organs throughout the body including the heart and brain. In addition, ultrafine particles increased surface areas allow for transport of much larger amounts of toxic compounds into the body.

Outreach and Training

Although the AQMD receives about 50 CEQA documents a month, the AQMD staff estimates that about 30 percent of agencies and schools do not send their CEQA documents to the AQMD for review. The AQMD staff will inform local governments, schools, and the public about the AQMD's Intergovernmental Review program and again request receipt of local CEQA documents. In addition, the AQMD staff will host a series of workshops to educate consultants, local planners, school districts, and the public about the AQMD's role in reviewing and commenting on CEQA projects. The workshops would likely cover a variety of air quality related CEQA issues such as the different types of air quality analyses needed in a CEQA analysis, significance thresholds, calculation methodologies, appropriate emission factors, default assumptions, compatible land uses, and mitigation measures. The AQMD staff is considering issuing participation certificates for these workshops. The "Clean Communities Pledge" (Participation -01), a voluntary pledge that local cities, counties, and other government agencies can take that includes commitments to participate in various air quality training and outreach activities, can be used to encourage participation.

Early Consultation for New Projects
The AQMD staff will more actively encourage early consultation with local governments and schools to ensure that siting and design considerations can be incorporated into the proposed project in its early stages of planning. Often a lead agency will consult with the AQMD staff during the CEQA review period after the design of the proposed project is well established. Early consultation allows more flexibility to design a project to minimize potential exposure to air toxics.

Preliminary Site Assessment
When the AQMD staff receives a request from a school district to identify hazardous emitting facilities, the AQMD staff identifies all permitted facilities and does a physical inspection of the area to identify non-permitted facilities and area sources that may potentially emit air toxics or have odorous operations. The AQMD will look into developing a service available to local governments where staff would conduct a preliminary site assessment for a sensitive land use that would identify permitted facilities within ¼ mile of the proposed project and provide a list of past complaints and violations in the area. AQMD staff will also conduct a visual inspection of the area surrounding the proposed project to identify potential non-permitted sources that may adversely affect sensitive receptors. This type of service would require a fee for AQMD staff time and material. Criteria will also be developed to prioritize and accept site assessment requests. Because this type of program is very resource intensive, the AQMD staff is recommending implementation as a pilot program for a period of 12 months to ensure that existing resources are sufficient and to assess the effectiveness of this service.

CEQA Project Tracking
There is also the possibility for development of a web-based geographic information system (GIS) map displaying selected areas and concentrations of emissions sources that are undergoing the CEQA review processes. This tool can be used by the AQMD and other agencies and local governments to track development of new projects and geographically see trends in developments such as increases in warehouses in specific areas or land use trends for siting housing developments near freeways.

AGENCY-02
Multi-Agency Coordinated Response

Measure Objective

- *Improve multi-agency communication by combining jurisdictional efforts to solve complex cross-media issues*
- *Improve agency coordination efforts to resolve air pollution related public health issues*

Implementation Approach

- *Establish an "Interagency Task Force"*
- *Establish process to address recurring issues*
- *Develop an interagency information sharing system*

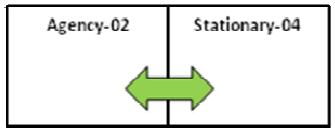
Background

Public concerns regarding the environment frequently involve multi-media pollution issues which fall under the jurisdiction of several regulatory agencies. For example, if a community is concerned about odors or toxic emissions from a nearby landfill, they may require support from several agencies, including the Department of Resources Recycling and Recovery, AQMD, Regional Water Quality Control Board, Department of Toxic Substances Control, the local city/county government, and possibly other agencies. Efforts have been made at the state level to improve inter-agency communication, however, there is a remaining need to have a streamlined, coordinated response from multiple government agencies when multi-media environmental pollution issues arise. In addition, there are opportunities for improved communication and coordination during multi-agency responses to air quality related incidents and emergencies.

The AQMD participates in programs with other government agencies to coordinate efforts, such as emergency response for local police, fire, and health departments where sampling and monitoring support is provided for emergency events such as fires, explosions, toxic spills, and toxic gas releases at industrial and commercial facilities. Other efforts include the AQMD's Engineering & Compliance (E&C) Toxics/Waste Management unit's regular communication with agencies such as the Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board, and the California Department of Resources Recycling and Recovery (CalRecycle) where issues such as compliance, permitting and complaints are addressed. The AQMD's Engineering & Compliance unit for gasoline dispensing operations is also an active participant in a regional taskforce which coordinates fire safety, water, and air quality issues. Although the AQMD currently works to communicate regularly with some agencies, improvements can be made to establish more frequent, regular multi-agency meetings to address non-emergency air quality issues.

AQMD staff has received comments about multi-media issues that are air-related, however sometimes resolution of the issue is outside of the AQMD's jurisdiction or authority. Similarly, it

Related Measures



is expected that other agencies also receive complaints for issues that are within the AQMD's jurisdiction and authority. Some environmental issues may straddle several agencies or may not be the distinct responsibility of any one specific agency. Pollution issues that have multi-media impacts require coordination among various agencies. Better coordination between agencies will help to address issues raised by the public and will ensure agency efforts are not duplicative or in conflict with each other. Agency coordination is also important for emergencies such as accidental releases and fires. The participation of several agencies has sometimes resulted in duplicative efforts for sampling and monitoring which complicate resolution of the issue. Better coordination is needed in order to develop a more comprehensive solution for public health and safety issues.

Implementation Approach

The purpose of this measure is to improve multi-agency communication and coordination efforts to resolve air pollution related public health issues. Jurisdictional efforts of various governmental agencies could be combined to address complex cross-media environmental issues and provide a more comprehensive response. For air quality related issues, AQMD enforcement staff will take the lead and involve other agencies such as health and fire departments, local planning departments, CARB, and DTSC, as appropriate.

Establish an "Interagency Task Force"

Under this measure, an "Interagency Task Force" would be created with the list of participating agencies. AQMD staff will establish a list of agencies, their general responsibilities, and the name and contact information for their representative on air quality issues. This information will be posted on the AQMD website along with links to the agency websites.

Establish Process to Address Recurring Issues

To better understand specific issues raised by the public that require multi-agency coordination, the AQMD staff will take the lead to convene meetings with other agencies on an as needed basis. Public input will also be solicited. The objective of these meetings will be to gather specific, relevant information from the public regarding issues and concerns, and to develop a process to address and resolve recurring issues. Each approach to resolve issues raised may vary depending on the nature and extent of the issue and the agencies involved.

Develop an Interagency Information Sharing System

To ensure that air quality-related issues that are raised by the public to other agencies are being addressed, the AQMD staff will develop a process whereby agencies can share information with each other regarding complaints and community issues. Agencies can share public communication and complaint information received by their respective agencies, as well as monitoring and compliance information such as notices to comply, notices of violations, and settlements. This will better ensure that agencies are informed about community issues and that agencies are fully aware of compliance actions that other agencies may be implementing at common facilities. The AQMD staff can conduct periodic meetings with other agencies to discuss unresolved air-quality related issues. Action items and issues derived from multi-agency working group meetings will be reported to the AQMD's Stationary Source Committee on an as needed basis.

COMPLIANCE-01
Enhancements to AQMD's Compliance Program

Measure Objective

- *Assess compliance presence and response time*
- *Identify mechanisms to improve feedback with the public for reported incidents*

Implementation Approach

- *Assess how resources are deployed to improve compliance presence and response*
- *Investigate the development of an enhanced compliance feedback and tracking system for the public*
- *Agreements with other agencies to optimize compliance resources*

Background

The AQMD staff receives over 5,000 complaints from the public annually through its toll-free 24-hour 1-800-CUT-SMOG line. Complaints received range across various air-related issues such as odors, smoke, overspray, and fugitive dust. Depending on the nature of the complaint, the date and time received, and the accuracy of information provided, the AQMD, under most circumstances, dispatches an inspector to conduct a field investigation. The AQMD staff currently maintains a "Hot List" of facilities that have received multiple complaints or have compliance issues. In addition, facilities notify the AQMD via the 1-800-CUT-SMOG line of equipment breakdowns and rule-related notifications of various air-related activities (e.g., asbestos abatement activities, tank degassing, and soil decontamination) which are relayed to the compliance staff for follow-up action. Compliance reports are created and data analyses are performed in order to develop facility profiles and track compliance progress.

Although the infrastructure for enforcement activities has been established by the AQMD, issues such as compliance response time, limited availability of staff to respond to complaints received associated with after hour operations, and fleeting air quality-related nuisance problems still remain. In addition, at times when a member of the public notifies the AQMD of an air-related issue, they may not always be apprised of ongoing activities such as the status of the investigation. This measure will focus on improving AQMD's current enforcement program by enhancing compliance presence, response times, investigation, and compliance feedback for the public.

Implementation Approach

Assess Deployment of Compliance Resources

Implementation approaches for this measure would include assessment of how compliance resources are deployed. Criteria would also be developed to proactively facilitate more focused enforcement presence. AQMD staff will look into automating notification, facility breakdown,

and complaint information to field inspectors to further allow for improved compliance response time.

Investigate Development of Tracking and Feedback System

The AQMD is concerned with increases in complaint trends and currently tracks trends for complaints received. However, problems with generic complaint descriptions, unidentified sources, and unconfirmed complaints present difficulties when assessing the data for accurate trends. The AQMD staff will investigate the development of an enhanced compliance tracking and feedback system where the community can interact with compliance staff regarding air related issues that are assigned a tracking or case number. Additional and more detailed inputs for complaint information requested will also be investigated. AQMD staff will explore development of an automated process to inform the public how their complaint was resolved to improve complaint handling and resolution. Other means to communicate with the public could include internet-based filing to serve as a central repository for certain types of air quality information. In addition, ways to integrate the latest technologies for compliance monitoring equipment and remote communication/data devices will also be researched to improve compliance effectiveness and response out in the field. The AQMD staff is always open to feedback from the public and businesses regarding suggestions to improve its compliance programs. The AQMD will periodically work with complainants to seek their feedback.

Studies and Agreements with Other Agencies

The AQMD staff will contact other agencies that often deal with community issues and complaints to discuss how they receive and resolve complaints and their complaint resolution process and use findings to determine if there are mechanisms to enhance AQMD's complaint response program. AQMD staff will propose where appropriate, agreements with other agencies and organizations for enforcement, such as the California Highway Patrol and code enforcement, to optimize the resources devoted to enforcement of air regulations.

COMPLIANCE-02
Increased Public Awareness and Participation to Enhance Compliance

Measure Objective
- *Enhance AQMD's compliance program through additional public participation in compliance activities*

Implementation Approach
- *Public education on air quality issues*
- *Outreach to improve public awareness and participation*
- *Enhanced air quality complaint reporting*

Background
The AQMD has adopted a sufficient number of regulations, many of which are implemented through permit conditions. An effective compliance/enforcement program is needed to ensure the intended emissions and health risk reductions are achieved. A major component of the AQMD's compliance program is field inspections where inspectors conduct visual inspections of permitted equipment, observe a facility's operations, review records, and verify compliance with permit conditions and regulatory requirements. Field inspections allow the AQMD to physically verify compliance with AQMD rules and regulations. The AQMD currently has over 100 field inspectors conducting regular inspections at over 28,000 facilities annually in the District. Facilities are inspected at various frequencies depending on factors such as facility size and complexity, processes conducted at the facility, past compliance history, and federal or state funded mandates.

The public is also a key component in the success of AQMD's compliance program. The AQMD periodically receives information from the public on air-related issues resulting from both permitted and unpermitted facilities and activities. Despite available mechanisms and pathways for public input, some air related incidents are either reported well after the fact or unreported due to a lack of community awareness of the AQMD and its role in air pollution related issues. In other cases, the public may be unclear on how to report incidents to the AQMD and the necessary information required for effective enforcement of air related issues. Furthermore, businesses have often expressed concerns that unfair business competitiveness exists between compliant and non-compliant facilities. A well informed public can assist the AQMD in identifying businesses that are operating without proper permits or air pollution control equipment.

The objective of this measure is to enhance AQMD's compliance program through additional public participation in compliance activities. The AQMD staff believes compliance efforts can be improved with assistance from the public. Although the AQMD employs a staff of highly trained, knowledgeable inspectors, increased public participation in the compliance process can help strengthen the District's compliance efforts by enabling the public to closely monitor air quality related activities in their neighborhoods. A well-informed public will help to identify air quality

issues in the community, make the AQMD's complaint response process more efficient by providing more accurate information, and minimize AQMD staff time spent responding to issues which may not be within AQMD jurisdiction.

Implementation Approach

Enhanced compliance can be achieved through improved public communication with the AQMD and increased outreach activities, including informing and educating the public regarding AQMD's compliance program and air quality complaint reporting and response procedures.

Public Education on Air Quality Issues

Training sessions conducted by staff on how to recognize air related problems and when to contact the AQMD would be offered to help educate the community regarding air quality compliance. The AQMD staff can also educate the public on AQMD's jurisdiction and compliance issues. Training content would include information such as: AQMD's roles and responsibilities; responsibilities of other government agencies; AQMD's rule enforcement procedures; typical sources and types of dust/smoke/odors or other air quality nuisances; air quality complaint referral process; permitting procedures; and other general air quality information. Training materials could be made accessible through the AQMD website and also at other local agency offices.

Outreach to Improve Public Awareness and Participation

A multi-media public outreach effort will be initiated to further promote the AQMD's existing air quality complaint reporting procedure (i.e., 1-800-CUT-SMOG hotline). Currently, the AQMD readily distributes 1-800-CUT-SMOG pamphlet to the public and businesses. Additional efforts to promote the CUT-SMOG hotline would include an increased presence on the internet, such as creating "links" on city/county and other public agency websites to the AQMD's "Making Air Quality Complaints" YouTube video, basic information on air quality complaint reporting, and directions for the public about the CUT-SMOG hotline and other complaint reporting methods. In addition, software applications for mobile devices have been developed to provide information on how to report smoking vehicles through the CUT-SMOG hotline, such as the AQMD application for the iPhone.

Enhanced Air Quality Complaint Reporting
AQMD's website would include enhanced information on various compliance and complaint reporting procedures and online filing of complaints. Website enhancements would include a "one-click complaint" feature, which allows the public to submit air quality related complaints via a link on the front page of the AQMD's website. Other complaint reporting methods may include an air quality complaint "texting" mechanism, which would allow the public to use their cell phones to send the AQMD text messages with air quality complaint information.

Periodic Community Meetings would also be used to enhance outreach and other possible mechanisms to improve communication between the community and AQMD. To further enhance outreach efforts and to facilitate greater public awareness of environmental issues, AQMD will advocate public participation in environmental education programs, such as those funded or led by US-EPA (see the following link for resources on US-EPA's Environmental Education programs - http://www.epa.gov/enviroed/index.html).

STATIONARY-01
Lead Emissions

Measure Objective
- *Reduce lead exposure to the public from lead-related activities*
- *Comply with the 2008-adopted NAAQS for lead*

Implementation Approach
- *Action plan development*
- *Amend Rule 1420 to address smaller lead-emitting facilities*

Background
Adverse health effects of exposure to lead emissions include neurodevelopmental effects in children; increased blood pressure and related cardiovascular conditions in adults; and possibly cancer. Secondary lead smelting, foundries, and lead-acid battery manufacturing and recycling are examples of stationary source operations that result in emissions of lead. General aviation airports are also a source of lead emissions because the fuel used in piston airplanes and helicopters still contains lead. Reduction of lead emissions in the air from both stationary and mobile sources reduces the amount of lead deposited to soil which is an additional pathway for lead exposure.

On October, 15, 2008, the US-EPA adopted a new National Ambient Air Quality Standard (NAAQS) for lead of 0.15 micrograms/cubic meter ($\mu g/m^3$) to be attained no later than 5 years after final attainment designations are made. The previous standard was 1.5 $\mu g/m^3$. No later than 18 months after final designations are made, states are required to submit State Implementation Plans outlining how the standard will be achieved. Various lead use and processing operations are regulated by US-EPA, the state, and AQMD Rule 1420 – Emissions Standard for Lead. Rule 1420 applies to all nonvehicular sources of lead emissions and contains requirements for emission levels, controls, housekeeping, and monitoring.

Implementation Approach
This measure will address the new NAAQS for lead emissions. It will focus on lead emissions from all lead emitting facilities beginning with the largest lead emitters which currently may have difficulties meeting the new lead standard.

Action Plan Development
Implementation of this measure will require analysis of the impacts of the new lead standard on affected industries, which includes a review of lead emissions for all facilities that use or process lead-containing materials. AQMD staff will work with affected facilities to gather information on typical industry and facility processes/practices and develop lead emission control strategies. Implementation of this measure will include development of an action plan which incorporates

additional emission control requirements, housekeeping, cleanup, and monitoring requirements to achieve the new NAAQS for lead.

Amend Rule 1420

Rule development is currently underway for Proposed Rule 1420.1, specifically for large lead-acid battery recyclers, the largest stationary source of lead emissions, to help ensure attainment with the lead NAAQS by US-EPA deadlines. Special requirements for the siting of new lead-emitting sources close to sensitive receptors are also a part of the proposed rule. A working group list including affected facilities, environmental groups, and other governmental agencies has already been established and worked with the AQMD staff during rule development for Proposed Rule 1420.1. This purpose of this measure is to develop an amendment to Rule 1420 for smaller lead-emitting facilities.

STATIONARY-02
Lead Paint for Pre-1978 Structures *(Lead)*

Measure Objective
- *Further reduce lead exposure to children from renovation or demolition of existing sources*
- *Innovative approaches to reduce lead exposure*
- *Assist in enforcing new US-EPA standard*

Implementation Approach
- *Public outreach and online information*
- *Determine feasibility of development of more stringent lead rule(s)*

Background
Lead-containing paint was commonly used to paint houses and other structures constructed before 1978 when lead paint was banned. The paint presents a health hazard when disturbed during renovation and repair activities. US-EPA has adopted a rule with lead standards for renovation of pre-1978 structures which takes effect in April 2010. The regulation requires notification before renovating six square feet or more of painted surfaces in a room for interior projects or more than twenty square feet of painted surfaces for exterior projects in housing, child care facilities and schools built before 1978. Contractors conducting renovations that disturb lead-based paint will also be required to be certified and follow specific work practices to prevent lead contamination. Young children are particularly susceptible to the neurodevelopmental effects of lead.[4]

Implementation Approach
This measure was developed because of the potential health impacts of lead exposure, particularly for children. Reduction of lead emissions from renovation activities for houses, apartments, childcare facilities and schools would also reduce the amount of airborne lead deposited to soil and water which are additional pathways for lead exposure.

Public Outreach and Online Information
The implementation approach would include education and outreach to increase public awareness of the health impacts associated with exposure to lead, particularly for children. Brochures developed under CCP measure Outreach-04 would include information on children's exposure to lead paint and the associated health effects. The AQMD website will provide links to other agency websites with information on lead paint related issues. Elements of the lead abatement certification process can be provided on the AQMD website along with a list of certified contractors.

---

[4] U.S. Department of Health and Human Services, Public Health Service Agency for Toxic Substances and Disease Registry, "Toxicological Profile for Lead," August 2007.

Determine Feasibility of Development of More Stringent Lead Paint Rules
Under this approach, AQMD staff will evaluate the need and feasibility of more stringent lead paint rules. During the feasibility analysis, staff will determine if a gap exists and the need for additional rules. Approaches could take the form of a program or rule to implement the US-EPA standard or require specific work practices conducted by certified lead abatement contractors. More stringent requirements including notifications for lead abatement activities and ambient air monitoring clearances upon renovation completion may be required. Additional requirements for the maintenance of lead painted buildings and structures where children may be exposed to paint chips or paint dust will also be considered. If a new rule is developed, the AQMD staff will consider resource impacts and program effectiveness in the scope of the rule.

STATIONARY-03
Identifying New Sources

Measure Objective

- *Proactively identify potential air toxic sources in the District through rigorous and systematic research methods*

Implementation Approach

- *Develop a multi-step approach for identifying sources emitting selected, highly toxic air contaminants involving:*
  - *Literature searches*
  - *Evaluation of rare and exotic TACs, and*
  - *Investigative monitoring and sampling*

Background

The AQMD has an extensive air toxics program covering a wide variety of sources. The AQMD also implements state Air Toxics Control Measures (ATCMs) and federal National Emissions Standards for Hazardous Air Pollutants (NESHAPs) where there is no source specific AQMD rule. In the first half of 2008, ambient air sampling conducted by the AQMD detected elevated levels of hexavalent chromium in the Rubidoux area. Extensive additional sampling and modeling traced these emissions to loading, unloading, and transferring of clinker material containing hexavalent chromium that was stored in the open at a cement plant located in Riverside. This was an unconventional source of hexavalent chromium and highlighted the need to find other unconventional sources of toxic air contaminants (TACs) that may pose a significant public health risk. The objective of this measure is to proactively identify potential sources of highly toxic air emissions through a systematic scientific approach.

Implementation Approach

The following is a sample of some of the approaches and techniques the AQMD staff will use to take additional steps to proactively identify unknown sources:

- Develop a concentrated list of TACs prioritized by highest toxicity values and examine and analyze existing air quality data to identify areas with higher than average concentrations
- Literature searches of high potency TACs for unconventional uses of these TACs and verifying if there are any sources in the District that use these TACs
- Evaluation of exotic and rare TACs that may be used in the District
- Investigative monitoring and sampling in identified areas of unconventional TAC use
- Enhanced air quality data analysis, including routine air quality monitoring and targeted studies, to help identify emissions sources
- Analyze existing data, collect additional data, and/or perform testing from sources, such as the metal finishing industry, to determine if further air toxic regulation is needed

If a source or a group of sources are found that are determined to pose an elevated health risk, the AQMD staff will bring them into Rule 1402 or possibly develop a source-specific rule.

STATIONARY-04
Alternative Assessment for Use of Acutely Hazardous Materials

Measure Objective

- *For new or modified sources, use CEQA process to evaluate substitution of acutely hazardous materials with less hazardous materials where possible*

Implementation Approach

- *Where applicable, during the permitting and CEQA review process, evaluate new uses of acutely hazardous materials to identify where less hazardous alternatives can be substituted*
- *Work with other agencies to ensure substitutions do not duplicate and are not in conflict with other programs*

Background

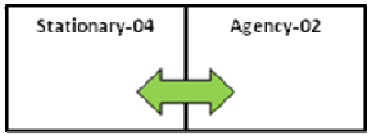
Acutely hazardous materials are used in a variety of processes throughout the district. Examples of some acutely hazardous materials include hydrogen fluoride, anhydrous ammonia, chlorine, and sodium hydroxide.[5] Replacements for some acutely hazardous materials are available. Refineries in the district have eliminated the transport and use of hydrogen fluoride over the past two decades using modified less hazardous alternatives. In addition, most new and modified permits for Selective Catalytic Reduction systems use aqueous instead of anhydrous ammonia. Some alternatives may come with tradeoffs in performance, efficiency, cost, and other environmental effects. The purpose of this measure is to decrease the potential for adverse health impacts due to the accidental release of acutely hazardous materials. It should be noted that the intent is not to regulate storage, transport, reporting, or any other activities that are already controlled by other regulating entities.

Implementation Approach

The most likely approach will be to use the CEQA process to evaluate substitution of less hazardous materials when permitting new and modified sources to reduce or eliminate the exposure to an acutely hazardous material during an accidental release. The AQMD staff will evaluate new uses of acutely hazardous materials and will consider potential trade-offs and other potential adverse impacts from alternatives while ensuring that no other environmental impacts are introduced. In addition, the AQMD staff will work with other agencies such as the state Certified Unified Program Agencies, California Emergency Management Agency (Cal-EMA), California Department of Occupational Safety and Health (Cal-OSHA), California Department of Toxic Substances Control (DTSC), U.S. Department of Transportation (DOT), and U.S. Environmental Protection Agency (US-EPA) to ensure that substitution assessments do not duplicate and are not

[5]List of Acutely Hazardous Materials, California Code of Regulations, Title 8, Section 5189, California Department of Industrial Relations, April 2009 <http://www.dir.ca.gov/title8/5189a.html>.

Related Measures



in conflict with other programs. Substitutions have been required in some instances, however using a more systematic approach during permitting would ensure that substitutions could be made wherever feasible.

STATIONARY-05
Indirect Sources *(Diesel PM)*

Measure Objective

- *Develop approaches for reducing exposure to diesel PM from facilities with associated diesel-fueled vehicle emissions*

Implementation Approach

- *Use a multi-step approach to reduce diesel PM emissions from sources associated with diesel mobile source emissions*
  - *Step 1: Establish Applicability Criteria*
  - *Step 2: Develop List of Implementation Options for Diesel PM Reduction*
  - *Step 3: Compliance Plan Submittal*
  - *Step 4: Diesel Reduction Plan*

Background

The AQMD's MATES II and III studies both showed diesel particulate matter (diesel PM) as the largest contributor to the District's cancer risk from toxic air pollutants. On average, diesel particulate, primarily from mobile sources, contributes approximately 83 percent of the cancer risk from toxic air pollutants in the District. Diesel fuel currently remains the primary fuel used for heavy duty trucks, locomotives, ships, and cargo handling equipment.

Studies have shown that the cancer risk from air toxics is elevated in communities that surround sources with diesel emissions. In 2006, the California Air Resources Board (CARB) conducted health risk assessments for 18 major railyards in the state. The results of the health risk assessments showed that nearly all of the railyards in the District had cancer risks from diesel emissions greater than 100 in a million, with the highest cancer risk from a Burlington Northern Santa Fe railyard in San Bernardino of 2,500 in a million. Risks at the rail yards have decreased and are expected to decrease further over time due to adopted regulations and fleet turnover; however, the residual health risk still remains elevated.

Because of the potency of diesel particulate and the high diesel particulate emissions, the health risk from other facilities that are associated with diesel mobile sources, such as warehouse and distribution centers, solid waste facilities, rock quarries, airports, and other types of businesses that rely on diesel mobile sources are expected to be elevated, particularly in densely populated neighborhoods. For example, many facilities rely on diesel-fueled trucks to deliver raw materials and distribute product. While the vehicle trips are peripheral to their main business, they may be a significant source of diesel PM emissions and impacting nearby receptors. Currently diesel PM emissions from mobile sources that either exclusively operate onsite or go offsite are not accounted for when a facility-wide health risk assessment is done which leads to an underestimate of the health risk to the surrounding neighborhood from these sources.

Progress in reducing diesel PM emissions from mobile sources has been made through the AQMD fleet rules requiring the use of alternative-fuel vehicles, cleaner diesel vehicles, and retrofitting or early retirement of older diesel vehicles. These rules only apply to diesel vehicles used by or under contract to government agencies and only for certain uses, such as street sweepers, trash trucks, airport access, transit buses, and school buses. In addition, significant progress in diesel PM emission reductions are also expected due to implementation of CARB's regulations and DRRP which is targeting an 85 percent reduction in diesel risk on average by 2020. Even if the District achieves these reductions in diesel PM, there will still be elevated health risks from diesel PM in the District. In addition, some diesel PM reduction measures accomplished through CARB's plan and US-EPA regulations will take a decade or more to be fully implemented as shown in Figure 2-1 of Chapter 2.

Implementation Approach

The purpose of this measure is to reduce exposure of diesel PM emissions from new, existing, and modified facilities with diesel mobile source emissions including, but not limited to, large warehousing facilities, distribution facilities, delivery facilities, and rail facilities. Additionally, facilities whose business is not primarily associated with diesel mobile sources, such as manufacturing facilities, may be included due to increased diesel PM emissions from truck or rail traffic for deliveries of raw materials and distribution of finished products. The basic approach to this measure is to establish criteria for applicability and, for a facility that meets the criteria, provide a menu of options that can be implemented to reduce diesel particulate exposure. Implementation may be developed in the form of a rule or any other appropriate implementation approach such as a guidance document which may require working with CARB to change their guidelines on mobile sources under AB2588. This measure will be implemented in several steps.

The AQMD staff may initiate development of an indirect source rule containing an applicability criteria that will account for diesel PM emissions, exposure to diesel PM, and the proximity to residential and sensitive receptors.[6] AQMD staff will compile a menu of options that facility

[6] Based on the Ninth's Circuit decision, local air district regulations addressing railroad emissions may be upheld and harmonized with the Interstate Commerce Commission Termination Act of 1995, but only if the regulations have been incorporated into a State Implementation Plan.

operators can implement. Potential options include, but are not limited to, use of accelerated fleet turnover, minimization of truck routes in or near neighborhoods, idling requirements, automated truck gates, and pre-scheduling of deliveries. AQMD staff will start development of an implementation schedule for facilities to submit a compliance plan outlining what measures they will implement to reduce exposure to diesel PM emissions. A Diesel Reduction Plan will be developed based on the findings of Steps 1 and 2. Strategies to reduce diesel PM emissions may include developing an indirect source rule for diesel or requiring health risk assessments similar to the ones CARB required for the rail yards. Other possible approaches would include ways to reduce idling, traffic studies to improve the flow of diesel vehicle traffic and vehicular scheduling and operating changes. This may require faster implementation of strategies in CARB's Diesel Risk Reduction Plan. Incentives for facilities would be developed to voluntarily accelerate turnover of fleets switching to equipment using alternative fuels or retrofitting with diesel particulate filters. Several implementation approaches are possible. If a regulatory approach is pursued, staff will conduct an analysis of the AQMD's regulatory authority.

NUISANCE-01
Nuisance Rule (Odors/Nuisances, Possibly TACs and Criteria Pollutants)

Measure Objective
- *Enhance effectiveness of AQMD Nuisance Rule 402*

Implementation Approach
- *Evaluate and consider revisions to Rule 402 and "Policies & Procedures on Public Nuisance Investigation"*

Background
Public nuisance issues relating to the release of air contaminants are addressed by the AQMD through enforcement of Rule 402 – Nuisance, adopted in 1976. The rule is generally a restatement of the text found in the California Health and Safety Code Sections 41700 and 41705. Air quality complaints that may result in a public nuisance situation are received through the AQMD's 24-hour complaint line (1-800-CUT-SMOG) and may be immediately dispatched to an inspector for investigation depending on the nature of the complaint, date and time received, and accuracy of the information provided. Complaints are responded to by communication with the complainant and investigation of the complaint site. Violations under Rule 402 require verification of the nuisance by the inspector with each of a considerable number of complainants (typically 6 persons from different households), and must be traced to a confirmed source. These requirements support AQMD's ability to meet the definition of "public nuisance". AQMD "Policies & Procedures on Public Nuisance Investigation" is provided in Appendix C of this document.

Although overall numbers of complaints received by the AQMD has decreased during the last decade, a need to develop public nuisance prevention strategies still exists. Federal, state and local rules and regulations continue to reduce emissions of criteria pollutants and toxic air contaminants from various sources, however, eliminating public nuisance issues associated with processes at these sources remains a challenge. Affected communities experience problems ranging from odors at landfills, rendering facilities, and refineries; overspray from painting operations; and dust exposure from outdoor operations to name a few. Resolving odor related nuisances can be problematic due to dissipation of often intermittent odors prior to verification, and weather and wind conditions making it difficult to trace problems to a source. Establishing public nuisance violations can also be difficult when only a few complaints are made to the AQMD, preventing enforcement staff from concluding that it is a "public" nuisance and there that has been a violation under Rule 402.

Implementation Approach
Evaluate and Consider Revisions to Rule 402 and Public Nuisance Procedures
The first step of this measure is to evaluate Rule 402 implementation and determine ways for the

AQMD staff to be more proactive in resolving nuisance issues. During this first step, AQMD staff will evaluate options of how "public" nuisance may be defined and the process to address recurring nuisance complaints. Evaluations may result in amendments to Rule 402 and "Policies & Procedures on Public Nuisance Investigation" to provide for a more systematic and prompt response to nuisance incidents. This may result in the need to amend existing rules and policies and procedures or amendments to Health and Safety Code Section 41700. In addition, the District may use legal tools, such as Orders for Abatement (administrative sanctions which can be used to require a facility to mitigate odors or other air pollution impacts), to address public nuisances originating from individual facilities. Another concept the AQMD is considering is the development of a new rule requiring facilities with recurring odor nuisance issues to submit odor management plans requiring odor control equipment or operational modifications.

NUISANCE-02
Source-Specific Nuisance Rules (Odors/Nuisances, Possibly TACs and Criteria Pollutants)

Measure Objective
- *Address nuisance issues through industry-specific rules or programs*

Implementation Approach
- *Identify persistent odor issues and develop industry-specific rules or programs to reduce odors*
- *Conduct research on a systematic, scientifically-based odor nuisance resolution practice*

Background
Approximately 50 percent of the air quality complaints received by the AQMD involve the reporting of odor events. Some events cannot be attributed to a known source or are a product of unpredictable events such as breakdowns or emergencies. For those that are regularly associated with particular industries and processes, odor prevention may be possible through the development of rules or programs specific to industries or sources such as waste water treatment plants and landfills.

One of the measures in the 2004 Addendum to the Air Toxics Control Plan was to develop a pilot program for odor mitigation. Rule 410 – Odors from Transfer Stations and Material Recovery Facilities (MRFs) was adopted in 2006 as the first AQMD rule to address odor nuisances. Combined with AQMD Rule 402 – Nuisance, a comprehensive strategy for prevention and mitigation is available for transfer stations and material recycling facilities. The rule reduces the possibility of odors from the subject facilities by requiring site-specific odor management practices. The purpose of this measure is to use this approach or other types of programs to address nuisance issues from other industries.

Implementation Approach
The first step in implementing this measure would be to evaluate odor complaints received by the AQMD to identify types of facilities or processes with odor issues occurring on a regular basis. Approaches to this measure could take the form of additional rules modeled after Rule 410 or some other type of program to reduce odors from specific sources. Requirements may include performance requirements, odor minimization plans, or community notification and reporting requirements.

Another approach currently in early development is researching a new systematic, scientifically-based odor nuisance resolution practice to be developed by the academic community and the AQMD. A contract with a UCLA team of olfactory experts was recently approved to enhance AQMD's ability to better characterize nuisance odors and enhance potential mitigation measures

to resolve odor complaints. AQMD staff will look into developing new rules or policies for odor nuisances based on findings of the study.

Chapter 4: Implementation Schedule

Implementation Schedule

The CCP, like the previous air toxics plans, addresses specific sources of air toxics and nuisance. Further, it enhances compliance efforts making them more accessible, understandable, and responsive to the public. It contains elements to improve coordination with other government organizations. It also focuses on education and outreach to increase awareness of toxic exposure and better alternatives for the public and schools. In order to address these highly impacted areas and their unique circumstances, an integral part of the CCP is a community-based approach which provides an opportunity for input from stakeholders in the community and focuses on the cumulative impacts of individual communities and neighborhoods.

Due to the varied scopes and complexities of each measure, full implementation of the CCP will depend on AQMD staff resources and availability of members from the community and other governmental regulatory entities. Resource needs will be assessed more fully as each measure is implemented. Stakeholders for each program will be included in the process of developing implementation approaches. Once implementation approaches are developed, the AQMD staff will assess resource needs. The AQMD will endeavor to use existing resources wherever possible to implement the measures. If needed, staff resources may be reallocated and projects reprioritized. Some additional resources may be needed for some measures. For example, increasing off-hour compliance presence and additional outreach activities may require additional staffing and changes to computer programs may require additional contract funding. As needs are identified during implementation of each measure, the annual budget process will be used to allocate resources subject to Board approval. Periodic reports will be made to the Stationary Source Committee regarding resource needs.

Table 4-1 lists all the measures of the CCP along with a schedule describing when specific actions for each are proposed to begin. It should be noted that the AQMD staff will need some lead time for implementing the agreed upon approaches. The implementation schedule presented in this chapter accounts for this lead time and may be changed if additional lead time is needed.

Table 4-1

CCP Measures Implementation Schedule

Measure	Proposed Action	Implementation Date
Community-01 Community Exposure Reduction Plan	• Phase 1: Select two pilot communities • Phase 2: Collect Stakeholder Input • Phase 3: Investigate and Validate Data • Phase 4: Implementation of Early Action Items • Phase 5: Develop Community Exposure Reduction Plan • Phase 6: Implement Community Exposure Reduction Plan	Completed Ongoing 2011-2013 2011-2012 Late 2011 2012+
Community-02 Community Guidance for Reducing Air Toxic Exposure	• Develop CERP process similar to the process followed in the pilot study to guide communities and local governments to develop CERPs with AQMD assistance • Update CERP process as experience is gained in developing CERPs	Beginning 2013 As needed
Community-03 Greening Communities Through Accelerated Toxic Emission Reduction Projects for Existing Sources	• Identify disproportionately-impacted communities and assess cumulative impacts • Provide outreach for permitted and unpermitted sources • Establish funding for emission reduction programs • Retrofit or replace existing toxic sources	Mid 2011 Mid 2011 and ongoing Beginning in 2011 Mid 2011 and ongoing
Participation-01 Clean Communities Pledge	• Develop Clean Communities Pledge and outreach for participation • Recognize achievements of participating members	Mid 2011 Mid 2011 and ongoing
Participation-02 Clean Schools Pledge	• Develop Clean Schools Pledge and outreach materials • Advocate school participation in air quality-related programs • Recognize achievements of participating members	Early 2011 Mid 2011 and ongoing Mid 2011 and ongoing
Participation-03 Enhanced AQMD Community Meetings	• Continue and enhance existing AQMD community meetings to include round table discussions to further understand community concerns • Develop new community meeting process to include local gatherings of diverse groups of key stakeholders (residents, local business representatives, health agencies, universities, public/private agencies)to seek input and collaborative ideas for addressing air-related issues	Beginning late 2010 Beginning late 2010
Outreach-01 Clean Air Toolbox for Local Governments, Communities, and Schools	• Establish "Clean Air Toolbox" website and add existing tools • Develop "Proximity Matters" advisory document for planners • Develop sample anti-idling ordinances and signage for idling trucks and trains • Develop additional tools	Early 2011 and ongoing Early 2011 Beginning in 2012 Ongoing

Table 4-1

CCP Measures Implementation Schedule

Measure	Proposed Action	Implementation Date
Outreach-02 Community Dialogue	• Begin development of "Ask AQMD" online forum • Develop additional tools to improve two-way communication with communities • Enhance MATES III interactive risk map	Beginning 2011 Beginning mid 2011 and ongoing 2011
Outreach-03 "Playing it Safe" Campaign	• Begin developing "Playing it Safe" Campaign • Provide outreach and information on AQMD website on situations when outdoor activities should be curtailed	Early 2011 Mid 2011
Outreach-04 Cleaner Choices to Reduce School Children's Exposure to Toxics	• Develop education materials for parents, educators, and children on how to reduce exposure to toxic substances • Provide practical recommendations on how the public can reduce their exposure to toxics	Late 2010 Late 2010
Outreach-05 Advocating Toxic-Free Choices	• Begin development of health bulletins and brochures identifying air toxic sources • Begin using several approaches including Community Health Bulletins, AQMD website enhancements, and brochures to proactively disseminate information to the public	Early 2011 Mid 2011
Outreach-06 Business Outreach and Assistance	• Add other means to disseminate information regarding AQMD's Small Business Assistance Program • Develop an air quality compliance outreach program • Develop an online forum on AQMD's website where the business community can communicate and share air quality solutions	Early 2011 Mid 2011 Mid 2011
Agency-01 Promoting Better Land-Use Decisions	• Develop tracking system for CEQA projects • Develop "Proximity Matters" advisory to planners • Evaluate feasibility of providing a preliminary site assessment service for land use planners • Implement "Reverse" CEQA Analysis for Sensitive Land Uses • Begin outreach and training • Develop and add siting requirements to source specific toxic rules	Currently in progress Early 2011 Mid 2011 Mid 2011 and ongoing Mid 2011 Ongoing
Agency-02 Multi-Agency Coordinated Response	• Establish list of participants for the Interagency Task Force • Establish process to address recurring issues • Develop interagency information sharing system	Early 2011 Mid 2011 Late 2011

Table 4-1

CCP Measures Implementation Schedule

Measure	Proposed Action	Implementation Date
Compliance-01 Enhancements to AQMD's Compliance Program	• Assess how resources are deployed to improve compliance presence and response • Investigate the development of an enhanced compliance feedback and tracking system • Enter agreements with other agencies to optimize compliance resources	Beginning late 2010 2012 Mid 2011
Compliance-02 Increased Public Awareness and Participation to Enhance Compliance	• Encourage additional public participation in compliance activities through training and outreach • Enhanced air quality complaint reporting	Beginning Early 2011 2012
Stationary-01 Lead Emissions	• Amend Rule 1420 to address smaller facilities	2012
Stationary-02 Lead Paint for Pre-1978 Structures	• Develop materials for public outreach and online information • Determine feasibility of more stringent lead rule(s)	Early 2011 Mid 2012
Stationary-03 Identifying New Sources	• Develop a multi-step approach for identifying sources emitting selected, highly toxic air contaminants	Beginning 2011
Stationary-04 Alternative Assessment for Use of Acutely Hazardous Materials	• Where applicable, during the permitting and CEQA review process, evaluate uses of acutely hazardous materials to identify where less hazardous alternatives can be substituted • Work with other agencies to ensure substitutions do not duplicate and are not in conflict with other programs	Mid 2012 Mid 2012
Stationary-05 Indirect Sources (Diesel PM)	• Develop multi-step approach to reduce diesel PM emissions from sources associated with diesel-fueled vehicle emissions	Beginning early 2012
Nuisance-01 Nuisance Rule	• Evaluate and consider revisions to Rule 402 and "Policies & Procedures on Public Nuisance Investigation"	Early 2011
Nuisance-02 Source-Specific Nuisance Rules	• Identify persistent odor issues and develop industry-specific rules or programs to reduce odors • Conduct research on a systematic, scientifically-based odor nuisance resolution practice	Mid 2012 Ongoing

APPENDIX A

KEY FEDERAL, STATE, AND LOCAL TOXIC AIR REGULATIONS

Table A-1
Examples of the AQMD Air Toxics Control Program

Source Category	Target TAC(s)
Toxic New Source Review Rule 1401 amended several times to add new TACS and most recently on 3/7/2008 to add diesel PM from internal combustion engines.	Various TACS, Diesel PM
Toxic Emitting Facilities near Schools Rule 1401.1 adopted 11/4/2005.	Various
Control of Toxic Air Contaminants from Existing Sources Rule 1402 amended 3/17/2000 to add industry categories and committed to assessing the need for source specific rules. Rules 461, 1421, 1425, 1426, 1469 were either adopted or amended. Reports to the Board for no further action on ethylene oxide, rubber and furniture stripping industries.	Various
Aerospace Coating Operations Rule 1124 amended 9/21/2001.	Perchloroethylene, Hexavalent Chromium, Trichloroethylene, Methylene Chloride
Perchloroethylene Film Cleaning and Printing Rule 1425 adopted 3/16/2001.	Perchloroethylene
Perchlorethylene Dry Cleaners Rule 1421 amended 12/6/2002 to phase out perchloroethylene.	Perchloroethylene
Gasoline Dispensing Rule 461 amended 3/7/2008 to incorporate more stringent emission limits and housekeeping requirements.	Benzene, Hexane, Toluene, Ethylbenzene, Xylene
Chrome Plating Rule 1469 amended twice on 5/2/2003 and 12/5/2008 to make emission limits more stringent and enhance housekeeping requirements.	Hexavalent Chromium
Hexavlent Chrome Spraying Rule 1469.1 adopted 3/4/2005.	Hexavalent Chromium

Table A-1
Examples of the AQMD Air Toxics Control Program

Source Category	Target TAC(s)
Other Metal Finishing Rule 1426 adopted 5/2/2003 to gather information from other types of plating with TAC emissions.	Nickel, Cadmium, Copper, Lead
Single Diesel Engines Rules 1470 adopted 4/2/2004.	Diesel PM
Multiple Standby Emergency Diesel Engines Rule 1472 adopted 3/7/2008.	Diesel PM

Table A-2
Examples of Recently Adopted Key ATCMs

Source Category	Target TAC(s)
Perchloroethylene from Dry Cleaning Operations 17 CCR 93109 amended on 1/25/2007.	Perchloroethylene
Decorative and Hard Chrome Plating and Chromic Acid Anodizing Facilities 17 CCR 93102 – 93102.16 amended on 12/7/2006.	Hexavalent Chromium
Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards 13 CCR § 2479 adopted on 12/8/2005.	Diesel PM
Hexavalent Chromium and Nickel from Thermal Spraying 17 CCR 93101.5 adopted on 9/30/2005.	Hexavelent Chromium, Nickel
Stationary Compression Ignition Engines 17 CCR 93115 adopted on 2/26/2004.	Diesel PM
In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generation Sets 13 CCR § 2477 and Article 8 adopted on 2/26/2004.	Diesel PM

Table A-2
Examples of Recently Adopted Key ATCMs

Source Category	Target TAC(s)
Diesel PM from Portable Engines Rated at ≥ 50 hp 17 CCR § 93116 adopted on 2/26/2004.	Diesel PM
On-Road Heavy-Duty Diesel-Fueled Solid Waste Collection Vehicles 13 CCR § 2020 & § 2020 adopted on 9/25/2003.	Diesel PM
Outdoor Residential Waste Burning 17 CCR 93113 adopted on 2/3/2003.	Multiple TACs
School Bus Idling 13 CCR Chapter 10 § 2480 adopted on 12/12/2002.	Diesel PM
Construction, Grading, Quarrying and Surface Mining Operations 17 CCR 93105 adopted on 7/26/2001.	Asbestos

Table A-3
Examples of Recently Adopted Key NESHAPs

Source Category	Target TAC(s)
Ferroalloys Production (Area Sources) 40 CFR Part 63 Subpart YYYYYY amended 12/23/2008	Chromium, Manganese, Nickel
Metal Fabrication and Finishing Source Nine Categories (Area Sources) 40 CFR Part 63 Subpart XXXXXX adopted 7/25/2008	Cadmium, Chromium, Lead, Manganese, Nickel
Plating and Polishing Operations (Area Sources) 40 CFR Part 63 Subpart WWWWWW adopted 7/1/2008	Cadmium, Chromium, Lead, Manganese, Nickel
Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (Area Sources) 40 CFR Part 63 Subpart BBBBBB adopted 1/10/2008	Multiple HAPs
Gasoline Dispensing Facilities (Area Sources) 40 CFR Part 63 Subpart CCCCCC adopted 1/10/2008	Multiple HAPs

Table A-3
Examples of Recently Adopted Key NESHAPs

Source Category	Target TAC(s)
Paint Stripping and Miscellaneous Surface Coating Operations (Area Sources) 40 CFR Part 63 Subpart HHHHHH adopted 1/9/2008	Cadmium, Chromium, Lead, Manganese, Nickel
Iron and Steel Foundries (Area Sources) 40 CFR Part 63 Subpart ZZZZZ adopted 1/2/2008	Chromium, Lead, Manganese, Nickel
Electric Arc Furnace Steelmaking Facilities (Area Sources) 40 CFR Part 63 Subpart YYYYY adopted 12/28/2007	Chromium, Lead, Manganese, Mercury
Secondary Nonferrous Metals Processing Brass, Bronze, Magnesium and Zinc (Area Sources) 40 CFR Part 63 Subpart TTTTTT adopted 12/26/2007	Arsenic, Chromium, Lead, Manganese, Nickel
Acrylic/Modacrylic Fiber (Area Sources) 40 CFR Part 63 Subpart LLLLLL adopted 7/16/2007	Acrylonitrile
Carbon Black Production (Area Sources) 40 CFR Part 63 Subpart LLLLLL adopted 7/16/2007	Polycyclic Organic Matter
Chemical Manufacturing Chromium Compounds (Area Sources) 40 CFR Part 63 Subpart NNNNNN adopted 7/16/2007	Chromium
Clay Ceramics Manufacturing (Area Sources) 40 CFR Part 63 Subpart RRRRRR adopted 7/16/2007	Chromium, Lead, Manganese, Nickel
Lead Acid Battery Manufacturing (Area Sources) 40 CFR Part 63 Subpart PPPPPP adopted 7/16/2007	Cadmium, Lead
Flexible Polyurethane Foam Production and Fabrication (Area Sources) 40 CFR Part 63 Subpart OOOOOO adopted 7/16/2007	Methylene Chloride
Wood Preserving (Area Sources) 40 CFR Part 63 Subpart QQQQQQ adopted 7/16/2007	Arsenic, Chromium, Dioxin, Methylene Chloride
Primary Nonferrous Metals-Zinc, Cadmium, and Beryllium (Area Sources) 40 CFR Part 63 Subpart GGGGGG adopted 1/23/2007	Arsenic, Cadmium, Chromium, Lead, Manganese, Mercury, Nickel

Table A-3
Examples of Recently Adopted Key NESHAPs

Source Category	Target TAC(s)
Secondary Copper Smelting (Area Sources) 40 CFR Part 63 Subpart FFFFFF adopted 1/23/2007	Cadmium, Dioxin, Lead
Clean Air Mercury Rule 40 CFR Part 60 Subparts Da and HHHH adopted 5/18/2005	Mercury
Auto & Light Duty Truck 40 CFR Part 63 Subpart IIII amended 4/26/2004	Multiple HAPs
Benzene Waste Operations 40 CFR Part 61 Subpart FF amended 12/4/2003 (amendments issued 11/12/2002)	Benzene
Engine Test Cells/Stands 40 CFR Part 63 Subpart PPPPP amended 5/29/2003	Benzene, Mixed Xylenes, Toluene, 1,3-Butadiene
For a complete list of Federal NESHAPs, refer to the EPA website at: http://www.epa.gov/ttn/atw/mactfnlalph.html	

APPENDIX B

UPDATED AIR TOXIC EMISSIONS INVENTORY

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Fuel Conbustion									
10	Electric Utilities	23.86	20.45	94.42	0.59	0.00	0.00	0.00	0.00	0.00
20	Cogeneration	4.79	0.00	17.59	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	4.52	3.07	34.95	0.08	0.00	0.00	0.00	0.00	0.00
40	Petroleum Refining	0.99	0.47	55.01	0.84	0.00	0.00	0.00	0.00	0.00
50	Manufacturing and Industrial	43.45	36.61	155.25	1.44	0.00	0.00	0.00	0.00	0.00
52	Food and Agricultural Processing	24.71	25.13	20.96	0.71	0.00	0.00	0.00	0.00	0.00
60	Service and Commercial	53.15	44.47	177.63	3.35	0.00	0.00	0.00	0.00	0.00
99	Other	15.40	7.15	57.75	12.31	0.00	0.00	0.00	0.00	0.00
	Total	**170.88**	**137.36**	**613.56**	**19.33**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	1.31	1.48	3.81	0.00	0.60	65.89	0.00	0.26	0.20
120	Landfills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	Incineration	0.00	0.00	135.63	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.91	2187.74	27.84	0.00	0.41	45.79	0.00	0.18	0.14
	Total	**2.23**	**2189.22**	**167.27**	**0.00**	**1.01**	**111.68**	**0.00**	**0.44**	**0.34**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	20084.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	2239.30	5.86	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	2454.54	3.13	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	8.75	0.19	0.00	0.00	0.00	0.00	0.01	0.00
	Total	**0.00**	**24787.14**	**9.19**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.38	0.56	245.92	0.19	0.06	0.01	0.00	0.00	0.00
320	Petroleum Refining	0.57	0.71	346.21	0.00	0.09	0.01	0.00	0.00	0.00
330	Petroleum Marketing	0.00	0.00	656.51	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.00	8.61	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.95**	**1.27**	**1257.26**	**0.19**	**0.15**	**0.02**	**0.00**	**0.00**	**0.00**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Industrial Processes									
410	Chemical	104.21	146.62	574.96	563.91	16.88	2.24	0.00	0.00	0.00
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	154.10	0.00	0.00	0.00	0.00	0.00	0.00
440	Metal Processes	2.89	4.28	17.38	1.42	0.47	0.07	0.00	0.00	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	1.31	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.09	0.13	0.50	0.04	0.01	0.00	0.00	0.00	0.00
499	Other	0.73	1.11	7.35	0.35	0.12	0.02	0.00	0.00	0.00
	Total	**107.92**	**152.14**	**755.59**	**565.73**	**17.48**	**2.33**	**0.00**	**0.00**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.00	19664.35	1.16	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	8.00	1763.95	70.34	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	3.99	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**8.00**	**21428.69**	**75.49**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	442.79	326.74	269.58	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	5200.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	122.54	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**442.79**	**5527.54**	**269.58**	**122.54**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	1265.74	925.33	10512.09	2082.92	0.00	0.00	0.00	0.00	0.00
722	Light Duty Trucks 1	388.73	267.19	2543.33	534.90	0.00	0.00	0.00	0.00	0.00
723	Light Duty Trucks 2	428.30	312.88	3536.89	745.59	0.00	0.00	0.00	0.00	0.00
724	Medium Duty Trucks	243.20	171.50	1808.47	395.86	0.00	0.00	0.00	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	144.29	106.14	1320.41	281.30	0.00	0.00	0.00	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	33.67	24.24	279.24	61.08	0.00	0.00	0.00	0.00	0.00
734	Medium Heavy Duty Gas Trucks	81.03	61.37	640.14	154.67	0.00	0.00	0.00	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	35.95	26.34	276.78	67.03	0.00	0.00	0.00	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	4.56	4.65	1.24	0.12	0.00	0.00	0.00	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	43.57	44.49	11.86	1.13	0.00	0.00	0.00	0.00	0.00
744	Medium Heavy Duty Diesel Truck	192.47	196.50	52.38	4.97	0.00	0.00	0.00	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	2076.25	2119.74	564.99	53.65	0.00	0.00	0.00	0.00	0.00
750	Motorcycles	54.38	34.65	337.73	68.74	0.00	0.00	0.00	0.00	0.00
760	Diesel Urban Buses	64.03	65.37	17.42	1.65	0.00	0.00	0.00	0.00	0.00
762	Gas Urban Buses	3.29	2.19	26.74	5.83	0.00	0.00	0.00	0.00	0.00
770	School Buses	15.90	14.87	23.51	4.95	0.00	0.00	0.00	0.00	0.00
776	Other Bus	10.72	9.52	46.73	11.06	0.00	0.00	0.00	0.00	0.00
780	Motor Homes	23.02	14.81	128.02	29.40	0.00	0.00	0.00	0.00	0.00
	Total	**5109.10**	**4401.79**	**22127.98**	**4504.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	608.54	3.48	302.95	238.87	0.00	0.00	0.00	0.00	0.00
820	Trains	411.44	420.06	111.96	10.63	0.00	0.00	0.00	0.00	0.00
830	Ships and Commercial Boats	485.45	495.62	162.29	12.54	0.00	0.00	0.00	0.00	0.00
840	Recreational Boats	592.53	376.59	2653.07	620.80	0.00	0.00	0.00	0.00	0.00
850	Off-Road Recreational Vehicles	131.08	80.40	614.45	145.06	0.00	0.00	0.00	0.00	0.00
860	Off-Road Equipment	7136.05	6914.44	6007.35	1161.24	0.00	0.00	0.00	0.00	0.00
870	Farm Equipment	281.53	286.18	91.07	10.56	0.00	0.00	0.00	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	148.27	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**9646.62**	**8576.78**	**10091.42**	**2199.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Stationary and Area Sources	**732.76**	**54223.36**	**3147.94**	**707.79**	**18.64**	**114.03**	**0.00**	**0.45**	**0.34**
	Total On-Road Vehicles	**5109.10**	**4401.79**	**22127.98**	**4504.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Other Mobile	**9646.62**	**8576.78**	**10091.42**	**2199.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Anthropogenic	**15488.48**	**67201.92**	**35367.34**	**7412.35**	**18.64**	**114.03**	**0.00**	**0.45**	**0.34**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Fuel Conbustion									
10	Electric Utilities	0.00	0.00	294.71	4.02	0.00	0.00	0.26	0.00	0.00
20	Cogeneration	0.00	0.00	129.53	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	0.00	0.00	103.96	0.60	0.00	0.01	0.04	0.00	0.00
40	Petroleum Refining	0.00	0.00	266.18	0.06	0.00	1.89	0.13	0.00	0.00
50	Manufacturing and Industrial	0.00	0.00	507.84	7.19	0.00	1.12	0.50	0.00	0.00
52	Food and Agricultural Processing	0.00	0.00	78.84	4.94	0.00	0.17	0.30	0.00	0.00
60	Service and Commercial	0.00	0.00	581.50	8.67	0.00	5.05	0.84	0.00	0.00
99	Other	0.00	0.00	71.84	0.94	0.00	1.73	2.09	0.00	0.00
	Total	**0.00**	**0.00**	**2034.39**	**26.42**	**0.00**	**9.97**	**4.16**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	0.36	0.00	6.93	0.00	101.24	0.00	0.00	10.03	82.49
120	Landfills	0.00	0.00	36.76	0.00	0.00	0.00	0.00	0.00	0.00
130	Incineration	0.00	0.01	0.85	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.25	0.00	4.81	0.00	70.36	0.00	0.00	6.97	57.32
	Total	**0.62**	**0.01**	**49.35**	**0.00**	**171.60**	**0.00**	**0.00**	**16.99**	**139.81**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16917.92
220	Degreasing	0.00	0.00	0.00	8291.35	14172.58	0.00	189.86	0.00	2717.86
230	Coatings and Related Processes	0.00	0.00	0.00	3416.59	107.46	0.00	13.88	0.00	726.13
240	Printing	0.00	0.00	0.00	1251.89	0.00	0.00	23.16	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	0.00	2063.93	57.47	0.00	0.00	0.00	0.00
299	Other	0.00	0.00	0.38	6.97	2.89	0.00	0.53	0.00	0.03
	Total	**0.00**	**0.00**	**0.38**	**15030.73**	**14340.40**	**0.00**	**227.43**	**0.00**	**20361.94**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.52	0.02	1.37	0.39	0.00	0.46	0.03	0.66	0.00
320	Petroleum Refining	0.77	0.02	456.21	0.58	0.00	19.70	0.03	0.98	0.00
330	Petroleum Marketing	0.00	0.00	0.08	0.00	0.00	21153.63	14.57	0.00	0.00
399	Other	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00
	Total	**1.28**	**0.04**	**457.67**	**0.97**	**0.00**	**21174.07**	**14.63**	**1.64**	**0.00**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Industrial Processes									
410	Chemical	141.24	3.92	48.45	116.07	0.00	0.00	0.09	180.41	0.00
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	85.75	0.00	0.00	0.00	69.11	0.00	0.00
440	Metal Processes	3.92	0.12	4.25	2.96	0.00	0.00	0.21	5.02	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.73	0.00	0.00	0.00	0.60	0.00	0.00
470	Electronics	0.12	0.00	0.13	0.09	0.00	0.00	0.01	0.15	0.00
499	Other	0.98	0.03	2.58	0.76	0.00	0.00	2.24	1.26	0.00
	Total	**146.26**	**4.07**	**141.88**	**119.89**	**0.00**	**0.00**	**72.25**	**186.84**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.00	46.83	7.99	1977.21	7876.53	0.00	376.53	4946.61	4898.17
520	Architectural Coatings & Related Solvent	0.00	0.00	2.29	269.24	114.44	0.00	30.07	0.00	15.47
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	0.00	0.00	0.00	0.00	62.41	0.00	0.00
	Total	**0.00**	**46.83**	**10.28**	**2246.45**	**7990.97**	**0.00**	**469.04**	**4946.61**	**4913.64**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	1017.88	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**1017.88**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	0.00	5790.28	144.96	0.00	40050.63	225.73	0.00	0.00
722	Light Duty Trucks 1	0.00	0.00	1691.80	41.40	0.00	7347.43	64.99	0.00	0.00
723	Light Duty Trucks 2	0.00	0.00	2053.11	47.46	0.00	9938.33	77.83	0.00	0.00
724	Medium Duty Trucks	0.00	0.00	1135.39	26.11	0.00	4165.79	43.25	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	0.00	0.00	753.35	16.65	0.00	2929.98	26.44	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	0.00	164.73	4.23	0.00	623.64	5.73	0.00	0.00
734	Medium Heavy Duty Gas Trucks	0.00	0.00	350.60	15.42	0.00	1521.08	10.25	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	0.00	165.86	6.01	0.00	469.24	4.94	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.00	9.12	0.92	0.00	0.00	0.05	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	0.00	0.00	87.20	8.75	0.00	0.00	0.50	0.00	0.00
744	Medium Heavy Duty Diesel Truck	0.00	0.00	385.15	38.66	0.00	0.00	2.22	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	0.00	0.00	4154.76	417.03	0.00	0.00	24.00	0.00	0.00
750	Motorcycles	0.00	0.00	227.96	5.67	0.00	1301.62	9.04	0.00	0.00
760	Diesel Urban Buses	0.00	0.00	128.13	12.86	0.00	0.00	0.74	0.00	0.00
762	Gas Urban Buses	0.00	0.00	18.45	0.28	0.00	24.46	0.61	0.00	0.00
770	School Buses	0.00	0.00	40.25	2.82	0.00	26.27	0.74	0.00	0.00
776	Other Bus	0.00	0.00	34.31	2.06	0.00	110.17	0.82	0.00	0.00
780	Motor Homes	0.00	0.00	105.18	1.98	0.00	95.49	3.93	0.00	0.00
	Total	**0.00**	**0.00**	**17295.64**	**793.27**	**0.00**	**68604.12**	**501.81**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	0.00	0.00	1955.77	0.97	0.00	3.62	74.90	0.00	0.00
820	Trains	0.00	0.00	823.34	82.64	0.00	0.00	4.76	0.00	0.00
830	Ships and Commercial Boats	0.00	0.00	972.83	97.51	0.00	0.00	6.59	0.00	0.00
840	Recreational Boats	0.00	0.00	2395.14	51.31	0.00	4886.26	97.48	0.00	0.00
850	Off-Road Recreational Vehicles	0.00	0.00	545.29	10.49	0.00	943.51	22.72	0.00	0.00
860	Off-Road Equipment	0.00	0.00	16296.04	1323.57	0.00	9578.91	228.68	0.00	0.00
870	Farm Equipment	0.00	0.00	569.93	56.18	0.00	69.88	3.75	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	6931.70	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**23558.32**	**1622.67**	**0.00**	**22413.88**	**438.87**	**0.00**	**0.00**
	Total Stationary and Area Sources	**148.16**	**50.94**	**3711.82**	**17424.46**	**22502.96**	**21184.04**	**787.51**	**5152.08**	**25415.39**
	Total On-Road Vehicles	**0.00**	**0.00**	**17295.64**	**793.27**	**0.00**	**68604.12**	**501.81**	**0.00**	**0.00**
	Total Other Mobile	**0.00**	**0.00**	**23558.32**	**1622.67**	**0.00**	**22413.88**	**438.87**	**0.00**	**0.00**
	Total Anthropogenic	**148.16**	**50.94**	**44565.78**	**19840.39**	**22502.96**	**112202.04**	**1728.19**	**5152.08**	**25415.39**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Fuel Conbustion									
10	Electric Utilities	0.00	0.17	53.77	0.00	0.00	0.00	0.00	0.21	215.74
20	Cogeneration	0.00	0.00	13.42	0.00	0.00	0.00	0.00	0.66	0.00
30	Oil and Gas Production	0.00	0.02	17.41	0.00	0.00	0.75	0.08	0.89	31.19
40	Petroleum Refining	0.00	0.13	32.54	0.00	0.00	0.00	2.43	26.77	0.00
50	Manufacturing and Industrial	0.00	0.36	83.03	0.00	0.00	0.03	0.42	4.99	375.92
52	Food and Agricultural Processing	0.00	0.21	16.25	0.00	0.00	0.00	0.03	0.38	297.21
60	Service and Commercial	0.00	0.69	104.21	0.00	0.00	0.02	0.12	1.46	466.19
99	Other	0.00	1.96	112.95	0.00	0.00	0.75	0.12	1.47	466.98
	Total	**0.00**	**3.55**	**433.58**	**0.00**	**0.00**	**1.55**	**3.20**	**36.83**	**1853.23**
	Waste Disposal									
110	Sewage Treatment	0.00	0.17	85.93	10.14	0.43	0.00	0.00	0.00	0.00
120	Landfills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	Incineration	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.00	0.12	116.69	7.05	0.30	1.84	0.17	1.84	0.00
	Total	**0.00**	**0.30**	**202.62**	**17.19**	**0.72**	**1.84**	**0.17**	**1.84**	**0.00**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	15.16	4580.28	2821.53	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	0.83	26934.78	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	33.29	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	632.18	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.15	538.31	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**16.14**	**32718.84**	**2821.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.93	136.75	0.00	0.33	0.03	0.00	0.01	0.00
320	Petroleum Refining	0.01	1.19	402.14	0.00	0.49	0.87	0.02	0.00	0.00
330	Petroleum Marketing	0.00	0.00	2853.79	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.00	5.05	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**2.12**	**3397.73**	**0.00**	**0.82**	**0.89**	**0.02**	**0.01**	**0.00**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Industrial Processes									
410	Chemical	1.12	6445.64	2038.22	0.00	360.38	0.00	0.39	0.09	0.00
420	Food and Agriculture	0.00	0.00	324.78	0.00	0.00	0.05	0.00	1.42	0.00
430	Mineral Processes	0.00	0.81	47.81	0.00	0.00	21.34	2.03	46.15	0.00
440	Metal Processes	0.02	7.25	218.48	0.00	2.50	0.44	0.43	12.28	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.00
460	Glass and Related Products	0.00	0.00	11.41	0.00	0.00	9.26	0.00	2.55	0.00
470	Electronics	0.00	0.21	0.11	0.00	0.07	0.00	0.00	0.00	0.00
499	Other	0.01	201.85	932.29	0.00	0.62	0.12	0.12	0.28	0.00
	Total	**1.15**	**6655.77**	**3573.11**	**0.00**	**363.58**	**31.22**	**2.98**	**62.82**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.14	12.73	9737.27	653.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	29.57	1280.61	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	9.48	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.14**	**42.31**	**11027.81**	**653.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	274.51	0.00	0.00	0.13	0.06	0.09	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.07	0.08	0.86	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	3.18	3.93	41.90	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	8.79	2.03	11.49	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.94	0.82	1.07	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.25	0.34	3.50	0.00
660	Fires	0.00	0.00	55.11	0.00	0.00	0.00	0.02	0.01	0.00
670	Waste Burning and Disposal	0.00	0.00	0.75	0.00	0.00	0.33	0.03	0.01	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	454.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**785.03**	**0.00**	**0.00**	**13.68**	**7.30**	**58.93**	**0.00**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	568.33	28587.09	0.00	0.00	0.05	0.03	8.17	478.81
722	Light Duty Trucks 1	0.00	119.80	6333.31	0.00	0.00	0.01	0.01	1.32	184.60
723	Light Duty Trucks 2	0.00	201.33	9235.59	0.00	0.00	0.02	0.01	3.69	78.20
724	Medium Duty Trucks	0.00	98.86	4541.39	0.00	0.00	0.01	0.00	1.38	19.00
732	Light Heavy Duty Gas Trucks 1	0.00	75.03	3398.71	0.00	0.00	0.00	0.00	0.36	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	15.07	714.95	0.00	0.00	0.00	0.00	0.07	0.00
734	Medium Heavy Duty Gas Trucks	0.00	34.83	1735.61	0.00	0.00	0.00	0.00	0.06	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	14.57	706.96	0.00	0.00	0.00	0.00	0.05	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.04	1.61	0.00	0.00	0.00	0.00	0.00	33.80
743	Light Heavy Duty Diesel Trucks 2	0.00	0.34	15.42	0.00	0.00	0.00	0.01	0.03	211.00
744	Medium Heavy Duty Diesel Truck	0.00	1.52	68.13	0.00	0.00	0.01	0.23	0.16	3471.40
746	Heavy Heavy Duty Diesel Trucks	0.00	16.38	734.92	0.00	0.00	0.08	1.25	0.63	18713.40
750	Motorcycles	0.00	12.57	843.27	0.00	0.00	0.00	0.00	0.06	0.00
760	Diesel Urban Buses	0.00	0.51	22.66	0.00	0.00	0.00	0.03	0.02	400.40
762	Gas Urban Buses	0.00	1.27	59.76	0.00	0.00	0.00	0.00	0.01	0.00
770	School Buses	0.00	0.95	49.05	0.00	0.00	0.00	0.02	0.01	246.20
776	Other Bus	0.00	2.70	126.64	0.00	0.00	0.00	0.01	0.01	100.59
780	Motor Homes	0.00	5.30	266.39	0.00	0.00	0.00	0.00	0.04	22.41
	Total	**0.00**	**1169.40**	**57441.47**	**0.00**	**0.00**	**0.18**	**1.61**	**16.07**	**23959.80**
	Other Mobile Sources									
810	Aircraft	0.00	55.39	174.83	0.00	0.00	3.38	0.32	3.82	0.00
820	Trains	0.00	3.25	145.64	0.00	0.00	0.01	0.12	0.02	1730.20
830	Ships and Commercial Boats	0.00	3.83	201.88	0.00	0.00	0.00	0.00	0.00	7508.15
840	Recreational Boats	0.00	97.36	5433.17	0.00	0.00	0.00	0.00	1.98	29.80
850	Off-Road Recreational Vehicles	0.00	22.72	1248.61	0.00	0.00	0.00	0.00	0.28	0.00
860	Off-Road Equipment	0.00	205.81	11125.83	0.00	0.00	0.10	1.74	2.12	26019.43
870	Farm Equipment	0.00	2.72	132.35	0.00	0.00	0.00	0.08	0.02	1153.15
890	Fuel Storage and Handling	0.00	0.00	693.79	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**391.07**	**19156.11**	**0.00**	**0.00**	**3.50**	**2.26**	**8.23**	**36440.72**
	Total Stationary and Area Sources	**1.30**	**6720.18**	**52138.73**	**3491.72**	**365.12**	**49.18**	**13.68**	**160.43**	**1853.23**
	Total On-Road Vehicles	**0.00**	**1169.40**	**57441.47**	**0.00**	**0.00**	**0.18**	**1.61**	**16.07**	**23959.80**
	Total Other Mobile	**0.00**	**391.07**	**19156.11**	**0.00**	**0.00**	**3.50**	**2.26**	**8.23**	**36440.72**
	Total Anthropogenic	**1.30**	**8280.65**	**128736.31**	**3491.72**	**365.12**	**52.86**	**17.54**	**184.73**	**62253.75**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Fuel Conbustion									
10	Electric Utilities	208.62	558.83	557.58	0.01	0.00	0.21	3.92	0.01	1.24
20	Cogeneration	0.00	265.08	262.96	0.03	0.00	0.66	0.00	0.00	0.00
30	Oil and Gas Production	30.16	59.62	58.72	0.04	0.79	0.21	0.00	0.19	0.17
40	Petroleum Refining	0.00	378.19	354.34	0.00	2.43	26.77	0.00	26.77	0.00
50	Manufacturing and Industrial	363.51	875.58	865.60	0.02	0.44	4.97	0.00	4.59	2.07
52	Food and Agricultural Processing	278.56	69.17	68.08	0.00	0.03	0.38	0.00	0.38	1.63
60	Service and Commercial	450.81	1342.93	1340.58	0.01	0.13	1.45	0.00	1.26	2.56
99	Other	421.38	142.52	126.93	0.07	0.78	5.12	0.00	0.13	2.57
	Total	1753.04	**3691.92**	3634.79	**0.19**	**4.61**	**39.76**	**3.92**	**33.33**	**10.25**
	Waste Disposal									
110	Sewage Treatment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	0.00	170.67	170.67	0.00	0.00	0.00	0.00	0.00	0.00
130	Incineration	0.00	47.70	47.70	0.00	0.00	11.97	0.00	0.00	11.97
199	Other	0.00	52.13	21.89	0.09	1.91	0.17	0.00	0.17	0.00
	Total	0.00	**270.50**	240.26	**0.09**	**1.91**	**12.14**	**0.00**	**0.17**	**11.97**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.30	0.28	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	57.59	53.27	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	0.02	0.01	0.00	0.00	0.00	0.06	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	1.13	1.13	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**59.04**	**54.69**	**0.00**	**0.00**	**0.00**	**0.06**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	3.74	3.33	0.00	0.03	0.03	4.50	0.00	5.13
320	Petroleum Refining	0.00	38.19	39.30	0.00	0.87	0.88	0.00	0.00	170.12
330	Petroleum Marketing	0.00	35.60	32.94	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**77.53**	**75.57**	**0.00**	**0.90**	**0.91**	**4.50**	**0.00**	**175.25**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Industrial Processes									
410	Chemical	0.00	143.58	132.21	0.00	0.09	0.39	6.91	0.00	0.00
420	Food and Agriculture	0.00	264.30	2.50	0.00	0.00	0.83	0.00	0.00	146.43
430	Mineral Processes	0.00	1092.28	407.80	0.45	2.25	14.85	1.98	2.67	2848.11
440	Metal Processes	0.00	173.56	139.84	3.01	8.05	4.03	116.05	0.02	2.57
450	Wood and Paper	0.00	43.63	12.89	0.00	0.06	0.06	31.14	0.00	0.22
460	Glass and Related Products	0.00	52.80	53.52	0.13	2.55	0.23	0.00	17.60	0.56
470	Electronics	0.00	0.84	0.32	0.00	0.00	0.00	2.39	0.00	0.00
499	Other	0.00	75.11	24.31	0.05	5.15	0.69	34.46	0.38	28.01
	Total	**0.00**	**1846.10**	**773.39**	**3.64**	**18.16**	**21.08**	**192.95**	**20.68**	**3025.89**
	Solvent Evaporation									
510	Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	21.24	19.64	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**21.24**	**19.64**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	5195.42	4400.37	0.00	0.23	0.01	6557.66	0.02	0.20
620	Farming Operations	0.00	18.13	1.47	0.00	0.25	0.21	110.61	0.01	774.54
630	Construction and Demolition	0.00	864.99	56.63	0.00	104.19	11.04	8222.41	0.37	35581.88
640	Paved Road Dust	0.00	5216.24	359.92	0.61	83.81	8.11	40376.86	1.35	205238.58
645	Unpaved Road Dust	0.00	73.04	4.28	0.00	8.16	2.32	2113.71	0.19	20383.99
650	Fugitive Windblown Dust	0.00	49.48	2.94	0.00	5.83	0.86	444.19	0.03	3025.46
660	Fires	0.00	219.29	193.06	0.00	0.05	0.00	215.66	0.00	37.27
670	Waste Burning and Disposal	0.00	3048.95	2533.98	0.00	0.63	0.01	7981.78	0.05	19.40
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	13113.14	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**14685.54**	**7552.64**	**0.61**	**203.16**	**22.55**	**79136.03**	**2.02**	**265061.34**

Table B-1: 1998 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	440.50	1820.08	1131.43	0.41	0.74	5.62	2276.71	0.16	334.08
722	Light Duty Trucks 1	169.83	338.71	223.90	0.07	0.11	0.94	417.43	0.02	50.15
723	Light Duty Trucks 2	71.95	928.25	652.92	0.18	0.26	2.77	756.04	0.06	120.24
724	Medium Duty Trucks	17.48	336.32	229.82	0.07	0.10	1.02	288.05	0.02	47.06
732	Light Heavy Duty Gas Trucks 1	0.00	97.29	61.00	0.02	0.04	0.27	96.54	0.01	12.14
733	Light Heavy Duty Gas Trucks 2	0.00	18.89	11.57	0.00	0.01	0.05	18.83	0.00	2.36
734	Medium Heavy Duty Gas Trucks	0.00	18.02	10.86	0.00	0.01	0.05	16.86	0.00	2.11
736	Heavy Heavy Duty Gas Trucks	0.00	7.70	4.57	0.00	0.00	0.03	9.28	0.00	2.13
742	Light Heavy Duty Diesel Trucks 1	31.10	9.23	8.37	0.00	0.00	0.00	24.50	0.00	0.25
743	Light Heavy Duty Diesel Trucks 2	194.12	59.80	52.81	0.00	0.01	0.02	158.09	0.00	2.25
744	Medium Heavy Duty Diesel Truck	3193.69	915.66	850.49	0.02	0.12	0.13	2439.67	0.02	16.79
746	Heavy Heavy Duty Diesel Trucks	17216.33	4919.17	4579.77	0.08	0.65	0.56	13106.38	0.11	78.40
750	Motorcycles	0.00	21.38	13.84	0.00	0.00	0.06	4.38	0.00	0.75
760	Diesel Urban Buses	368.37	104.89	97.92	0.00	0.01	0.01	279.87	0.00	1.96
762	Gas Urban Buses	0.00	1.69	1.09	0.00	0.00	0.00	1.54	0.00	0.21
770	School Buses	226.50	65.22	60.55	0.00	0.01	0.01	172.95	0.00	1.20
776	Other Bus	92.54	28.02	25.46	0.00	0.00	0.01	72.51	0.00	0.72
780	Motor Homes	20.61	14.69	9.29	0.00	0.01	0.03	29.68	0.00	1.86
	Total	**22043.01**	**9705.01**	**8025.67**	**0.85**	**2.10**	**11.56**	**20169.33**	**0.41**	**674.65**
	Other Mobile Sources									
810	Aircraft	0.00	271.40	245.72	0.19	3.51	0.76	0.00	0.32	0.00
820	Trains	1574.39	444.89	416.21	0.01	0.05	0.03	1188.84	0.01	4.96
830	Ships and Commercial Boats	6998.32	300.33	279.93	0.02	0.00	0.00	0.00	0.00	41.29
840	Recreational Boats	27.42	800.70	546.52	0.10	0.00	1.98	20.47	0.00	0.09
850	Off-Road Recreational Vehicles	0.00	112.80	76.70	0.01	0.00	0.28	0.00	0.00	0.00
860	Off-Road Equipment	23938.87	7432.43	6845.69	0.17	0.78	2.27	17878.17	0.13	74.65
870	Farm Equipment	1061.01	298.82	282.07	0.00	0.03	0.02	792.34	0.01	3.31
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**33600.00**	**9661.37**	**8692.84**	**0.51**	**4.38**	**5.35**	**19879.81**	**0.46**	**124.30**
	Total Stationary and Area Sources	**1753.04**	**20651.87**	**12350.99**	**4.54**	**228.74**	**96.45**	**79337.45**	**56.20**	**268284.69**
	Total On-Road Vehicles	**22043.01**	**9705.01**	**8025.67**	**0.85**	**2.10**	**11.56**	**20169.33**	**0.41**	**674.65**
	Total Other Mobile	**33600.00**	**9661.37**	**8692.84**	**0.51**	**4.38**	**5.35**	**19879.81**	**0.46**	**124.30**
	Total Anthropogenic	**57396.06**	**40018.24**	**29069.50**	**5.90**	**235.21**	**113.36**	**119386.59**	**57.07**	**269083.66**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Fuel Combustion									
10	Electric Utilities	20.34	18.40	167.59	0.47	0.00	0.00	0.00	0.00	0.00
20	Cogeneration	0.59	0.00	2.17	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	2.07	0.89	17.41	0.03	0.00	0.00	0.00	0.00	0.00
40	Petroleum Refining	1.30	0.11	12.02	0.20	0.00	0.00	0.00	0.00	0.00
50	Manufacturing and Industrial	19.43	12.85	114.02	1.04	0.00	0.00	0.00	0.00	0.00
52	Food and Agricultural Processing	15.33	15.64	13.87	0.41	0.00	0.00	0.00	0.00	0.00
60	Service and Commercial	27.28	22.16	118.62	2.13	0.00	0.00	0.00	0.00	0.00
99	Other	17.53	10.23	50.03	12.06	0.00	0.00	0.00	0.00	0.00
	Total	**103.87**	**80.29**	**495.73**	**16.33**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	3.89	4.31	11.84	0.00	1.74	192.44	0.00	0.76	0.58
120	Landfills	0.00	0.90	1.91	0.00	0.00	0.00	0.52	0.00	0.00
130	Incineration	0.00	0.00	80.87	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.24	2532.49	0.69	0.00	0.11	11.91	0.00	0.05	0.04
	Total	**4.13**	**2537.69**	**95.31**	**0.00**	**1.85**	**204.35**	**0.52**	**0.81**	**0.62**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	2544.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.01	1139.62	6.67	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	1.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	888.04	1.30	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**4573.67**	**7.97**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	48.02	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	44.18	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	1.35	0.00	225.35	0.00	1.35	1.35	0.00	0.00	1.35
399	Other	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.35**	**0.00**	**317.72**	**0.00**	**1.35**	**1.35**	**0.00**	**0.00**	**1.35**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Industrial Processes									
410	Chemical	48.03	69.71	325.92	532.67	7.77	1.06	0.00	0.00	0.03
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	11.92	0.04	0.00	0.00	0.00	0.00	0.00
440	Metal Processes	0.12	0.18	0.98	0.06	0.02	0.00	0.00	0.00	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	5.90	0.00	0.00	0.00	0.00	0.00	0.00
499	Other	0.69	1.20	13.62	0.37	0.23	0.16	0.00	0.00	0.14
	Total	**48.84**	**71.09**	**358.34**	**533.13**	**8.03**	**1.23**	**0.00**	**0.00**	**0.18**
	Solvent Evaporation									
510	Consumer Products	0.00	16846.20	1.30	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	7.61	1230.45	17.93	0.00	0.00	0.00	0.00	0.66	0.00
530	Pesticides/Fertilizers	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	4.70	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**7.61**	**18076.93**	**23.93**	**0.00**	**0.00**	**0.00**	**0.00**	**0.66**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	465.10	343.21	216.85	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	3774.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	96.31	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**465.10**	**4117.59**	**216.85**	**96.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	889.67	519.31	5427.49	1109.11	0.00	0.00	0.00	0.00	0.00
722	Light Duty Trucks 1	250.63	141.34	1172.36	250.41	0.00	0.00	0.00	0.00	0.00
723	Light Duty Trucks 2	337.76	201.02	2236.18	463.48	0.00	0.00	0.00	0.00	0.00
724	Medium Duty Trucks	214.73	126.20	1295.45	286.67	0.00	0.00	0.00	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	104.53	65.68	731.12	158.89	0.00	0.00	0.00	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	19.52	12.13	130.64	28.75	0.00	0.00	0.00	0.00	0.00
734	Medium Heavy Duty Gas Trucks	53.28	33.69	335.64	82.39	0.00	0.00	0.00	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	36.49	22.03	233.06	56.95	0.00	0.00	0.00	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	41.75	42.62	11.36	1.08	0.00	0.00	0.00	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	44.19	45.12	12.03	1.14	0.00	0.00	0.00	0.00	0.00
744	Medium Heavy Duty Diesel Truck	226.96	231.71	61.76	5.86	0.00	0.00	0.00	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	2326.69	2375.42	633.14	60.12	0.00	0.00	0.00	0.00	0.00
750	Motorcycles	194.22	96.94	809.68	185.25	0.00	0.00	0.00	0.00	0.00
760	Diesel Urban Buses	68.00	69.42	18.50	1.76	0.00	0.00	0.00	0.00	0.00
762	Gas Urban Buses	3.84	2.13	26.54	5.97	0.00	0.00	0.00	0.00	0.00
770	School Buses	17.69	16.95	16.21	3.15	0.00	0.00	0.00	0.00	0.00
776	Other Bus	12.21	10.55	32.69	7.88	0.00	0.00	0.00	0.00	0.00
780	Motor Homes	14.83	8.26	60.91	14.24	0.00	0.00	0.00	0.00	0.00
	Total	**4856.99**	**4020.52**	**13244.76**	**2723.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	790.31	4.19	388.71	309.55	0.00	0.00	0.00	0.00	0.00
820	Trains	449.99	459.41	122.45	11.63	0.00	0.00	0.00	0.00	0.00
830	Ships and Commercial Boats	446.97	456.33	172.53	11.55	0.00	0.00	0.00	0.00	0.00
840	Recreational Boats	705.58	363.78	2390.09	566.41	0.00	0.00	0.00	0.00	0.00
850	Off-Road Recreational Vehicles	72.90	35.18	277.39	62.22	0.00	0.00	0.00	0.00	0.00
860	Off-Road Equipment	5938.72	5649.52	4274.11	785.86	0.00	0.00	0.00	0.00	0.00
870	Farm Equipment	217.91	220.66	71.60	8.42	0.00	0.00	0.00	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	111.44	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**8622.38**	**7189.07**	**7808.33**	**1755.64**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Stationary and Area Sources	**630.91**	**29457.25**	**1515.85**	**645.78**	**11.22**	**206.93**	**0.52**	**1.46**	**2.15**
	Total On-Road Vehicles	**4856.99**	**4020.52**	**13244.76**	**2723.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Other Mobile	**8622.38**	**7189.07**	**7808.33**	**1755.64**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Anthropogenic	**14110.29**	**40666.85**	**22568.94**	**5124.52**	**11.22**	**206.93**	**0.52**	**1.46**	**2.15**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Fuel Combustion									
10	Electric Utilities	0.00	0.00	412.13	3.62	0.00	0.00	0.21	0.00	0.00
20	Cogeneration	0.00	0.00	15.95	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	0.00	0.00	59.60	0.18	0.00	0.00	0.01	0.00	0.00
40	Petroleum Refining	0.00	0.00	275.68	0.01	0.00	0.00	0.03	0.00	0.00
50	Manufacturing and Industrial	0.00	0.00	383.56	2.50	0.00	0.00	0.26	0.00	0.00
52	Food and Agricultural Processing	0.00	0.00	49.97	3.08	0.00	0.00	0.18	0.00	0.00
60	Service and Commercial	0.00	0.00	339.12	4.33	0.00	0.00	0.53	0.00	0.00
99	Other	0.00	0.00	53.22	1.56	0.00	0.00	1.95	0.00	0.00
	Total	**0.00**	**0.00**	**1589.23**	**15.27**	**0.00**	**0.00**	**3.18**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	1.06	0.33	20.77	0.00	295.71	0.00	0.00	29.28	240.93
120	Landfills	0.08	0.00	44.93	1.12	2.69	0.00	0.00	0.00	1.37
130	Incineration	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.07	0.00	1.25	0.00	18.30	0.00	0.00	1.81	14.91
	Total	**1.21**	**0.33**	**67.58**	**1.12**	**316.70**	**0.00**	**0.00**	**31.10**	**257.21**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4681.60
220	Degreasing	0.00	0.00	0.00	1030.23	5283.64	0.00	24.86	0.00	664.31
230	Coatings and Related Processes	0.01	0.00	0.01	2581.70	8.35	0.00	6.67	0.01	160.50
240	Printing	0.00	0.00	0.00	617.33	0.00	0.00	16.57	0.00	1.41
250	Adhesives and Sealants	0.00	0.00	0.00	746.72	23.85	0.00	0.00	0.00	0.00
299	Other	0.00	13.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**13.97**	**0.01**	**4976.00**	**5315.85**	**0.00**	**48.09**	**0.01**	**5507.82**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	2.79	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	164.76	0.00	0.00	0.00	0.01	0.00	0.00
330	Petroleum Marketing	0.00	0.00	1.35	0.00	0.00	1.35	5.17	0.00	0.00
399	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**168.90**	**0.00**	**0.00**	**1.35**	**5.18**	**0.00**	**0.00**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Industrial Processes									
410	Chemical	65.03	1.81	1.18	54.25	0.00	88.05	0.22	83.09	0.00
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	14.15	0.00	0.00	0.00	4.28	0.00	0.00
440	Metal Processes	0.16	0.00	0.17	0.12	0.00	0.00	0.01	0.21	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	0.12	0.00	0.00	0.00	0.01	0.00	0.00
499	Other	0.74	0.02	2.20	0.73	0.00	0.14	0.05	0.95	0.00
	Total	**65.93**	**1.83**	**17.83**	**55.10**	**0.00**	**88.20**	**4.58**	**84.25**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.00	52.57	8.97	2047.58	7969.87	0.00	387.65	5553.91	4854.28
520	Architectural Coatings & Related Solvent	0.00	0.00	1.74	615.95	270.94	0.00	57.88	0.00	6.43
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	0.00	0.00	0.00	0.00	78.16	0.00	0.00
	Total	**0.00**	**52.57**	**10.71**	**2663.53**	**8240.81**	**0.00**	**523.70**	**5553.91**	**4860.71**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	936.54	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**936.54**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	0.00	2965.32	81.89	0.00	0.00	253.03	0.00	0.00
722	Light Duty Trucks 1	0.00	0.00	791.73	22.09	0.00	0.00	53.14	0.00	0.00
723	Light Duty Trucks 2	0.00	0.00	1196.68	30.74	0.00	0.00	96.71	0.00	0.00
724	Medium Duty Trucks	0.00	0.00	749.70	19.37	0.00	0.00	49.36	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	0.00	0.00	361.51	11.17	0.00	0.00	30.32	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	0.00	64.52	2.27	0.00	0.00	5.45	0.00	0.00
734	Medium Heavy Duty Gas Trucks	0.00	0.00	166.64	8.33	0.00	0.00	10.37	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	0.00	134.34	4.59	0.00	0.00	5.82	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.00	83.54	8.39	0.00	0.00	0.48	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	0.00	0.00	88.43	8.88	0.00	0.00	0.51	0.00	0.00
744	Medium Heavy Duty Diesel Truck	0.00	0.00	454.16	45.59	0.00	0.00	2.62	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	0.00	0.00	4655.91	467.33	0.00	0.00	26.90	0.00	0.00
750	Motorcycles	0.00	0.00	611.28	14.48	0.00	0.00	33.70	0.00	0.00
760	Diesel Urban Buses	0.00	0.00	136.08	13.66	0.00	0.00	0.79	0.00	0.00
762	Gas Urban Buses	0.00	0.00	17.50	0.27	0.00	0.00	0.66	0.00	0.00
770	School Buses	0.00	0.00	39.20	3.27	0.00	0.00	0.57	0.00	0.00
776	Other Bus	0.00	0.00	29.76	2.13	0.00	0.00	1.05	0.00	0.00
780	Motor Homes	0.00	0.00	50.34	1.17	0.00	0.00	1.96	0.00	0.00
	Total	**0.00**	**0.00**	**12596.64**	**745.60**	**0.00**	**0.00**	**573.43**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	0.00	0.00	2541.17	1.17	0.00	4.35	97.20	0.00	0.00
820	Trains	0.00	0.00	900.47	90.38	0.00	0.00	5.20	0.00	0.00
830	Ships and Commercial Boats	0.00	0.00	896.79	89.78	0.00	0.00	6.81	0.00	0.00
840	Recreational Boats	0.00	0.00	2125.73	50.08	0.00	0.00	90.76	0.00	0.00
850	Off-Road Recreational Vehicles	0.00	0.00	224.44	4.56	0.00	0.00	9.93	0.00	0.00
860	Off-Road Equipment	0.00	0.00	12760.68	1086.68	0.00	0.00	163.93	0.00	0.00
870	Farm Equipment	0.00	0.00	439.69	43.30	0.00	0.00	2.94	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**19888.96**	**1365.95**	**0.00**	**4.35**	**376.77**	**0.00**	**0.00**
	Total Stationary and Area Sources	**67.15**	**68.70**	**2790.80**	**7711.03**	**13873.36**	**89.55**	**584.72**	**5669.27**	**10625.74**
	Total On-Road Vehicles	**0.00**	**0.00**	**12596.64**	**745.60**	**0.00**	**0.00**	**573.43**	**0.00**	**0.00**
	Total Other Mobile	**0.00**	**0.00**	**19888.96**	**1365.95**	**0.00**	**4.35**	**376.77**	**0.00**	**0.00**
	Total Anthropogenic	**67.15**	**68.70**	**35276.40**	**9822.58**	**13873.36**	**93.90**	**1534.93**	**5669.27**	**10625.74**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Fuel Combustion									
10	Electric Utilities	0.00	0.14	88.12	0.00	0.00	0.00	0.00	0.09	164.77
20	Cogeneration	0.00	0.00	7.82	0.00	0.00	0.00	0.00	0.06	0.00
30	Oil and Gas Production	0.00	0.01	8.33	0.00	0.00	1.07	0.11	1.24	15.01
40	Petroleum Refining	0.00	0.03	6.71	0.00	0.00	0.00	1.44	15.95	0.00
50	Manufacturing and Industrial	0.00	0.21	61.15	0.00	0.00	0.02	0.28	3.30	111.50
52	Food and Agricultural Processing	0.00	0.12	10.39	0.00	0.00	0.00	0.02	0.19	166.81
60	Service and Commercial	0.00	0.41	64.89	0.00	0.00	0.02	0.01	0.29	166.76
99	Other	0.00	1.94	104.16	0.00	0.00	0.00	0.04	0.42	482.95
	Total	**0.00**	**2.86**	**351.57**	**0.00**	**0.00**	**1.11**	**1.90**	**21.54**	**1107.81**
	Waste Disposal									
110	Sewage Treatment	0.10	0.75	251.27	29.62	1.29	0.00	0.00	0.00	0.00
120	Landfills	0.00	0.00	33.64	0.81	1.01	0.00	0.00	0.11	0.00
130	Incineration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.00	0.03	78.96	1.83	0.08	0.26	0.02	0.26	0.00
	Total	**0.10**	**0.78**	**363.88**	**32.27**	**2.38**	**0.26**	**0.03**	**0.37**	**0.00**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	4.68	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	1.96	596.15	538.55	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	0.52	13047.96	33.54	0.01	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	24.23	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	228.72	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.00	70.67	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**2.48**	**13967.73**	**576.78**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	28.58	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	278.48	0.00	0.00	0.90	0.00	0.00	0.00
330	Petroleum Marketing	1.35	0.00	1074.70	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.35**	**0.00**	**1382.07**	**0.00**	**0.00**	**0.90**	**0.00**	**0.00**	**0.00**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Industrial Processes									
410	Chemical	0.55	1329.04	1142.24	0.00	48.15	0.00	0.35	0.13	0.00
420	Food and Agriculture	0.00	0.00	69.35	0.00	0.00	0.02	0.00	0.45	0.00
430	Mineral Processes	0.00	0.04	6.66	0.00	0.00	13.37	1.07	26.59	0.00
440	Metal Processes	0.00	0.36	5.63	0.00	0.10	0.50	0.50	19.98	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.06	0.00
460	Glass and Related Products	0.00	0.00	3.44	0.00	0.00	10.55	0.00	2.90	0.00
470	Electronics	0.00	0.03	13.25	0.00	0.00	0.00	0.01	0.01	0.00
499	Other	0.15	1.33	994.72	0.00	0.47	0.00	0.02	0.07	0.00
	Total	**0.70**	**1330.81**	**2235.27**	**0.00**	**48.73**	**24.44**	**1.98**	**50.19**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.16	11.60	8901.95	611.09	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	60.44	1796.44	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	11.16	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.16**	**72.04**	**10709.87**	**611.09**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	255.18	0.00	0.00	0.13	0.06	0.09	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.05	0.06	0.65	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	3.15	3.90	41.56	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	7.06	1.63	9.23	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.62	0.53	0.70	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.15	0.21	2.16	0.00
660	Fires	0.00	0.00	55.11	0.00	0.00	0.00	0.02	0.01	0.00
670	Waste Burning and Disposal	0.00	0.00	0.75	0.00	0.00	0.24	0.03	0.01	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	432.25	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**743.28**	**0.00**	**0.00**	**11.40**	**6.44**	**54.40**	**0.00**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	282.90	16501.81	0.00	0.00	0.06	0.01	9.48	222.20
722	Light Duty Trucks 1	0.00	52.35	3212.17	0.00	0.00	0.01	0.01	1.48	158.01
723	Light Duty Trucks 2	0.00	124.00	6728.93	0.00	0.00	0.03	0.00	5.72	44.20
724	Medium Duty Trucks	0.00	75.20	3685.78	0.00	0.00	0.01	0.00	2.61	23.00
732	Light Heavy Duty Gas Trucks 1	0.00	46.14	2264.76	0.00	0.00	0.00	0.00	0.34	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	7.97	407.34	0.00	0.00	0.00	0.00	0.07	0.00
734	Medium Heavy Duty Gas Trucks	0.00	20.05	1020.57	0.00	0.00	0.00	0.00	0.05	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	13.30	630.27	0.00	0.00	0.00	0.00	0.06	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.33	14.78	0.00	0.00	0.00	0.01	0.07	158.60
743	Light Heavy Duty Diesel Trucks 2	0.00	0.35	15.64	0.00	0.00	0.00	0.01	0.04	150.60
744	Medium Heavy Duty Diesel Truck	0.00	1.79	80.34	0.00	0.00	0.02	0.23	0.22	3479.60
746	Heavy Heavy Duty Diesel Trucks	0.00	18.35	823.57	0.00	0.00	0.07	1.15	0.71	17112.57
750	Motorcycles	0.00	31.56	1970.19	0.00	0.00	0.00	0.00	0.18	0.00
760	Diesel Urban Buses	0.00	0.54	24.07	0.00	0.00	0.00	0.03	0.02	399.00
762	Gas Urban Buses	0.00	1.33	63.26	0.00	0.00	0.00	0.00	0.01	0.00
770	School Buses	0.00	0.69	34.77	0.00	0.00	0.00	0.02	0.01	265.80
776	Other Bus	0.00	2.23	95.73	0.00	0.00	0.00	0.01	0.02	113.80
780	Motor Homes	0.00	2.63	133.96	0.00	0.00	0.00	0.00	0.04	37.20
	Total	**0.00**	**681.71**	**37707.93**	**0.00**	**0.00**	**0.20**	**1.49**	**21.13**	**22164.56**
	Other Mobile Sources									
810	Aircraft	0.00	71.62	216.79	0.00	0.00	3.85	0.36	4.37	0.00
820	Trains	0.00	3.55	159.28	0.00	0.00	0.01	0.13	0.02	1884.39
830	Ships and Commercial Boats	0.00	3.53	208.87	0.00	0.00	0.00	0.00	0.00	11102.81
840	Recreational Boats	0.00	90.60	5146.49	0.00	0.00	0.00	0.00	2.65	42.80
850	Off-Road Recreational Vehicles	0.00	9.93	643.03	0.00	0.00	0.00	0.00	0.06	0.00
860	Off-Road Equipment	0.00	144.93	8328.80	0.00	0.00	0.09	1.57	2.04	23441.80
870	Farm Equipment	0.00	2.15	107.68	0.00	0.00	0.00	0.06	0.02	934.37
890	Fuel Storage and Handling	0.00	0.00	558.20	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**326.31**	**15369.16**	**0.00**	**0.00**	**3.95**	**2.13**	**9.16**	**37406.17**
	Total Stationary and Area Sources	**2.30**	**1408.97**	**29753.67**	**1220.14**	**51.12**	**38.11**	**10.34**	**126.50**	**1107.81**
	Total On-Road Vehicles	**0.00**	**681.71**	**37707.93**	**0.00**	**0.00**	**0.20**	**1.49**	**21.13**	**22164.56**
	Total Other Mobile	**0.00**	**326.31**	**15369.16**	**0.00**	**0.00**	**3.95**	**2.13**	**9.16**	**37406.17**
	Total Anthropogenic	**2.30**	**2416.99**	**82830.76**	**1220.14**	**51.12**	**42.27**	**13.95**	**156.79**	**60678.54**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Fuel Combustion									
10	Electric Utilities	159.33	949.06	947.35	0.00	0.00	0.09	15.30	0.01	1.11
20	Cogeneration	0.00	25.90	25.70	0.00	0.00	0.06	0.00	0.00	0.00
30	Oil and Gas Production	14.51	46.56	45.33	0.05	1.13	0.27	0.00	0.25	0.08
40	Petroleum Refining	0.00	432.90	418.33	0.01	1.44	15.95	0.00	15.80	0.00
50	Manufacturing and Industrial	107.81	804.11	800.45	0.01	0.30	3.28	0.00	3.06	0.61
52	Food and Agricultural Processing	156.32	61.76	61.16	0.00	0.02	0.19	0.00	0.19	0.92
60	Service and Commercial	161.19	1277.11	1276.34	0.01	0.04	0.26	0.00	0.14	0.92
99	Other	445.76	32.81	30.85	0.00	0.04	0.42	0.00	0.40	2.66
	Total	**1044.92**	**3630.21**	**3605.51**	**0.09**	**2.95**	**20.54**	**15.30**	**19.84**	**6.30**
	Waste Disposal									
110	Sewage Treatment	0.00	2.80	2.80	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	0.00	303.13	283.19	0.00	0.13	0.06	72.13	0.00	0.00
130	Incineration	0.00	77.55	77.55	0.00	0.00	10.68	0.00	0.00	10.68
199	Other	0.00	7.47	7.21	0.01	0.27	0.03	0.13	0.02	0.55
	Total	**0.00**	**390.95**	**370.75**	**0.02**	**0.40**	**10.77**	**72.26**	**0.02**	**11.22**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	696.49	644.83	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	103.88	96.10	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**800.46**	**741.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	128.19	125.47	0.00	0.90	0.90	0.00	0.00	176.90
330	Petroleum Marketing	0.00	29.71	27.48	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**161.78**	**156.82**	**0.00**	**0.90**	**0.90**	**0.00**	**0.00**	**176.90**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Industrial Processes									
410	Chemical	0.00	162.36	146.85	0.00	0.14	0.39	38.22	0.00	2.85
420	Food and Agriculture	0.00	281.77	2.77	0.00	0.00	0.26	0.00	0.00	152.31
430	Mineral Processes	0.00	558.44	104.94	0.19	1.07	8.96	15.30	1.94	3313.62
440	Metal Processes	0.00	225.58	126.68	0.20	5.60	5.53	76.11	0.00	0.00
450	Wood and Paper	0.00	57.98	18.27	0.00	0.09	0.09	106.24	0.00	0.75
460	Glass and Related Products	0.00	60.14	60.96	0.15	2.90	0.30	0.00	20.05	26.88
470	Electronics	0.00	1.24	0.30	0.00	0.02	0.01	4.39	0.00	1.30
499	Other	0.00	238.10	170.24	0.00	0.23	0.13	43.24	0.07	25.61
	Total	**0.00**	**1585.61**	**631.02**	**0.54**	**10.06**	**15.67**	**283.50**	**22.07**	**3523.32**
	Solvent Evaporation									
510	Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	24.82	22.96	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**24.82**	**22.96**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	4865.58	4028.84	0.00	0.24	0.01	6901.64	0.02	0.21
620	Farming Operations	0.00	13.68	1.11	0.00	0.19	0.15	83.47	0.01	584.53
630	Construction and Demolition	0.00	857.82	56.16	0.00	103.33	10.95	8154.27	0.37	35286.99
640	Paved Road Dust	0.00	4190.52	289.15	0.49	67.33	6.52	32437.15	1.09	164880.42
645	Unpaved Road Dust	0.00	47.82	2.80	0.00	5.34	1.52	1383.84	0.12	13345.41
650	Fugitive Windblown Dust	0.00	31.62	1.86	0.00	3.37	0.53	274.09	0.02	1870.85
660	Fires	0.00	219.29	193.06	0.00	0.05	0.00	215.66	0.00	37.27
670	Waste Burning and Disposal	0.00	2227.61	1855.59	0.00	0.46	0.01	5818.64	0.03	15.70
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	13961.30	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**12453.94**	**6428.57**	**0.49**	**180.31**	**19.68**	**69230.07**	**1.66**	**216021.38**

Table B-2: 2005 Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	204.42	2048.20	1269.56	0.47	0.84	6.55	2383.40	0.18	381.67
722	Light Duty Trucks 1	145.37	352.94	227.92	0.07	0.13	1.02	452.28	0.03	59.16
723	Light Duty Trucks 2	40.66	1466.12	1054.43	0.28	0.39	4.37	1066.53	0.08	177.07
724	Medium Duty Trucks	21.16	654.07	462.95	0.13	0.18	1.97	505.68	0.04	83.75
732	Light Heavy Duty Gas Trucks 1	0.00	85.56	47.16	0.02	0.04	0.24	110.68	0.01	13.91
733	Light Heavy Duty Gas Trucks 2	0.00	16.89	9.04	0.00	0.01	0.05	22.63	0.00	2.85
734	Medium Heavy Duty Gas Trucks	0.00	14.36	8.27	0.00	0.01	0.04	16.16	0.00	2.03
736	Heavy Heavy Duty Gas Trucks	0.00	9.56	5.85	0.00	0.00	0.04	11.26	0.00	2.56
742	Light Heavy Duty Diesel Trucks 1	145.91	53.07	41.88	0.00	0.02	0.04	138.01	0.00	4.10
743	Light Heavy Duty Diesel Trucks 2	138.55	46.61	38.75	0.00	0.01	0.03	122.11	0.00	2.78
744	Medium Heavy Duty Diesel Truck	3201.23	930.11	855.81	0.02	0.13	0.16	2474.50	0.02	20.49
746	Heavy Heavy Duty Diesel Trucks	15743.56	4531.81	4196.86	0.08	0.62	0.59	12062.58	0.11	79.41
750	Motorcycles	0.00	60.53	39.22	0.01	0.00	0.16	12.65	0.00	2.13
760	Diesel Urban Buses	367.08	104.74	97.64	0.00	0.01	0.02	279.41	0.00	2.04
762	Gas Urban Buses	0.00	2.35	1.45	0.00	0.00	0.01	2.43	0.00	0.29
770	School Buses	244.54	70.78	65.53	0.00	0.01	0.01	187.44	0.00	1.37
776	Other Bus	104.69	33.07	29.25	0.00	0.01	0.01	85.13	0.00	1.21
780	Motor Homes	34.22	17.40	12.12	0.00	0.01	0.02	39.80	0.00	1.87
	Total	**20391.40**	**10498.17**	**8463.68**	**1.10**	**2.43**	**15.32**	**19972.68**	**0.49**	**838.69**
	Other Mobile Sources									
810	Aircraft	0.00	320.42	290.00	0.22	3.99	0.89	0.00	0.36	0.00
820	Trains	1715.04	484.54	453.39	0.01	0.06	0.03	1294.78	0.01	5.41
830	Ships and Commercial Boats	10365.17	444.11	414.61	0.03	0.00	0.00	0.00	0.00	61.07
840	Recreational Boats	39.39	1068.96	729.83	0.13	0.00	2.65	29.41	0.00	0.12
850	Off-Road Recreational Vehicles	0.00	24.96	16.97	0.00	0.00	0.06	0.00	0.00	0.00
860	Off-Road Equipment	21567.22	6750.75	6206.58	0.16	0.70	2.18	16107.07	0.12	67.25
870	Farm Equipment	859.71	243.65	229.59	0.00	0.03	0.02	642.01	0.00	2.68
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**34546.53**	**9337.40**	**8340.97**	**0.56**	**4.78**	**5.84**	**18073.27**	**0.49**	**136.53**
	Total Stationary and Area Sources	**1044.92**	**19047.77**	**11956.64**	**1.14**	**194.63**	**67.55**	**69601.13**	**43.60**	**219739.11**
	Total On-Road Vehicles	**20391.40**	**10498.17**	**8463.68**	**1.10**	**2.43**	**15.32**	**19972.68**	**0.49**	**838.69**
	Total Other Mobile	**34546.53**	**9337.40**	**8340.97**	**0.56**	**4.78**	**5.84**	**18073.27**	**0.49**	**136.53**
	Total Anthropogenic	**55982.85**	**38883.34**	**28761.29**	**2.80**	**201.83**	**88.71**	**107647.08**	**44.58**	**220714.33**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Fuel Combustion									
10	Electric Utilities	20.77	18.78	171.09	0.48	0.00	0.00	0.00	0.00	0.00
20	Cogeneration	0.45	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	2.07	0.89	17.41	0.03	0.00	0.00	0.00	0.00	0.00
40	Petroleum Refining	1.30	0.11	12.02	0.20	0.00	0.00	0.00	0.00	0.00
50	Manufacturing and Industrial	22.58	15.09	133.80	1.22	0.00	0.00	0.00	0.00	0.00
52	Food and Agricultural Processing	4.64	4.73	11.59	0.14	0.00	0.00	0.00	0.00	0.00
60	Service and Commercial	30.53	24.13	126.16	2.65	0.00	0.00	0.00	0.00	0.00
99	Other	11.88	7.55	30.09	7.12	0.00	0.00	0.00	0.00	0.00
	Total	**94.24**	**71.29**	**503.83**	**11.84**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	4.35	4.82	13.27	0.00	1.95	215.44	0.00	0.85	0.65
120	Landfills	0.00	0.98	2.08	0.00	0.00	0.00	0.56	0.00	0.00
130	Incineration	0.00	0.00	93.52	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.31	2370.52	0.89	0.00	0.14	15.47	0.00	0.06	0.05
	Total	**4.66**	**2376.33**	**109.76**	**0.00**	**2.09**	**230.91**	**0.56**	**0.91**	**0.70**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	3011.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.01	967.30	10.17	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	1.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	1164.54	1.71	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**5145.25**	**11.88**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	24.16	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	40.76	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	1.35	0.00	220.48	0.00	1.35	1.35	0.00	0.00	1.35
399	Other	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.35**	**0.00**	**285.48**	**0.00**	**1.35**	**1.35**	**0.00**	**0.00**	**1.35**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Industrial Processes									
410	Chemical	54.33	80.22	402.58	834.16	8.79	1.21	0.00	0.00	0.04
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	12.19	0.05	0.00	0.00	0.00	0.00	0.00
440	Metal Processes	0.21	0.31	1.56	0.10	0.03	0.01	0.00	0.00	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	7.05	0.00	0.00	0.00	0.00	0.00	0.00
499	Other	0.74	1.28	14.22	0.38	0.26	0.19	0.00	0.00	0.17
	Total	**55.28**	**81.82**	**437.59**	**834.70**	**9.10**	**1.40**	**0.00**	**0.00**	**0.22**
	Solvent Evaporation									
510	Consumer Products	0.00	17842.60	1.06	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	4.60	912.49	14.28	0.00	0.00	0.00	0.00	0.47	0.00
530	Pesticides/Fertilizers	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	5.59	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**4.60**	**18755.31**	**20.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.47**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	505.50	373.02	243.47	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	2088.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	96.23	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**505.50**	**2461.16**	**243.47**	**96.23**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	227.04	141.04	1719.19	315.57	0.00	0.00	0.00	0.00	0.00
722	Light Duty Trucks 1	64.03	39.71	382.94	70.08	0.00	0.00	0.00	0.00	0.00
723	Light Duty Trucks 2	129.90	80.14	1064.83	188.44	0.00	0.00	0.00	0.00	0.00
724	Medium Duty Trucks	97.03	58.69	668.70	133.47	0.00	0.00	0.00	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	42.48	27.28	307.71	63.06	0.00	0.00	0.00	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	7.31	4.75	52.52	10.59	0.00	0.00	0.00	0.00	0.00
734	Medium Heavy Duty Gas Trucks	17.32	11.21	105.25	25.69	0.00	0.00	0.00	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	11.98	7.50	76.71	18.80	0.00	0.00	0.00	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	34.32	35.04	9.34	0.89	0.00	0.00	0.00	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	30.39	31.03	8.27	0.79	0.00	0.00	0.00	0.00	0.00
744	Medium Heavy Duty Diesel Truck	148.12	151.22	40.31	3.83	0.00	0.00	0.00	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	1557.49	1590.11	423.83	40.25	0.00	0.00	0.00	0.00	0.00
750	Motorcycles	133.09	68.29	603.84	141.07	0.00	0.00	0.00	0.00	0.00
760	Diesel Urban Buses	61.03	62.31	16.61	1.58	0.00	0.00	0.00	0.00	0.00
762	Gas Urban Buses	3.26	1.84	23.52	5.26	0.00	0.00	0.00	0.00	0.00
770	School Buses	22.32	22.20	13.28	2.24	0.00	0.00	0.00	0.00	0.00
776	Other Bus	7.98	7.28	15.57	3.57	0.00	0.00	0.00	0.00	0.00
780	Motor Homes	4.02	2.90	15.75	3.43	0.00	0.00	0.00	0.00	0.00
	Total	**2599.11**	**2342.54**	**5548.16**	**1028.58**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	1097.03	5.18	530.72	428.41	0.00	0.00	0.00	0.00	0.00
820	Trains	432.18	441.23	117.60	11.17	0.00	0.00	0.00	0.00	0.00
830	Ships and Commercial Boats	312.69	319.24	163.20	8.08	0.00	0.00	0.00	0.00	0.00
840	Recreational Boats	513.13	278.13	1695.69	391.05	0.00	0.00	0.00	0.00	0.00
850	Off-Road Recreational Vehicles	91.18	44.00	340.68	77.82	0.00	0.00	0.00	0.00	0.00
860	Off-Road Equipment	3485.92	3261.47	2838.18	546.24	0.00	0.00	0.00	0.00	0.00
870	Farm Equipment	115.23	116.39	39.82	4.91	0.00	0.00	0.00	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	47.71	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**6047.36**	**4465.64**	**5773.61**	**1467.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Stationary and Area Sources	**665.64**	**28891.15**	**1612.94**	**942.78**	**12.54**	**233.67**	**0.56**	**1.38**	**2.27**
	Total On-Road Vehicles	**2599.11**	**2342.54**	**5548.16**	**1028.58**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Other Mobile	**6047.36**	**4465.64**	**5773.61**	**1467.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Anthropogenic	**9312.11**	**35699.34**	**12934.71**	**3439.03**	**12.54**	**233.67**	**0.56**	**1.38**	**2.27**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Fuel Combustion									
10	Electric Utilities	0.00	0.00	421.03	3.70	0.00	0.00	0.21	0.00	0.00
20	Cogeneration	0.00	0.00	12.21	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	0.00	0.00	59.60	0.18	0.00	0.00	0.01	0.00	0.00
40	Petroleum Refining	0.00	0.00	275.68	0.01	0.00	0.00	0.03	0.00	0.00
50	Manufacturing and Industrial	0.00	0.00	446.35	2.94	0.00	0.00	0.31	0.00	0.00
52	Food and Agricultural Processing	0.00	0.00	29.83	0.93	0.00	0.00	0.06	0.00	0.00
60	Service and Commercial	0.00	0.00	367.41	4.71	0.00	0.00	0.66	0.00	0.00
99	Other	0.00	0.00	36.34	1.22	0.00	0.00	1.16	0.00	0.00
	Total	**0.00**	**0.00**	**1648.46**	**13.68**	**0.00**	**0.00**	**2.45**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	1.19	0.37	23.27	0.00	331.05	0.00	0.00	32.78	269.73
120	Landfills	0.09	0.00	50.93	1.22	2.92	0.00	0.00	0.00	1.49
130	Incineration	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.09	0.00	1.63	0.00	23.77	0.00	0.00	2.35	19.37
	Total	**1.36**	**0.37**	**76.53**	**1.22**	**357.74**	**0.00**	**0.00**	**35.14**	**290.58**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1861.26
220	Degreasing	0.00	0.00	0.00	1224.26	6123.36	0.00	28.86	0.00	741.42
230	Coatings and Related Processes	0.01	0.00	0.01	2009.04	12.36	0.00	4.89	0.02	178.55
240	Printing	0.00	0.00	0.00	535.72	0.00	0.00	13.03	0.00	1.68
250	Adhesives and Sealants	0.00	0.00	0.00	979.21	31.33	0.00	0.00	0.00	0.00
299	Other	0.00	17.50	0.00	0.01	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**17.50**	**0.01**	**4748.23**	**6167.04**	**0.00**	**46.78**	**0.02**	**2782.92**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	2.79	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	116.40	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	0.00	0.00	1.35	0.00	0.00	1.35	2.87	0.00	0.00
399	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**120.54**	**0.00**	**0.00**	**1.35**	**2.87**	**0.00**	**0.00**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Industrial Processes									
410	Chemical	73.55	2.04	1.34	62.07	0.00	60.01	0.27	93.98	0.00
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	14.31	0.00	0.00	0.00	4.31	0.00	0.00
440	Metal Processes	0.29	0.01	0.31	0.22	0.00	0.00	0.02	0.37	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	0.14	0.00	0.00	0.00	0.02	0.00	0.00
499	Other	0.77	0.02	2.61	0.76	0.00	0.17	0.05	0.98	0.00
	Total	**74.61**	**2.07**	**18.71**	**63.05**	**0.00**	**60.18**	**4.66**	**95.33**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.00	57.70	9.84	2186.78	7887.18	0.00	424.73	3698.52	5289.18
520	Architectural Coatings & Related Solvent	0.00	0.00	1.03	445.35	195.82	0.00	41.66	0.00	4.93
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	0.00	0.00	0.00	0.00	99.68	0.00	0.00
	Total	**0.00**	**57.70**	**10.87**	**2632.13**	**8083.00**	**0.00**	**566.08**	**3698.52**	**5294.10**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	1033.48	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**1033.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	0.00	758.48	22.56	0.00	0.00	92.73	0.00	0.00
722	Light Duty Trucks 1	0.00	0.00	204.26	6.40	0.00	0.00	21.19	0.00	0.00
723	Light Duty Trucks 2	0.00	0.00	455.61	12.48	0.00	0.00	59.76	0.00	0.00
724	Medium Duty Trucks	0.00	0.00	331.10	9.17	0.00	0.00	32.03	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	0.00	0.00	135.72	4.62	0.00	0.00	15.47	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	0.00	21.82	0.82	0.00	0.00	2.85	0.00	0.00
734	Medium Heavy Duty Gas Trucks	0.00	0.00	50.92	2.35	0.00	0.00	3.78	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	0.00	43.47	1.30	0.00	0.00	2.06	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.00	68.68	6.89	0.00	0.00	0.40	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	0.00	0.00	60.81	6.10	0.00	0.00	0.35	0.00	0.00
744	Medium Heavy Duty Diesel Truck	0.00	0.00	296.40	29.75	0.00	0.00	1.71	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	0.00	0.00	3116.68	312.83	0.00	0.00	18.00	0.00	0.00
750	Motorcycles	0.00	0.00	444.78	10.07	0.00	0.00	21.22	0.00	0.00
760	Diesel Urban Buses	0.00	0.00	122.13	12.26	0.00	0.00	0.71	0.00	0.00
762	Gas Urban Buses	0.00	0.00	15.12	0.23	0.00	0.00	0.59	0.00	0.00
770	School Buses	0.00	0.00	47.10	4.33	0.00	0.00	0.48	0.00	0.00
776	Other Bus	0.00	0.00	18.01	1.41	0.00	0.00	0.60	0.00	0.00
780	Motor Homes	0.00	0.00	13.57	0.48	0.00	0.00	0.45	0.00	0.00
	Total	**0.00**	**0.00**	**6204.66**	**444.07**	**0.00**	**0.00**	**274.38**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	0.00	0.00	3529.62	1.45	0.00	5.39	134.79	0.00	0.00
820	Trains	0.00	0.00	864.83	86.81	0.00	0.00	5.00	0.00	0.00
830	Ships and Commercial Boats	0.00	0.00	629.34	62.81	0.00	0.00	6.14	0.00	0.00
840	Recreational Boats	0.00	0.00	1518.74	39.91	0.00	0.00	62.86	0.00	0.00
850	Off-Road Recreational Vehicles	0.00	0.00	280.74	5.70	0.00	0.00	12.43	0.00	0.00
860	Off-Road Equipment	0.00	0.00	7587.49	623.77	0.00	0.00	109.03	0.00	0.00
870	Farm Equipment	0.00	0.00	233.10	22.82	0.00	0.00	1.62	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**14643.85**	**843.26**	**0.00**	**5.39**	**331.87**	**0.00**	**0.00**
	Total Stationary and Area Sources	**75.98**	**77.65**	**2908.59**	**7458.31**	**14607.78**	**61.53**	**622.85**	**3829.01**	**8367.61**
	Total On-Road Vehicles	**0.00**	**0.00**	**6204.66**	**444.07**	**0.00**	**0.00**	**274.38**	**0.00**	**0.00**
	Total Other Mobile	**0.00**	**0.00**	**14643.85**	**843.26**	**0.00**	**5.39**	**331.87**	**0.00**	**0.00**
	Total Anthropogenic	**75.98**	**77.65**	**23757.11**	**8745.65**	**14607.78**	**66.92**	**1229.09**	**3829.01**	**8367.61**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Fuel Combustion									
10	Electric Utilities	0.00	0.15	89.95	0.00	0.00	0.00	0.00	0.09	168.16
20	Cogeneration	0.00	0.00	5.46	0.00	0.00	0.00	0.00	0.05	0.00
30	Oil and Gas Production	0.00	0.01	8.33	0.00	0.00	1.07	0.11	1.24	15.01
40	Petroleum Refining	0.00	0.03	6.71	0.00	0.00	0.00	1.44	15.95	0.00
50	Manufacturing and Industrial	0.00	0.25	71.89	0.00	0.00	0.02	0.23	2.81	130.71
52	Food and Agricultural Processing	0.00	0.04	6.92	0.00	0.00	0.00	0.02	0.18	50.13
60	Service and Commercial	0.00	0.51	69.38	0.00	0.00	0.03	0.01	0.25	185.85
99	Other	0.00	1.15	62.96	0.00	0.00	0.00	0.04	0.42	298.58
	Total	**0.00**	**2.13**	**321.59**	**0.00**	**0.00**	**1.12**	**1.85**	**21.00**	**848.44**
	Waste Disposal									
110	Sewage Treatment	0.11	0.84	281.31	33.16	1.44	0.00	0.00	0.00	0.00
120	Landfills	0.00	0.00	36.59	0.89	1.10	0.00	0.00	0.12	0.00
130	Incineration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.00	0.04	86.78	2.38	0.10	0.29	0.03	0.29	0.00
	Total	**0.11**	**0.88**	**404.67**	**36.43**	**2.64**	**0.29**	**0.03**	**0.41**	**0.00**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	1.64	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	2.28	694.41	591.75	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	0.38	12623.26	45.25	0.01	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	19.28	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	299.93	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.00	85.42	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**2.65**	**13722.31**	**638.64**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	13.84	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	273.78	0.00	0.00	0.54	0.00	0.00	0.00
330	Petroleum Marketing	1.35	0.00	1043.67	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.35**	**0.00**	**1331.62**	**0.00**	**0.00**	**0.54**	**0.00**	**0.00**	**0.00**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Industrial Processes									
410	Chemical	0.62	1784.73	1406.98	0.00	54.38	0.00	0.43	0.17	0.00
420	Food and Agriculture	0.00	0.00	81.59	0.00	0.00	0.02	0.00	0.60	0.00
430	Mineral Processes	0.00	0.05	7.50	0.00	0.00	10.78	0.84	22.55	0.00
440	Metal Processes	0.00	0.60	5.63	0.00	0.18	0.65	0.65	25.89	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.00
460	Glass and Related Products	0.00	0.00	3.44	0.00	0.00	11.44	0.00	3.15	0.00
470	Electronics	0.00	0.04	18.52	0.00	0.00	0.00	0.01	0.01	0.00
499	Other	0.18	1.38	1081.15	0.00	0.49	0.00	0.02	0.08	0.00
	Total	**0.81**	**1786.80**	**2604.81**	**0.00**	**55.05**	**22.89**	**1.99**	**52.53**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.23	12.70	9513.72	626.20	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	41.35	1803.59	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	13.29	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.23**	**54.05**	**11330.85**	**626.20**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	281.23	0.00	0.00	0.14	0.07	0.10	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.04	0.05	0.49	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	4.08	5.04	53.76	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	7.16	1.65	9.36	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.52	0.45	0.59	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.12	0.17	1.77	0.00
660	Fires	0.00	0.00	55.11	0.00	0.00	0.00	0.02	0.01	0.00
670	Waste Burning and Disposal	0.00	0.00	0.75	0.00	0.00	0.24	0.03	0.01	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	489.72	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**826.81**	**0.00**	**0.00**	**12.30**	**7.48**	**66.08**	**0.00**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	91.69	5844.32	0.00	0.00	0.06	0.00	9.92	44.57
722	Light Duty Trucks 1	0.00	17.55	1238.01	0.00	0.00	0.01	0.00	1.56	59.74
723	Light Duty Trucks 2	0.00	54.23	3651.17	0.00	0.00	0.03	0.00	6.43	10.71
724	Medium Duty Trucks	0.00	37.37	2123.62	0.00	0.00	0.01	0.00	2.96	8.76
732	Light Heavy Duty Gas Trucks 1	0.00	19.71	1030.12	0.00	0.00	0.00	0.00	0.31	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	3.44	182.49	0.00	0.00	0.00	0.00	0.06	0.00
734	Medium Heavy Duty Gas Trucks	0.00	7.49	330.37	0.00	0.00	0.00	0.00	0.05	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	5.27	211.02	0.00	0.00	0.00	0.00	0.02	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.27	12.15	0.00	0.00	0.00	0.01	0.06	98.47
743	Light Heavy Duty Diesel Trucks 2	0.00	0.24	10.76	0.00	0.00	0.00	0.01	0.04	79.79
744	Medium Heavy Duty Diesel Truck	0.00	1.17	52.43	0.00	0.00	0.01	0.13	0.19	2007.30
746	Heavy Heavy Duty Diesel Trucks	0.00	12.29	551.30	0.00	0.00	0.04	0.63	0.82	9422.33
750	Motorcycles	0.00	26.74	1446.48	0.00	0.00	0.00	0.00	0.13	0.00
760	Diesel Urban Buses	0.00	0.48	21.60	0.00	0.00	0.00	0.02	0.02	336.26
762	Gas Urban Buses	0.00	1.21	57.17	0.00	0.00	0.00	0.00	0.01	0.00
770	School Buses	0.00	0.54	26.40	0.00	0.00	0.00	0.02	0.02	302.02
776	Other Bus	0.00	1.15	46.47	0.00	0.00	0.00	0.01	0.02	80.76
780	Motor Homes	0.00	0.72	37.05	0.00	0.00	0.00	0.00	0.04	30.55
	Total	**0.00**	**281.55**	**16872.93**	**0.00**	**0.00**	**0.16**	**0.84**	**22.66**	**12481.24**
	Other Mobile Sources									
810	Aircraft	0.00	98.83	281.76	0.00	0.00	4.77	0.45	5.42	0.00
820	Trains	0.00	3.41	162.36	0.00	0.00	0.01	0.11	0.02	1698.21
830	Ships and Commercial Boats	0.00	2.47	188.43	0.00	0.00	0.00	0.00	0.00	8918.61
840	Recreational Boats	0.00	62.65	3762.70	0.00	0.00	0.00	0.00	4.26	56.59
850	Off-Road Recreational Vehicles	0.00	12.43	772.84	0.00	0.00	0.00	0.00	0.07	0.00
860	Off-Road Equipment	0.00	98.25	5642.76	0.00	0.00	0.05	0.84	1.99	12592.05
870	Farm Equipment	0.00	1.21	61.63	0.00	0.00	0.00	0.03	0.02	511.18
890	Fuel Storage and Handling	0.00	0.00	238.99	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**279.25**	**11111.48**	**0.00**	**0.00**	**4.83**	**1.45**	**11.77**	**23776.64**
	Total Stationary and Area Sources	**2.49**	**1846.51**	**30542.66**	**1301.26**	**57.71**	**37.15**	**11.34**	**140.03**	**848.45**
	Total On-Road Vehicles	**0.00**	**281.55**	**16872.93**	**0.00**	**0.00**	**0.16**	**0.84**	**22.66**	**12481.24**
	Total Other Mobile	**0.00**	**279.25**	**11111.48**	**0.00**	**0.00**	**4.83**	**1.45**	**11.77**	**23776.64**
	Total Anthropogenic	**2.49**	**2407.31**	**58527.07**	**1301.26**	**57.71**	**42.14**	**13.62**	**174.46**	**37106.33**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Fuel Combustion									
10	Electric Utilities	162.61	969.30	967.55	0.00	0.00	0.09	15.62	0.01	1.14
20	Cogeneration	0.00	18.16	18.01	0.00	0.00	0.05	0.00	0.00	0.00
30	Oil and Gas Production	14.51	46.56	45.33	0.05	1.13	0.27	0.00	0.25	0.08
40	Petroleum Refining	0.00	432.90	418.33	0.01	1.44	15.95	0.00	15.80	0.00
50	Manufacturing and Industrial	126.39	926.69	923.35	0.01	0.25	2.79	0.00	2.53	0.72
52	Food and Agricultural Processing	47.00	60.26	59.97	0.00	0.02	0.18	0.00	0.18	0.28
60	Service and Commercial	179.64	1316.88	1316.08	0.01	0.04	0.23	0.00	0.09	1.02
99	Other	276.18	26.41	25.03	0.00	0.04	0.42	0.00	0.40	1.64
	Total	**806.34**	**3797.16**	**3773.65**	**0.10**	**2.91**	**19.98**	**15.62**	**19.25**	**4.88**
	Waste Disposal									
110	Sewage Treatment	0.00	3.18	3.18	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	0.00	329.32	307.49	0.00	0.14	0.07	78.97	0.00	0.00
130	Incineration	0.00	96.42	96.42	0.00	0.00	10.58	0.00	0.00	10.58
199	Other	0.00	8.25	7.96	0.01	0.30	0.03	0.12	0.03	0.52
	Total	**0.00**	**437.17**	**415.05**	**0.02**	**0.44**	**10.68**	**79.09**	**0.03**	**11.10**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	927.71	859.01	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	58.75	54.35	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**986.55**	**913.44**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	113.76	109.76	0.00	0.54	0.54	0.00	0.00	106.78
330	Petroleum Marketing	0.00	15.91	14.72	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**133.50**	**128.31**	**0.00**	**0.54**	**0.54**	**0.00**	**0.00**	**106.78**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Industrial Processes									
410	Chemical	0.00	172.12	154.18	0.01	0.19	0.49	57.82	0.00	3.19
420	Food and Agriculture	0.00	316.55	3.10	0.00	0.00	0.35	0.00	0.00	172.65
430	Mineral Processes	0.00	381.57	91.23	0.20	0.84	7.01	18.30	1.68	1420.71
440	Metal Processes	0.00	289.27	163.39	0.26	7.24	7.16	89.80	0.00	0.00
450	Wood and Paper	0.00	83.01	25.46	0.00	0.12	0.12	112.36	0.00	0.79
460	Glass and Related Products	0.00	65.21	66.10	0.16	3.15	0.30	0.00	21.74	12.91
470	Electronics	0.00	1.72	0.41	0.00	0.03	0.01	5.99	0.01	1.66
499	Other	0.00	253.81	175.87	0.00	0.27	0.16	45.23	0.10	30.44
	Total	**0.00**	**1563.27**	**679.75**	**0.62**	**11.84**	**15.60**	**329.49**	**23.52**	**1642.33**
	Solvent Evaporation									
510	Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	29.14	26.95	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**29.14**	**26.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	5368.21	4455.94	0.00	0.26	0.01	7524.62	0.02	0.23
620	Farming Operations	0.00	10.37	0.84	0.00	0.15	0.12	63.28	0.00	443.13
630	Construction and Demolition	0.00	1109.69	72.65	0.00	133.67	14.16	10548.49	0.48	45647.83
640	Paved Road Dust	0.00	4247.94	293.11	0.50	68.25	6.60	32881.62	1.10	167139.69
645	Unpaved Road Dust	0.00	40.44	2.37	0.00	4.52	1.29	1170.15	0.10	11284.64
650	Fugitive Windblown Dust	0.00	23.47	1.42	0.00	3.26	0.44	224.42	0.01	1523.04
660	Fires	0.00	219.29	193.06	0.00	0.05	0.00	215.66	0.00	37.27
670	Waste Burning and Disposal	0.00	2226.02	1854.36	0.00	0.46	0.01	5815.96	0.03	15.69
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	15793.46	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**13245.42**	**6873.75**	**0.50**	**210.61**	**22.62**	**74237.68**	**1.76**	**226091.50**

Table B-3: 2014 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	41.00	2147.50	1356.22	0.49	0.85	6.94	2301.03	0.18	387.98
722	Light Duty Trucks 1	54.96	364.37	241.41	0.08	0.13	1.11	382.35	0.03	58.48
723	Light Duty Trucks 2	9.85	1750.91	1315.73	0.32	0.38	5.09	1031.17	0.08	174.93
724	Medium Duty Trucks	8.06	805.34	604.75	0.15	0.18	2.34	477.71	0.04	80.58
732	Light Heavy Duty Gas Trucks 1	0.00	75.26	40.07	0.02	0.04	0.21	103.43	0.01	13.00
733	Light Heavy Duty Gas Trucks 2	0.00	15.50	8.32	0.00	0.01	0.04	21.08	0.00	2.65
734	Medium Heavy Duty Gas Trucks	0.00	12.31	6.87	0.00	0.01	0.03	15.56	0.00	1.95
736	Heavy Heavy Duty Gas Trucks	0.00	4.16	2.59	0.00	0.00	0.02	4.80	0.00	1.08
742	Light Heavy Duty Diesel Trucks 1	90.59	35.68	26.74	0.00	0.01	0.03	92.14	0.00	3.36
743	Light Heavy Duty Diesel Trucks 2	73.40	27.34	21.24	0.00	0.01	0.02	70.94	0.00	2.23
744	Medium Heavy Duty Diesel Truck	1846.71	548.47	496.90	0.01	0.09	0.13	1455.64	0.02	15.37
746	Heavy Heavy Duty Diesel Trucks	8668.55	2600.32	2338.64	0.06	0.43	0.58	6884.75	0.07	67.91
750	Motorcycles	0.00	40.15	25.45	0.01	0.01	0.11	13.73	0.00	2.33
760	Diesel Urban Buses	309.36	88.62	82.38	0.00	0.01	0.01	236.35	0.00	1.88
762	Gas Urban Buses	0.00	3.36	2.20	0.00	0.00	0.01	3.08	0.00	0.40
770	School Buses	277.86	80.33	74.37	0.00	0.01	0.01	213.09	0.00	1.54
776	Other Bus	74.30	24.44	21.19	0.00	0.00	0.01	62.08	0.00	1.07
780	Motor Homes	28.10	16.35	10.46	0.00	0.01	0.03	38.21	0.00	2.25
	Total	**11482.75**	**8640.41**	**6675.55**	**1.15**	**2.17**	**16.73**	**13407.13**	**0.44**	**819.00**
	Other Mobile Sources									
810	Aircraft	0.00	397.27	360.01	0.27	4.95	1.11	0.00	0.45	0.00
820	Trains	1545.55	436.67	408.59	0.01	0.05	0.03	1166.85	0.01	4.87
830	Ships and Commercial Boats	8332.77	356.74	333.31	0.03	0.00	0.00	0.00	0.00	49.05
840	Recreational Boats	52.07	1717.31	1171.65	0.21	0.00	4.26	38.88	0.00	0.16
850	Off-Road Recreational Vehicles	0.00	28.16	19.15	0.00	0.00	0.07	0.00	0.00	0.00
860	Off-Road Equipment	11585.04	3984.55	3584.94	0.13	0.38	2.07	8652.12	0.06	36.13
870	Farm Equipment	470.33	135.40	127.04	0.00	0.02	0.02	351.23	0.00	1.47
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**21985.76**	**7056.09**	**6004.68**	**0.65**	**5.39**	**7.55**	**10209.09**	**0.52**	**91.68**
	Total Stationary and Area Sources	**806.34**	**20192.21**	**12810.90**	**1.24**	**226.35**	**69.43**	**74661.89**	**44.56**	**227856.59**
	Total On-Road Vehicles	**11482.75**	**8640.41**	**6675.55**	**1.15**	**2.17**	**16.73**	**13407.13**	**0.44**	**819.00**
	Total Other Mobile	**21985.76**	**7056.09**	**6004.68**	**0.65**	**5.39**	**7.55**	**10209.09**	**0.52**	**91.68**
	Total Anthropogenic	**34274.84**	**35888.72**	**25491.13**	**3.04**	**233.91**	**93.71**	**98278.11**	**45.53**	**228767.28**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Fuel Combustion									
10	Electric Utilities	20.76	18.78	171.08	0.48	0.00	0.00	0.00	0.00	0.00
20	Cogeneration	0.42	0.00	1.55	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	1.97	0.89	16.79	0.03	0.00	0.00	0.00	0.00	0.00
40	Petroleum Refining	1.13	0.10	11.38	0.17	0.00	0.00	0.00	0.00	0.00
50	Manufacturing and Industrial	21.62	14.49	128.92	1.20	0.00	0.00	0.00	0.00	0.00
52	Food and Agricultural Processing	4.63	4.72	11.13	0.14	0.00	0.00	0.00	0.00	0.00
60	Service and Commercial	29.53	23.20	125.12	2.55	0.00	0.00	0.00	0.00	0.00
99	Other	11.86	7.53	30.08	7.12	0.00	0.00	0.00	0.00	0.00
	Total	**91.93**	**69.71**	**496.05**	**11.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	4.33	4.80	13.20	0.00	1.94	214.37	0.00	0.85	0.65
120	Landfills	0.00	0.98	2.07	0.00	0.00	0.00	0.56	0.00	0.00
130	Incineration	0.00	0.00	84.24	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.31	2370.52	0.89	0.00	0.14	15.34	0.00	0.06	0.05
	Total	**4.64**	**2376.30**	**100.41**	**0.00**	**2.08**	**229.70**	**0.56**	**0.91**	**0.70**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	3011.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.01	951.26	10.02	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	1.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	1159.47	1.71	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**5124.15**	**11.73**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	24.04	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	38.48	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	1.35	0.00	190.07	0.00	1.35	1.35	0.00	0.00	1.35
399	Other	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.35**	**0.00**	**252.66**	**0.00**	**1.35**	**1.35**	**0.00**	**0.00**	**1.35**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Industrial Processes									
410	Chemical	48.36	71.37	354.57	721.69	7.83	1.08	0.00	0.00	0.04
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	11.18	0.05	0.00	0.00	0.00	0.00	0.00
440	Metal Processes	0.21	0.31	1.56	0.10	0.03	0.01	0.00	0.00	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	7.01	0.00	0.00	0.00	0.00	0.00	0.00
499	Other	0.72	1.27	13.23	0.37	0.24	0.17	0.00	0.00	0.15
	Total	**49.30**	**72.96**	**387.55**	**722.21**	**8.11**	**1.25**	**0.00**	**0.00**	**0.19**
	Solvent Evaporation									
510	Consumer Products	0.00	14934.26	0.88	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	4.60	912.49	14.28	0.00	0.00	0.00	0.00	0.47	0.00
530	Pesticides/Fertilizers	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	5.59	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**4.60**	**15846.97**	**20.76**	**0.00**	**0.00**	**0.00**	**0.00**	**0.47**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	505.50	373.02	243.47	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	1714.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	96.23	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**505.50**	**2087.38**	**243.47**	**96.23**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	201.01	124.91	1506.35	279.28	0.00	0.00	0.00	0.00	0.00
722	Light Duty Trucks 1	57.30	35.59	338.79	62.58	0.00	0.00	0.00	0.00	0.00
723	Light Duty Trucks 2	115.89	71.51	939.91	168.09	0.00	0.00	0.00	0.00	0.00
724	Medium Duty Trucks	86.38	52.25	590.71	118.79	0.00	0.00	0.00	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	36.11	23.19	259.51	53.60	0.00	0.00	0.00	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	6.88	4.47	48.94	9.96	0.00	0.00	0.00	0.00	0.00
734	Medium Heavy Duty Gas Trucks	17.32	11.21	104.77	25.69	0.00	0.00	0.00	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	11.98	7.50	76.60	18.80	0.00	0.00	0.00	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	28.93	29.54	7.87	0.75	0.00	0.00	0.00	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	27.87	28.45	7.58	0.72	0.00	0.00	0.00	0.00	0.00
744	Medium Heavy Duty Diesel Truck	69.91	71.38	19.02	1.81	0.00	0.00	0.00	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	735.14	750.53	200.05	19.00	0.00	0.00	0.00	0.00	0.00
750	Motorcycles	107.40	55.11	489.57	113.85	0.00	0.00	0.00	0.00	0.00
760	Diesel Urban Buses	61.03	62.31	16.61	1.58	0.00	0.00	0.00	0.00	0.00
762	Gas Urban Buses	3.26	1.84	23.50	5.26	0.00	0.00	0.00	0.00	0.00
770	School Buses	22.32	22.20	13.26	2.24	0.00	0.00	0.00	0.00	0.00
776	Other Bus	7.98	7.28	15.50	3.57	0.00	0.00	0.00	0.00	0.00
780	Motor Homes	4.02	2.90	15.73	3.43	0.00	0.00	0.00	0.00	0.00
	Total	**1600.73**	**1362.16**	**4674.29**	**888.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	1097.03	5.18	530.72	428.41	0.00	0.00	0.00	0.00	0.00
820	Trains	308.60	315.06	83.98	7.97	0.00	0.00	0.00	0.00	0.00
830	Ships and Commercial Boats	224.41	229.11	139.18	5.80	0.00	0.00	0.00	0.00	0.00
840	Recreational Boats	417.60	232.03	1351.80	309.52	0.00	0.00	0.00	0.00	0.00
850	Off-Road Recreational Vehicles	78.14	37.71	291.16	66.70	0.00	0.00	0.00	0.00	0.00
860	Off-Road Equipment	2577.84	2336.83	2570.94	519.01	0.00	0.00	0.00	0.00	0.00
870	Farm Equipment	115.23	116.39	39.78	4.91	0.00	0.00	0.00	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	47.71	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**4818.85**	**3272.32**	**5055.26**	**1342.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Stationary and Area Sources	**657.32**	**25577.46**	**1512.63**	**830.13**	**11.53**	**232.30**	**0.56**	**1.38**	**2.23**
	Total On-Road Vehicles	**1600.73**	**1362.16**	**4674.29**	**888.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Other Mobile	**4818.85**	**3272.32**	**5055.26**	**1342.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Anthropogenic	**7076.91**	**30211.94**	**11242.18**	**3061.43**	**11.53**	**232.30**	**0.56**	**1.38**	**2.23**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Fuel Combustion									
10	Electric Utilities	0.00	0.00	420.91	3.70	0.00	0.00	0.21	0.00	0.00
20	Cogeneration	0.00	0.00	11.41	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	0.00	0.00	56.35	0.18	0.00	0.00	0.01	0.00	0.00
40	Petroleum Refining	0.00	0.00	240.21	0.01	0.00	0.00	0.03	0.00	0.00
50	Manufacturing and Industrial	0.00	0.00	428.32	2.82	0.00	0.00	0.30	0.00	0.00
52	Food and Agricultural Processing	0.00	0.00	28.89	0.93	0.00	0.00	0.06	0.00	0.00
60	Service and Commercial	0.00	0.00	363.66	4.53	0.00	0.00	0.64	0.00	0.00
99	Other	0.00	0.00	36.30	1.21	0.00	0.00	1.16	0.00	0.00
	Total	**0.00**	**0.00**	**1586.04**	**13.37**	**0.00**	**0.00**	**2.41**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	1.18	0.37	23.15	0.00	329.40	0.00	0.00	32.62	268.38
120	Landfills	0.09	0.00	50.93	1.22	2.92	0.00	0.00	0.00	1.48
130	Incineration	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.08	0.00	1.61	0.00	23.57	0.00	0.00	2.33	19.20
	Total	**1.36**	**0.37**	**76.35**	**1.22**	**355.88**	**0.00**	**0.00**	**34.95**	**289.07**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1861.26
220	Degreasing	0.00	0.00	0.00	1223.15	6123.36	0.00	28.86	0.00	725.92
230	Coatings and Related Processes	0.01	0.00	0.01	1981.91	10.77	0.00	4.89	0.02	169.62
240	Printing	0.00	0.00	0.00	492.06	0.00	0.00	12.71	0.00	1.68
250	Adhesives and Sealants	0.00	0.00	0.00	974.96	31.33	0.00	0.00	0.00	0.00
299	Other	0.00	17.50	0.00	0.01	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**17.50**	**0.01**	**4672.08**	**6165.46**	**0.00**	**46.46**	**0.02**	**2758.49**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	2.76	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	113.30	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	0.00	0.00	1.35	0.00	0.00	1.35	2.66	0.00	0.00
399	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**117.41**	**0.00**	**0.00**	**1.35**	**2.67**	**0.00**	**0.00**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Industrial Processes									
410	Chemical	65.47	1.82	1.24	55.19	0.00	51.49	0.27	83.66	0.00
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	13.75	0.00	0.00	0.00	3.85	0.00	0.00
440	Metal Processes	0.29	0.01	0.31	0.22	0.00	0.00	0.02	0.37	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	0.14	0.00	0.00	0.00	0.02	0.00	0.00
499	Other	0.77	0.02	2.58	0.76	0.00	0.15	0.05	0.98	0.00
	Total	**66.53**	**1.85**	**18.03**	**56.17**	**0.00**	**51.65**	**4.20**	**85.01**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.00	48.30	8.24	1830.33	6601.57	0.00	355.50	3095.66	4427.04
520	Architectural Coatings & Related Solvent	0.00	0.00	1.03	445.35	195.82	0.00	41.66	0.00	4.93
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	0.00	0.00	0.00	0.00	99.68	0.00	0.00
	Total	**0.00**	**48.30**	**9.26**	**2275.68**	**6797.39**	**0.00**	**496.85**	**3095.66**	**4431.97**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	1033.48	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**1033.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	0.00	671.41	19.98	0.00	0.00	80.19	0.00	0.00
722	Light Duty Trucks 1	0.00	0.00	182.66	5.74	0.00	0.00	18.52	0.00	0.00
723	Light Duty Trucks 2	0.00	0.00	406.44	11.14	0.00	0.00	52.04	0.00	0.00
724	Medium Duty Trucks	0.00	0.00	294.71	8.16	0.00	0.00	27.94	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	0.00	0.00	115.38	3.93	0.00	0.00	12.86	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	0.00	20.53	0.77	0.00	0.00	2.62	0.00	0.00
734	Medium Heavy Duty Gas Trucks	0.00	0.00	50.92	2.35	0.00	0.00	3.71	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	0.00	43.47	1.30	0.00	0.00	2.04	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.00	57.90	5.81	0.00	0.00	0.33	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	0.00	0.00	55.77	5.60	0.00	0.00	0.32	0.00	0.00
744	Medium Heavy Duty Diesel Truck	0.00	0.00	139.90	14.04	0.00	0.00	0.81	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	0.00	0.00	1471.08	147.66	0.00	0.00	8.50	0.00	0.00
750	Motorcycles	0.00	0.00	358.94	8.13	0.00	0.00	17.36	0.00	0.00
760	Diesel Urban Buses	0.00	0.00	122.13	12.26	0.00	0.00	0.71	0.00	0.00
762	Gas Urban Buses	0.00	0.00	15.12	0.23	0.00	0.00	0.59	0.00	0.00
770	School Buses	0.00	0.00	47.10	4.33	0.00	0.00	0.48	0.00	0.00
776	Other Bus	0.00	0.00	18.01	1.41	0.00	0.00	0.59	0.00	0.00
780	Motor Homes	0.00	0.00	13.57	0.48	0.00	0.00	0.45	0.00	0.00
	Total	**0.00**	**0.00**	**4085.03**	**253.33**	**0.00**	**0.00**	**230.06**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	0.00	0.00	3529.62	1.45	0.00	5.39	134.79	0.00	0.00
820	Trains	0.00	0.00	617.53	61.98	0.00	0.00	3.57	0.00	0.00
830	Ships and Commercial Boats	0.00	0.00	452.69	45.08	0.00	0.00	5.12	0.00	0.00
840	Recreational Boats	0.00	0.00	1224.65	33.94	0.00	0.00	49.84	0.00	0.00
850	Off-Road Recreational Vehicles	0.00	0.00	240.59	4.88	0.00	0.00	10.65	0.00	0.00
860	Off-Road Equipment	0.00	0.00	5765.08	442.01	0.00	0.00	97.96	0.00	0.00
870	Farm Equipment	0.00	0.00	233.10	22.82	0.00	0.00	1.62	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**12063.25**	**612.16**	**0.00**	**5.39**	**303.56**	**0.00**	**0.00**
	Total Stationary and Area Sources	**67.90**	**68.02**	**2840.59**	**7018.52**	**13318.72**	**52.99**	**552.58**	**3215.64**	**7479.53**
	Total On-Road Vehicles	**0.00**	**0.00**	**4085.03**	**253.33**	**0.00**	**0.00**	**230.06**	**0.00**	**0.00**
	Total Other Mobile	**0.00**	**0.00**	**12063.25**	**612.16**	**0.00**	**5.39**	**303.56**	**0.00**	**0.00**
	Total Anthropogenic	**67.90**	**68.02**	**18988.87**	**7884.01**	**13318.72**	**58.38**	**1086.20**	**3215.64**	**7479.53**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Fuel Combustion									
10	Electric Utilities	0.00	0.15	89.95	0.00	0.00	0.00	0.00	0.09	168.16
20	Cogeneration	0.00	0.00	5.42	0.00	0.00	0.00	0.00	0.05	0.00
30	Oil and Gas Production	0.00	0.01	8.07	0.00	0.00	0.97	0.10	1.13	13.53
40	Petroleum Refining	0.00	0.03	6.29	0.00	0.00	0.00	1.16	12.91	0.00
50	Manufacturing and Industrial	0.00	0.24	69.45	0.00	0.00	0.02	0.22	2.61	116.86
52	Food and Agricultural Processing	0.00	0.04	6.68	0.00	0.00	0.00	0.02	0.18	50.06
60	Service and Commercial	0.00	0.49	68.16	0.00	0.00	0.03	0.01	0.24	168.04
99	Other	0.00	1.15	62.95	0.00	0.00	0.00	0.04	0.42	282.12
	Total	**0.00**	**2.10**	**316.97**	**0.00**	**0.00**	**1.02**	**1.55**	**17.63**	**798.77**
	Waste Disposal									
110	Sewage Treatment	0.11	0.84	279.91	32.99	1.44	0.00	0.00	0.00	0.00
120	Landfills	0.00	0.00	36.51	0.88	1.10	0.00	0.00	0.12	0.00
130	Incineration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.00	0.04	78.43	2.36	0.10	0.29	0.03	0.29	0.00
	Total	**0.11**	**0.88**	**394.84**	**36.24**	**2.63**	**0.29**	**0.03**	**0.41**	**0.00**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	1.64	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	2.28	694.38	576.25	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	0.38	12255.82	41.49	0.01	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	18.82	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	298.63	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.00	85.42	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**2.65**	**13353.07**	**619.39**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	13.78	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	238.16	0.00	0.00	0.45	0.00	0.00	0.00
330	Petroleum Marketing	1.35	0.00	898.38	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.35**	**0.00**	**1150.66**	**0.00**	**0.00**	**0.45**	**0.00**	**0.00**	**0.00**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Industrial Processes									
410	Chemical	0.56	1666.14	1330.99	0.00	49.22	0.00	0.42	0.17	0.00
420	Food and Agriculture	0.00	0.00	71.34	0.00	0.00	0.02	0.00	0.60	0.00
430	Mineral Processes	0.00	0.05	7.22	0.00	0.00	10.78	0.79	22.15	0.00
440	Metal Processes	0.00	0.60	5.63	0.00	0.18	0.58	0.58	23.34	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.00
460	Glass and Related Products	0.00	0.00	3.44	0.00	0.00	10.31	0.00	2.83	0.00
470	Electronics	0.00	0.04	16.28	0.00	0.00	0.00	0.01	0.01	0.00
499	Other	0.16	1.37	758.59	0.00	0.49	0.00	0.02	0.08	0.00
	Total	**0.72**	**1668.19**	**2193.49**	**0.00**	**49.89**	**21.69**	**1.86**	**49.27**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.19	10.63	7962.98	524.12	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	41.35	1803.59	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	13.29	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.19**	**51.98**	**9780.11**	**524.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	281.23	0.00	0.00	0.13	0.06	0.09	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.04	0.05	0.49	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	4.08	5.04	53.76	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	7.16	1.65	9.36	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.52	0.45	0.59	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.12	0.17	1.77	0.00
660	Fires	0.00	0.00	55.11	0.00	0.00	0.00	0.02	0.01	0.00
670	Waste Burning and Disposal	0.00	0.00	0.75	0.00	0.00	0.24	0.03	0.01	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	489.72	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**826.81**	**0.00**	**0.00**	**12.29**	**7.47**	**66.08**	**0.00**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	81.15	5092.23	0.00	0.00	0.06	0.00	9.78	40.60
722	Light Duty Trucks 1	0.00	15.67	1088.61	0.00	0.00	0.01	0.00	1.54	55.32
723	Light Duty Trucks 2	0.00	48.37	3204.35	0.00	0.00	0.03	0.00	6.33	9.91
724	Medium Duty Trucks	0.00	33.26	1866.58	0.00	0.00	0.01	0.00	2.91	8.10
732	Light Heavy Duty Gas Trucks 1	0.00	16.76	864.66	0.00	0.00	0.00	0.00	0.31	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	3.23	169.17	0.00	0.00	0.00	0.00	0.06	0.00
734	Medium Heavy Duty Gas Trucks	0.00	7.49	327.83	0.00	0.00	0.00	0.00	0.05	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	5.27	210.45	0.00	0.00	0.00	0.00	0.02	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.23	10.24	0.00	0.00	0.00	0.01	0.06	90.48
743	Light Heavy Duty Diesel Trucks 2	0.00	0.22	9.86	0.00	0.00	0.00	0.01	0.04	75.16
744	Medium Heavy Duty Diesel Truck	0.00	0.55	24.75	0.00	0.00	0.00	0.00	0.17	74.27
746	Heavy Heavy Duty Diesel Trucks	0.00	5.80	260.21	0.00	0.00	0.01	0.06	0.74	951.65
750	Motorcycles	0.00	21.58	1179.21	0.00	0.00	0.00	0.00	0.13	0.00
760	Diesel Urban Buses	0.00	0.48	21.60	0.00	0.00	0.00	0.02	0.02	319.45
762	Gas Urban Buses	0.00	1.21	57.04	0.00	0.00	0.00	0.00	0.01	0.00
770	School Buses	0.00	0.54	26.31	0.00	0.00	0.00	0.02	0.02	286.92
776	Other Bus	0.00	1.15	46.14	0.00	0.00	0.00	0.01	0.02	76.72
780	Motor Homes	0.00	0.72	36.93	0.00	0.00	0.00	0.00	0.04	29.02
	Total	**0.00**	**243.68**	**14496.19**	**0.00**	**0.00**	**0.12**	**0.14**	**22.24**	**2017.60**
	Other Mobile Sources									
810	Aircraft	0.00	98.83	281.76	0.00	0.00	4.77	0.45	5.42	0.00
820	Trains	0.00	2.43	118.62	0.00	0.00	0.00	0.02	0.00	352.37
830	Ships and Commercial Boats	0.00	1.77	157.18	0.00	0.00	0.00	0.00	0.00	2732.43
840	Recreational Boats	0.00	49.63	3018.24	0.00	0.00	0.00	0.00	3.32	53.75
850	Off-Road Recreational Vehicles	0.00	10.65	658.26	0.00	0.00	0.00	0.00	0.07	0.00
860	Off-Road Equipment	0.00	90.51	5245.91	0.00	0.00	0.03	0.45	1.93	6775.29
870	Farm Equipment	0.00	1.21	61.44	0.00	0.00	0.00	0.03	0.01	485.58
890	Fuel Storage and Handling	0.00	0.00	238.99	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**255.03**	**9780.42**	**0.00**	**0.00**	**4.80**	**0.96**	**10.77**	**10399.42**
	Total Stationary and Area Sources	**2.36**	**1725.80**	**28015.95**	**1179.75**	**52.53**	**35.75**	**10.91**	**133.38**	**798.77**
	Total On-Road Vehicles	**0.00**	**243.68**	**14496.19**	**0.00**	**0.00**	**0.12**	**0.14**	**22.24**	**2017.60**
	Total Other Mobile	**0.00**	**255.03**	**9780.42**	**0.00**	**0.00**	**4.80**	**0.96**	**10.77**	**10399.42**
	Total Anthropogenic	**2.36**	**2224.51**	**52292.55**	**1179.75**	**52.53**	**40.66**	**12.00**	**166.39**	**13215.79**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Fuel Combustion									
10	Electric Utilities	162.61	968.92	967.18	0.00	0.00	0.09	15.62	0.01	1.14
20	Cogeneration	0.00	18.16	18.01	0.00	0.00	0.05	0.00	0.00	0.00
30	Oil and Gas Production	13.07	42.31	41.19	0.05	1.02	0.26	0.00	0.24	0.07
40	Petroleum Refining	0.00	348.83	337.05	0.01	1.16	12.91	0.00	12.78	0.00
50	Manufacturing and Industrial	113.00	874.36	871.27	0.01	0.23	2.59	0.00	2.35	0.64
52	Food and Agricultural Processing	46.93	54.93	54.64	0.00	0.02	0.18	0.00	0.18	0.28
60	Service and Commercial	162.42	1301.42	1300.67	0.01	0.04	0.21	0.00	0.08	0.92
99	Other	260.89	25.15	23.82	0.00	0.04	0.42	0.00	0.40	1.55
	Total	**758.93**	**3634.08**	**3613.83**	**0.09**	**2.51**	**16.70**	**15.62**	**16.04**	**4.60**
	Waste Disposal									
110	Sewage Treatment	0.00	3.18	3.18	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	0.00	299.48	277.65	0.00	0.14	0.07	78.97	0.00	0.00
130	Incineration	0.00	96.42	96.42	0.00	0.00	10.58	0.00	0.00	10.58
199	Other	0.00	8.25	7.96	0.01	0.30	0.03	0.12	0.03	0.52
	Total	**0.00**	**407.33**	**385.21**	**0.02**	**0.44**	**10.68**	**79.09**	**0.03**	**11.10**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	843.24	780.87	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	58.75	54.35	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**902.08**	**835.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	110.16	105.84	0.00	0.45	0.45	0.00	0.00	89.42
330	Petroleum Marketing	0.00	15.91	14.72	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**129.90**	**124.39**	**0.00**	**0.45**	**0.45**	**0.00**	**0.00**	**89.42**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Industrial Processes									
410	Chemical	0.00	157.53	140.67	0.01	0.19	0.47	57.82	0.00	2.87
420	Food and Agriculture	0.00	316.55	3.10	0.00	0.00	0.35	0.00	0.00	172.65
430	Mineral Processes	0.00	378.13	88.04	0.18	0.80	6.48	18.30	1.60	1383.27
440	Metal Processes	0.00	263.78	148.10	0.24	6.54	6.46	89.80	0.00	0.00
450	Wood and Paper	0.00	83.01	25.46	0.00	0.12	0.12	112.36	0.00	0.79
460	Glass and Related Products	0.00	58.75	59.56	0.14	2.83	0.27	0.00	19.58	12.91
470	Electronics	0.00	1.72	0.41	0.00	0.03	0.01	5.99	0.01	1.66
499	Other	0.00	226.78	150.86	0.00	0.27	0.15	45.23	0.09	30.44
	Total	**0.00**	**1486.25**	**616.21**	**0.56**	**10.78**	**14.32**	**329.49**	**21.28**	**1604.58**
	Solvent Evaporation									
510	Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	29.14	26.95	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**29.14**	**26.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	5051.65	4230.60	0.00	0.24	0.01	6772.16	0.02	0.21
620	Farming Operations	0.00	10.37	0.84	0.00	0.15	0.12	63.28	0.00	443.13
630	Construction and Demolition	0.00	1109.69	72.65	0.00	133.67	14.16	10548.49	0.48	45647.83
640	Paved Road Dust	0.00	4247.94	293.11	0.50	68.25	6.60	32881.62	1.10	167139.69
645	Unpaved Road Dust	0.00	40.44	2.37	0.00	4.52	1.29	1170.15	0.10	11284.64
650	Fugitive Windblown Dust	0.00	23.47	1.42	0.00	3.26	0.44	224.42	0.01	1523.04
660	Fires	0.00	219.29	193.06	0.00	0.05	0.00	215.66	0.00	37.27
670	Waste Burning and Disposal	0.00	2226.02	1854.36	0.00	0.46	0.01	5815.96	0.03	15.69
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	15793.46	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**12928.87**	**6648.41**	**0.50**	**210.59**	**22.62**	**73485.22**	**1.76**	**226091.47**

Table B-4: 2014 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	37.35	2089.54	1304.07	0.48	0.85	6.79	2298.31	0.18	387.96
722	Light Duty Trucks 1	50.89	356.52	234.31	0.08	0.13	1.10	379.31	0.03	58.47
723	Light Duty Trucks 2	9.12	1708.11	1277.22	0.31	0.38	4.98	1030.62	0.08	174.92
724	Medium Duty Trucks	7.46	785.62	587.01	0.14	0.18	2.29	477.27	0.04	80.58
732	Light Heavy Duty Gas Trucks 1	0.00	74.00	38.94	0.02	0.04	0.21	103.43	0.01	13.00
733	Light Heavy Duty Gas Trucks 2	0.00	15.45	8.27	0.00	0.01	0.04	21.08	0.00	2.65
734	Medium Heavy Duty Gas Trucks	0.00	12.31	6.87	0.00	0.01	0.03	15.56	0.00	1.95
736	Heavy Heavy Duty Gas Trucks	0.00	4.16	2.59	0.00	0.00	0.02	4.80	0.00	1.08
742	Light Heavy Duty Diesel Trucks 1	83.24	33.63	24.79	0.00	0.01	0.03	86.65	0.00	3.34
743	Light Heavy Duty Diesel Trucks 2	69.15	26.16	20.12	0.00	0.01	0.02	67.76	0.00	2.22
744	Medium Heavy Duty Diesel Truck	68.33	51.42	26.76	0.01	0.03	0.10	127.43	0.01	9.83
746	Heavy Heavy Duty Diesel Trucks	875.52	422.23	278.45	0.04	0.18	0.44	1064.47	0.03	43.61
750	Motorcycles	0.00	40.15	25.45	0.01	0.01	0.11	13.73	0.00	2.33
760	Diesel Urban Buses	293.89	84.29	78.29	0.00	0.01	0.01	224.79	0.00	1.84
762	Gas Urban Buses	0.00	3.36	2.20	0.00	0.00	0.01	3.08	0.00	0.40
770	School Buses	263.96	76.45	70.70	0.00	0.01	0.01	202.71	0.00	1.50
776	Other Bus	70.58	23.40	20.21	0.00	0.00	0.01	59.30	0.00	1.06
780	Motor Homes	26.70	15.96	10.09	0.00	0.01	0.03	37.16	0.00	2.25
	Total	**1856.19**	**5822.75**	**4016.34**	**1.11**	**1.86**	**16.25**	**6217.46**	**0.39**	**788.98**
	Other Mobile Sources									
810	Aircraft	0.00	397.27	360.01	0.27	4.95	1.11	0.00	0.45	0.00
820	Trains	307.38	90.61	81.26	0.00	0.01	0.01	242.11	0.00	1.01
830	Ships and Commercial Boats	2544.11	109.30	101.76	0.01	0.00	0.00	0.00	0.00	15.03
840	Recreational Boats	49.46	1343.38	917.18	0.17	0.00	3.32	36.93	0.00	0.15
850	Off-Road Recreational Vehicles	0.00	28.16	19.15	0.00	0.00	0.07	0.00	0.00	0.00
860	Off-Road Equipment	6233.51	2487.47	2169.21	0.11	0.20	1.97	4655.36	0.03	19.44
870	Farm Equipment	446.78	128.82	120.81	0.00	0.01	0.02	333.65	0.00	1.39
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**9581.24**	**4584.99**	**3769.39**	**0.57**	**5.18**	**6.50**	**5268.06**	**0.49**	**37.02**
	Total Stationary and Area Sources	**758.93**	**19517.64**	**12250.30**	**1.17**	**224.78**	**64.78**	**73909.42**	**39.11**	**227801.17**
	Total On-Road Vehicles	**1856.19**	**5822.75**	**4016.34**	**1.11**	**1.86**	**16.25**	**6217.46**	**0.39**	**788.98**
	Total Other Mobile	**9581.24**	**4584.99**	**3769.39**	**0.57**	**5.18**	**6.50**	**5268.06**	**0.49**	**37.02**
	Total Anthropogenic	**12196.37**	**29925.38**	**20036.03**	**2.84**	**231.81**	**87.52**	**85394.95**	**39.99**	**228627.19**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Fuel Combustion									
10	Electric Utilities	22.92	20.72	188.77	0.53	0.00	0.00	0.00	0.00	0.00
20	Cogeneration	0.47	0.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	2.07	0.89	17.41	0.03	0.00	0.00	0.00	0.00	0.00
40	Petroleum Refining	1.30	0.11	12.02	0.20	0.00	0.00	0.00	0.00	0.00
50	Manufacturing and Industrial	23.97	16.24	141.41	1.32	0.00	0.00	0.00	0.00	0.00
52	Food and Agricultural Processing	3.27	3.33	11.75	0.10	0.00	0.00	0.00	0.00	0.00
60	Service and Commercial	32.50	25.50	124.98	2.89	0.00	0.00	0.00	0.00	0.00
99	Other	9.53	6.43	21.81	5.07	0.00	0.00	0.00	0.00	0.00
	Total	**96.03**	**73.22**	**519.87**	**10.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	4.61	5.11	14.04	0.00	2.06	228.27	0.00	0.90	0.69
120	Landfills	0.00	1.03	2.19	0.00	0.00	0.00	0.59	0.00	0.00
130	Incineration	0.00	0.00	99.06	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.35	2529.38	1.01	0.00	0.16	17.51	0.00	0.07	0.05
	Total	**4.96**	**2535.53**	**116.31**	**0.00**	**2.22**	**245.78**	**0.59**	**0.97**	**0.74**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	3203.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.01	1030.66	11.53	0.01	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	1.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	1269.70	1.86	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**5505.57**	**13.39**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	24.16	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	40.79	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	1.35	0.00	233.61	0.00	1.35	1.35	0.00	0.00	1.35
399	Other	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.35**	**0.00**	**298.64**	**0.00**	**1.35**	**1.35**	**0.00**	**0.00**	**1.35**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Industrial Processes									
410	Chemical	57.38	85.22	439.68	965.91	9.29	1.28	0.00	0.00	0.04
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	12.40	0.05	0.00	0.00	0.00	0.00	0.00
440	Metal Processes	0.24	0.36	1.76	0.12	0.04	0.01	0.00	0.00	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	7.43	0.00	0.00	0.00	0.00	0.00	0.00
499	Other	0.77	1.33	14.68	0.40	0.28	0.20	0.00	0.00	0.19
	Total	**58.40**	**86.91**	**475.95**	**966.47**	**9.61**	**1.49**	**0.00**	**0.00**	**0.23**
	Solvent Evaporation									
510	Consumer Products	0.00	18423.90	1.11	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	4.91	973.45	15.24	0.00	0.00	0.00	0.00	0.50	0.00
530	Pesticides/Fertilizers	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	6.10	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**4.91**	**19397.54**	**22.44**	**0.00**	**0.00**	**0.00**	**0.00**	**0.50**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	535.05	394.82	256.40	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	1820.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	96.19	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**535.05**	**2215.32**	**256.40**	**96.19**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	108.54	69.76	1039.77	166.04	0.00	0.00	0.00	0.00	0.00
722	Light Duty Trucks 1	22.93	16.10	208.27	29.64	0.00	0.00	0.00	0.00	0.00
723	Light Duty Trucks 2	77.94	49.56	801.58	122.21	0.00	0.00	0.00	0.00	0.00
724	Medium Duty Trucks	60.47	37.45	493.45	87.76	0.00	0.00	0.00	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	31.00	20.15	237.88	45.57	0.00	0.00	0.00	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	5.02	3.30	37.68	7.18	0.00	0.00	0.00	0.00	0.00
734	Medium Heavy Duty Gas Trucks	9.85	6.49	58.95	14.00	0.00	0.00	0.00	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	6.02	3.85	37.64	9.27	0.00	0.00	0.00	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	32.57	33.25	8.86	0.84	0.00	0.00	0.00	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	24.72	25.24	6.73	0.64	0.00	0.00	0.00	0.00	0.00
744	Medium Heavy Duty Diesel Truck	124.04	126.64	33.75	3.21	0.00	0.00	0.00	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	1015.59	1036.86	276.36	26.24	0.00	0.00	0.00	0.00	0.00
750	Motorcycles	121.65	63.39	585.54	135.99	0.00	0.00	0.00	0.00	0.00
760	Diesel Urban Buses	52.81	53.91	14.37	1.36	0.00	0.00	0.00	0.00	0.00
762	Gas Urban Buses	2.83	1.67	23.83	5.24	0.00	0.00	0.00	0.00	0.00
770	School Buses	25.32	25.57	12.15	1.81	0.00	0.00	0.00	0.00	0.00
776	Other Bus	7.29	6.88	10.99	2.35	0.00	0.00	0.00	0.00	0.00
780	Motor Homes	2.07	1.83	5.84	1.16	0.00	0.00	0.00	0.00	0.00
	Total	**1730.66**	**1581.91**	**3893.63**	**660.50**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	1322.30	5.57	630.14	515.01	0.00	0.00	0.00	0.00	0.00
820	Trains	449.97	459.40	122.45	11.63	0.00	0.00	0.00	0.00	0.00
830	Ships and Commercial Boats	268.16	273.77	174.73	6.93	0.00	0.00	0.00	0.00	0.00
840	Recreational Boats	452.33	254.85	1464.76	329.83	0.00	0.00	0.00	0.00	0.00
850	Off-Road Recreational Vehicles	110.31	53.23	411.75	94.15	0.00	0.00	0.00	0.00	0.00
860	Off-Road Equipment	2676.60	2436.97	2577.53	522.75	0.00	0.00	0.00	0.00	0.00
870	Farm Equipment	65.76	66.18	24.10	3.17	0.00	0.00	0.00	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	36.64	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**5345.43**	**3549.97**	**5442.10**	**1483.46**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Stationary and Area Sources	**700.71**	**29814.09**	**1703.00**	**1072.80**	**13.19**	**248.62**	**0.59**	**1.47**	**2.33**
	Total On-Road Vehicles	**1730.66**	**1581.91**	**3893.63**	**660.50**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Other Mobile	**5345.43**	**3549.97**	**5442.10**	**1483.46**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Anthropogenic	**7776.79**	**34945.97**	**11038.73**	**3216.76**	**13.19**	**248.62**	**0.59**	**1.47**	**2.33**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Fuel Combustion									
10	Electric Utilities	0.00	0.00	464.56	4.08	0.00	0.00	0.24	0.00	0.00
20	Cogeneration	0.00	0.00	12.69	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	0.00	0.00	59.60	0.18	0.00	0.00	0.01	0.00	0.00
40	Petroleum Refining	0.00	0.00	275.68	0.01	0.00	0.00	0.03	0.00	0.00
50	Manufacturing and Industrial	0.00	0.00	468.52	3.16	0.00	0.00	0.33	0.00	0.00
52	Food and Agricultural Processing	0.00	0.00	28.14	0.65	0.00	0.00	0.04	0.00	0.00
60	Service and Commercial	0.00	0.00	372.86	4.98	0.00	0.00	0.73	0.00	0.00
99	Other	0.00	0.00	29.42	1.08	0.00	0.00	0.84	0.00	0.00
	Total	**0.00**	**0.00**	**1711.46**	**14.13**	**0.00**	**0.00**	**2.21**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	1.26	0.39	24.64	0.00	350.76	0.00	0.00	34.74	285.79
120	Landfills	0.10	0.00	53.83	1.29	3.09	0.00	0.00	0.00	1.57
130	Incineration	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.10	0.00	1.84	0.00	26.90	0.00	0.00	2.66	21.92
	Total	**1.45**	**0.39**	**81.06**	**1.29**	**380.75**	**0.00**	**0.00**	**37.40**	**309.28**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	876.73
220	Degreasing	0.00	0.00	0.00	1303.40	6511.59	0.00	30.75	0.00	796.01
230	Coatings and Related Processes	0.01	0.00	0.02	2117.66	14.24	0.00	5.13	0.02	195.50
240	Printing	0.00	0.00	0.00	567.04	0.00	0.00	13.75	0.00	1.82
250	Adhesives and Sealants	0.00	0.00	0.00	1067.64	34.14	0.00	0.00	0.00	0.00
299	Other	0.00	19.76	0.00	0.01	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**19.76**	**0.02**	**5055.75**	**6559.98**	**0.00**	**49.62**	**0.02**	**1870.06**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	2.79	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	116.40	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	0.00	0.00	1.35	0.00	0.00	1.35	3.05	0.00	0.00
399	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**120.54**	**0.00**	**0.00**	**1.35**	**3.05**	**0.00**	**0.00**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Industrial Processes									
410	Chemical	77.68	2.16	1.42	65.80	0.00	62.52	0.30	99.26	0.00
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	14.46	0.00	0.00	0.00	4.40	0.00	0.00
440	Metal Processes	0.33	0.01	0.36	0.25	0.00	0.00	0.02	0.42	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	0.15	0.00	0.00	0.00	0.02	0.00	0.00
499	Other	0.79	0.02	2.80	0.79	0.00	0.19	0.05	1.01	0.00
	Total	**78.80**	**2.19**	**19.20**	**66.84**	**0.00**	**62.71**	**4.78**	**100.69**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.00	60.60	10.33	2274.73	8278.17	0.00	445.61	3884.69	5556.00
520	Architectural Coatings & Related Solvent	0.00	0.00	1.09	475.10	208.90	0.00	44.44	0.00	5.26
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	0.00	0.00	0.00	0.00	111.92	0.00	0.00
	Total	**0.00**	**60.60**	**11.43**	**2749.83**	**8487.07**	**0.00**	**601.98**	**3884.69**	**5561.26**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	1091.30	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**1091.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	0.00	380.61	11.06	0.00	0.00	64.11	0.00	0.00
722	Light Duty Trucks 1	0.00	0.00	77.26	2.67	0.00	0.00	14.34	0.00	0.00
723	Light Duty Trucks 2	0.00	0.00	284.93	7.71	0.00	0.00	51.83	0.00	0.00
724	Medium Duty Trucks	0.00	0.00	210.90	5.85	0.00	0.00	27.44	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	0.00	0.00	95.28	3.37	0.00	0.00	13.67	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	0.00	14.29	0.56	0.00	0.00	2.29	0.00	0.00
734	Medium Heavy Duty Gas Trucks	0.00	0.00	27.37	1.14	0.00	0.00	2.52	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	0.00	20.71	0.62	0.00	0.00	1.11	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.00	65.17	6.54	0.00	0.00	0.38	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	0.00	0.00	49.47	4.97	0.00	0.00	0.29	0.00	0.00
744	Medium Heavy Duty Diesel Truck	0.00	0.00	248.22	24.91	0.00	0.00	1.43	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	0.00	0.00	2032.28	203.99	0.00	0.00	11.74	0.00	0.00
750	Motorcycles	0.00	0.00	419.25	9.26	0.00	0.00	19.67	0.00	0.00
760	Diesel Urban Buses	0.00	0.00	105.67	10.61	0.00	0.00	0.61	0.00	0.00
762	Gas Urban Buses	0.00	0.00	14.56	0.21	0.00	0.00	0.56	0.00	0.00
770	School Buses	0.00	0.00	52.52	5.01	0.00	0.00	0.44	0.00	0.00
776	Other Bus	0.00	0.00	15.76	1.33	0.00	0.00	0.49	0.00	0.00
780	Motor Homes	0.00	0.00	6.13	0.33	0.00	0.00	0.17	0.00	0.00
	Total	**0.00**	**0.00**	**4120.36**	**300.14**	**0.00**	**0.00**	**213.08**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	0.00	0.00	4256.84	1.56	0.00	5.79	162.33	0.00	0.00
820	Trains	0.00	0.00	900.44	90.38	0.00	0.00	5.20	0.00	0.00
830	Ships and Commercial Boats	0.00	0.00	541.31	53.86	0.00	0.00	6.39	0.00	0.00
840	Recreational Boats	0.00	0.00	1319.41	37.67	0.00	0.00	53.17	0.00	0.00
850	Off-Road Recreational Vehicles	0.00	0.00	339.62	6.89	0.00	0.00	15.03	0.00	0.00
860	Off-Road Equipment	0.00	0.00	5962.48	461.66	0.00	0.00	99.28	0.00	0.00
870	Farm Equipment	0.00	0.00	133.49	12.96	0.00	0.00	0.98	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**13453.60**	**664.99**	**0.00**	**5.79**	**342.39**	**0.00**	**0.00**
	Total Stationary and Area Sources	**80.26**	**82.94**	**3035.01**	**7887.84**	**15427.79**	**64.06**	**661.65**	**4022.80**	**7740.59**
	Total On-Road Vehicles	**0.00**	**0.00**	**4120.36**	**300.14**	**0.00**	**0.00**	**213.08**	**0.00**	**0.00**
	Total Other Mobile	**0.00**	**0.00**	**13453.60**	**664.99**	**0.00**	**5.79**	**342.39**	**0.00**	**0.00**
	Total Anthropogenic	**80.26**	**82.94**	**20608.97**	**8852.97**	**15427.79**	**69.86**	**1217.12**	**4022.80**	**7740.59**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Fuel Combustion									
10	Electric Utilities	0.00	0.16	99.24	0.00	0.00	0.00	0.00	0.10	185.53
20	Cogeneration	0.00	0.00	5.56	0.00	0.00	0.00	0.00	0.05	0.00
30	Oil and Gas Production	0.00	0.01	8.33	0.00	0.00	1.07	0.11	1.24	15.01
40	Petroleum Refining	0.00	0.03	6.71	0.00	0.00	0.00	1.44	15.95	0.00
50	Manufacturing and Industrial	0.00	0.27	76.26	0.00	0.00	0.02	0.26	3.16	140.68
52	Food and Agricultural Processing	0.00	0.03	6.71	0.00	0.00	0.00	0.02	0.19	35.21
60	Service and Commercial	0.00	0.55	69.20	0.00	0.00	0.03	0.01	0.27	197.85
99	Other	0.00	0.82	45.82	0.00	0.00	0.00	0.04	0.42	200.20
	Total	**0.00**	**1.87**	**317.83**	**0.00**	**0.00**	**1.13**	**1.88**	**21.38**	**774.48**
	Waste Disposal									
110	Sewage Treatment	0.12	0.89	298.05	35.13	1.53	0.00	0.00	0.00	0.00
120	Landfills	0.00	0.00	38.61	0.94	1.16	0.00	0.00	0.12	0.00
130	Incineration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.00	0.05	92.62	2.69	0.11	0.31	0.03	0.31	0.00
	Total	**0.12**	**0.93**	**429.29**	**38.76**	**2.80**	**0.31**	**0.03**	**0.43**	**0.00**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	2.42	738.51	636.57	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	0.40	13589.11	50.04	0.01	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	20.36	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	327.02	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.00	91.49	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**2.82**	**14766.49**	**687.37**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	13.84	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	273.78	0.00	0.00	0.54	0.00	0.00	0.00
330	Petroleum Marketing	1.35	0.00	1105.77	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.35**	**0.00**	**1393.77**	**0.00**	**0.00**	**0.54**	**0.00**	**0.00**	**0.00**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Industrial Processes									
410	Chemical	0.66	1983.95	1543.47	0.00	57.55	0.00	0.47	0.19	0.00
420	Food and Agriculture	0.00	0.00	86.55	0.00	0.00	0.02	0.00	0.65	0.00
430	Mineral Processes	0.00	0.05	8.00	0.00	0.00	10.78	0.91	22.86	0.00
440	Metal Processes	0.00	0.68	5.70	0.00	0.21	0.70	0.70	28.02	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.10	0.00
460	Glass and Related Products	0.00	0.00	3.44	0.00	0.00	12.19	0.00	3.35	0.00
470	Electronics	0.00	0.05	20.23	0.00	0.00	0.00	0.01	0.01	0.00
499	Other	0.19	1.42	1135.98	0.00	0.50	0.01	0.02	0.08	0.00
	Total	**0.86**	**1986.14**	**2803.37**	**0.00**	**58.26**	**23.70**	**2.16**	**55.26**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.24	13.31	9865.16	657.72	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	44.11	1924.07	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	14.48	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.24**	**57.43**	**11803.93**	**657.72**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	297.02	0.00	0.00	0.15	0.07	0.11	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.41	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	4.59	5.67	60.43	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	7.36	1.70	9.62	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.52	0.45	0.59	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.11	0.16	1.58	0.00
660	Fires	0.00	0.00	55.11	0.00	0.00	0.00	0.02	0.01	0.00
670	Waste Burning and Disposal	0.00	0.00	0.75	0.00	0.00	0.24	0.03	0.01	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	518.26	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**871.14**	**0.00**	**0.00**	**12.99**	**8.13**	**72.75**	**0.00**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	50.55	3810.69	0.00	0.00	0.06	0.00	10.51	14.48
722	Light Duty Trucks 1	0.00	8.80	788.71	0.00	0.00	0.01	0.00	1.67	32.08
723	Light Duty Trucks 2	0.00	36.44	2967.15	0.00	0.00	0.03	0.00	7.17	4.31
724	Medium Duty Trucks	0.00	25.43	1692.44	0.00	0.00	0.01	0.00	3.32	4.90
732	Light Heavy Duty Gas Trucks 1	0.00	14.86	840.34	0.00	0.00	0.00	0.00	0.34	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	2.44	137.21	0.00	0.00	0.00	0.00	0.07	0.00
734	Medium Heavy Duty Gas Trucks	0.00	4.75	192.74	0.00	0.00	0.00	0.00	0.05	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	2.85	106.85	0.00	0.00	0.00	0.00	0.02	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.26	11.53	0.00	0.00	0.00	0.01	0.06	93.69
743	Light Heavy Duty Diesel Trucks 2	0.00	0.19	8.75	0.00	0.00	0.00	0.00	0.04	66.31
744	Medium Heavy Duty Diesel Truck	0.00	0.98	43.91	0.00	0.00	0.01	0.11	0.20	1661.62
746	Heavy Heavy Duty Diesel Trucks	0.00	8.01	359.48	0.00	0.00	0.03	0.37	0.93	5487.56
750	Motorcycles	0.00	27.11	1419.79	0.00	0.00	0.00	0.00	0.12	0.00
760	Diesel Urban Buses	0.00	0.42	18.69	0.00	0.00	0.00	0.02	0.02	293.99
762	Gas Urban Buses	0.00	1.26	59.04	0.00	0.00	0.00	0.00	0.02	0.00
770	School Buses	0.00	0.49	23.04	0.00	0.00	0.00	0.02	0.02	331.16
776	Other Bus	0.00	0.80	33.33	0.00	0.00	0.00	0.01	0.02	78.83
780	Motor Homes	0.00	0.27	14.52	0.00	0.00	0.00	0.00	0.05	26.02
	Total	**0.00**	**185.89**	**12528.20**	**0.00**	**0.00**	**0.15**	**0.54**	**24.62**	**8094.94**
	Other Mobile Sources									
810	Aircraft	0.00	118.50	318.90	0.00	0.00	5.45	0.51	6.15	0.00
820	Trains	0.00	3.55	168.11	0.00	0.00	0.01	0.12	0.02	1756.43
830	Ships and Commercial Boats	0.00	2.12	196.20	0.00	0.00	0.00	0.00	0.00	10601.41
840	Recreational Boats	0.00	52.92	3332.49	0.00	0.00	0.00	0.00	5.75	69.40
850	Off-Road Recreational Vehicles	0.00	15.03	932.97	0.00	0.00	0.00	0.00	0.08	0.00
860	Off-Road Equipment	0.00	91.47	5173.33	0.00	0.00	0.03	0.42	1.99	6310.84
870	Farm Equipment	0.00	0.75	37.98	0.00	0.00	0.00	0.02	0.01	258.37
890	Fuel Storage and Handling	0.00	0.00	183.55	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**284.33**	**10343.53**	**0.00**	**0.00**	**5.48**	**1.08**	**14.00**	**18996.45**
	Total Stationary and Area Sources	**2.56**	**2049.20**	**32385.80**	**1383.85**	**61.07**	**38.67**	**12.19**	**149.83**	**774.48**
	Total On-Road Vehicles	**0.00**	**185.89**	**12528.20**	**0.00**	**0.00**	**0.15**	**0.54**	**24.62**	**8094.94**
	Total Other Mobile	**0.00**	**284.33**	**10343.53**	**0.00**	**0.00**	**5.48**	**1.08**	**14.00**	**18996.45**
	Total Anthropogenic	**2.56**	**2519.42**	**55257.53**	**1383.85**	**61.07**	**44.31**	**13.81**	**188.46**	**27865.88**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Fuel Combustion									
10	Electric Utilities	179.40	1069.41	1067.48	0.01	0.00	0.10	17.23	0.01	1.25
20	Cogeneration	0.00	18.52	18.37	0.00	0.00	0.05	0.00	0.00	0.00
30	Oil and Gas Production	14.51	46.56	45.33	0.05	1.13	0.27	0.00	0.25	0.08
40	Petroleum Refining	0.00	432.90	418.33	0.01	1.44	15.95	0.00	15.80	0.00
50	Manufacturing and Industrial	136.04	975.09	971.40	0.02	0.28	3.14	0.00	2.86	0.77
52	Food and Agricultural Processing	33.02	62.59	62.32	0.00	0.02	0.19	0.00	0.19	0.19
60	Service and Commercial	191.24	1264.75	1263.90	0.01	0.04	0.24	0.00	0.09	1.09
99	Other	185.67	23.00	21.94	0.00	0.04	0.42	0.00	0.40	1.10
	Total	**739.88**	**3892.82**	**3869.07**	**0.10**	**2.95**	**20.36**	**17.23**	**19.60**	**4.49**
	Waste Disposal									
110	Sewage Treatment	0.00	3.32	3.32	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	0.00	341.62	318.79	0.00	0.15	0.07	82.55	0.00	0.00
130	Incineration	0.00	103.63	103.63	0.00	0.00	10.68	0.00	0.00	10.68
199	Other	0.00	8.74	8.44	0.02	0.32	0.03	0.12	0.03	0.53
	Total	**0.00**	**457.30**	**434.18**	**0.02**	**0.47**	**10.78**	**82.67**	**0.03**	**11.21**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	1023.32	947.57	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	62.56	57.87	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**1085.98**	**1005.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	113.85	109.85	0.00	0.54	0.54	0.00	0.00	106.78
330	Petroleum Marketing	0.00	16.50	15.27	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**134.19**	**128.95**	**0.00**	**0.54**	**0.54**	**0.00**	**0.00**	**106.78**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Industrial Processes									
410	Chemical	0.00	176.66	157.61	0.01	0.21	0.54	66.51	0.00	3.42
420	Food and Agriculture	0.00	335.87	3.29	0.00	0.00	0.38	0.00	0.00	183.32
430	Mineral Processes	0.00	403.93	94.67	0.21	0.91	7.47	19.34	1.73	1551.97
440	Metal Processes	0.00	312.94	176.78	0.28	7.84	7.75	96.83	0.00	0.00
450	Wood and Paper	0.00	92.51	28.19	0.00	0.14	0.14	114.40	0.00	0.80
460	Glass and Related Products	0.00	69.50	70.45	0.17	3.35	0.32	0.00	23.17	14.04
470	Electronics	0.00	1.89	0.45	0.00	0.03	0.01	6.56	0.01	1.81
499	Other	0.00	260.92	178.21	0.00	0.29	0.17	46.28	0.11	32.73
	Total	**0.00**	**1654.22**	**709.65**	**0.67**	**12.76**	**16.78**	**349.92**	**25.01**	**1788.10**
	Solvent Evaporation									
510	Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	31.52	29.15	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**31.52**	**29.15**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	5676.79	4709.29	0.01	0.28	0.01	7980.19	0.03	0.24
620	Farming Operations	0.00	8.63	0.70	0.00	0.12	0.10	52.67	0.00	368.85
630	Construction and Demolition	0.00	1247.49	81.67	0.00	150.27	15.92	11858.40	0.54	51316.34
640	Paved Road Dust	0.00	4366.83	301.31	0.51	70.16	6.79	33801.91	1.13	171817.61
645	Unpaved Road Dust	0.00	40.27	2.36	0.00	4.50	1.28	1165.28	0.10	11237.60
650	Fugitive Windblown Dust	0.00	19.37	1.20	0.00	3.20	0.39	199.38	0.01	1347.68
660	Fires	0.00	219.29	193.06	0.00	0.05	0.00	215.66	0.00	37.27
670	Waste Burning and Disposal	0.00	2225.13	1853.68	0.00	0.46	0.01	5814.48	0.03	15.69
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	16701.75	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**13803.80**	**7143.27**	**0.51**	**229.04**	**24.49**	**77789.73**	**1.85**	**236141.28**

Table B-5: 2020 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	13.32	2299.95	1469.96	0.52	0.88	7.40	2375.61	0.19	404.16
722	Light Duty Trucks 1	29.51	388.89	259.62	0.08	0.13	1.20	379.73	0.03	61.18
723	Light Duty Trucks 2	3.97	2000.48	1526.91	0.36	0.40	5.76	1081.29	0.09	184.23
724	Medium Duty Trucks	4.51	926.06	706.18	0.16	0.19	2.66	504.67	0.04	85.65
732	Light Heavy Duty Gas Trucks 1	0.00	83.81	45.41	0.02	0.04	0.24	112.44	0.01	14.13
733	Light Heavy Duty Gas Trucks 2	0.00	17.14	9.20	0.00	0.01	0.05	23.32	0.00	2.94
734	Medium Heavy Duty Gas Trucks	0.00	13.74	7.77	0.00	0.01	0.04	17.20	0.00	2.15
736	Heavy Heavy Duty Gas Trucks	0.00	2.74	1.70	0.00	0.00	0.01	3.23	0.00	0.74
742	Light Heavy Duty Diesel Trucks 1	86.20	35.39	25.83	0.00	0.01	0.04	91.08	0.00	3.62
743	Light Heavy Duty Diesel Trucks 2	61.00	24.39	18.10	0.00	0.01	0.02	62.90	0.00	2.37
744	Medium Heavy Duty Diesel Truck	1528.69	461.75	413.41	0.01	0.08	0.13	1223.23	0.01	15.00
746	Heavy Heavy Duty Diesel Trucks	5048.55	1623.63	1390.93	0.06	0.34	0.60	4262.24	0.06	64.70
750	Motorcycles	0.00	35.93	22.56	0.01	0.01	0.10	14.58	0.00	2.51
760	Diesel Urban Buses	270.47	77.79	72.11	0.00	0.01	0.01	207.40	0.00	1.76
762	Gas Urban Buses	0.00	4.19	2.68	0.00	0.00	0.01	4.08	0.00	0.50
770	School Buses	304.66	88.11	81.56	0.00	0.01	0.01	233.69	0.00	1.69
776	Other Bus	72.53	23.92	20.67	0.00	0.00	0.01	60.87	0.00	1.08
780	Motor Homes	23.94	15.98	9.59	0.00	0.01	0.03	36.97	0.00	2.48
	Total	**7447.35**	**8123.90**	**6084.20**	**1.24**	**2.15**	**18.33**	**10694.51**	**0.44**	**850.89**
	Other Mobile Sources									
810	Aircraft	0.00	436.14	396.09	0.31	5.66	1.22	0.00	0.51	0.00
820	Trains	1600.21	451.64	423.04	0.01	0.05	0.03	1206.86	0.01	5.04
830	Ships and Commercial Boats	9913.51	424.06	396.54	0.03	0.00	0.00	0.00	0.00	58.31
840	Recreational Boats	63.85	2315.92	1579.58	0.29	0.00	5.75	47.68	0.00	0.20
850	Off-Road Recreational Vehicles	0.00	33.12	22.52	0.00	0.00	0.08	0.00	0.00	0.00
860	Off-Road Equipment	5806.14	2394.08	2074.99	0.12	0.19	2.03	4336.23	0.03	18.11
870	Farm Equipment	237.71	70.55	65.65	0.00	0.01	0.01	177.53	0.00	0.74
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**17621.42**	**6125.52**	**4958.41**	**0.75**	**5.91**	**9.12**	**5768.31**	**0.56**	**82.39**
	Total Stationary and Area Sources	**739.88**	**21059.83**	**13319.81**	**1.30**	**245.75**	**72.96**	**78239.55**	**46.49**	**238051.86**
	Total On-Road Vehicles	**7447.35**	**8123.90**	**6084.20**	**1.24**	**2.15**	**18.33**	**10694.51**	**0.44**	**850.89**
	Total Other Mobile	**17621.42**	**6125.52**	**4958.41**	**0.75**	**5.91**	**9.12**	**5768.31**	**0.56**	**82.39**
	Total Anthropogenic	**25808.65**	**35309.25**	**24362.42**	**3.29**	**253.81**	**100.41**	**94702.36**	**47.49**	**238985.14**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Fuel Combustion									
10	Electric Utilities	22.90	20.72	188.72	0.53	0.00	0.00	0.00	0.00	0.00
20	Cogeneration	0.38	0.00	1.41	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	1.78	0.88	15.67	0.03	0.00	0.00	0.00	0.00	0.00
40	Petroleum Refining	0.91	0.08	10.61	0.14	0.00	0.00	0.00	0.00	0.00
50	Manufacturing and Industrial	21.40	14.79	126.36	1.26	0.00	0.00	0.00	0.00	0.00
52	Food and Agricultural Processing	3.24	3.30	10.38	0.10	0.00	0.00	0.00	0.00	0.00
60	Service and Commercial	29.56	22.77	121.81	2.57	0.00	0.00	0.00	0.00	0.00
99	Other	9.45	6.35	21.78	5.06	0.00	0.00	0.00	0.00	0.00
	Total	**89.62**	**68.90**	**496.74**	**9.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	4.55	5.04	13.85	0.00	2.03	225.06	0.00	0.89	0.68
120	Landfills	0.00	1.03	2.18	0.00	0.00	0.00	0.59	0.00	0.00
130	Incineration	0.00	0.00	71.48	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.34	2529.37	0.99	0.00	0.15	17.12	0.00	0.07	0.05
	Total	**4.89**	**2535.44**	**88.51**	**0.00**	**2.19**	**242.18**	**0.59**	**0.96**	**0.73**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	3203.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.01	980.55	11.03	0.01	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	1.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	1253.42	1.86	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**5439.19**	**12.90**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	23.83	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	35.75	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	1.34	0.00	196.03	0.00	1.34	1.34	0.00	0.00	1.34
399	Other	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.34**	**0.00**	**255.69**	**0.00**	**1.34**	**1.34**	**0.00**	**0.00**	**1.34**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Industrial Processes									
410	Chemical	41.20	60.69	298.73	597.67	6.67	0.92	0.00	0.00	0.03
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	9.56	0.05	0.00	0.00	0.00	0.00	0.00
440	Metal Processes	0.24	0.36	1.76	0.12	0.04	0.01	0.00	0.00	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	7.32	0.00	0.00	0.00	0.00	0.00	0.00
499	Other	0.70	1.32	11.77	0.35	0.22	0.14	0.00	0.00	0.13
	Total	**42.15**	**62.37**	**329.14**	**598.18**	**6.93**	**1.07**	**0.00**	**0.00**	**0.16**
	Solvent Evaporation									
510	Consumer Products	0.00	15420.80	0.93	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	4.81	953.98	14.93	0.00	0.00	0.00	0.00	0.49	0.00
530	Pesticides/Fertilizers	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	6.10	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**4.81**	**16374.98**	**21.96**	**0.00**	**0.00**	**0.00**	**0.00**	**0.49**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	535.05	394.82	256.40	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	1500.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	96.19	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**535.05**	**1895.07**	**256.40**	**96.19**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	97.91	62.89	933.05	149.93	0.00	0.00	0.00	0.00	0.00
722	Light Duty Trucks 1	20.45	14.28	186.65	26.76	0.00	0.00	0.00	0.00	0.00
723	Light Duty Trucks 2	70.34	44.72	719.07	110.36	0.00	0.00	0.00	0.00	0.00
724	Medium Duty Trucks	54.57	33.77	443.36	79.24	0.00	0.00	0.00	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	25.73	16.73	196.50	37.82	0.00	0.00	0.00	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	4.57	3.00	33.99	6.53	0.00	0.00	0.00	0.00	0.00
734	Medium Heavy Duty Gas Trucks	9.85	6.49	58.70	14.00	0.00	0.00	0.00	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	6.02	3.85	37.60	9.27	0.00	0.00	0.00	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	25.21	25.74	6.86	0.65	0.00	0.00	0.00	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	22.50	22.97	6.12	0.58	0.00	0.00	0.00	0.00	0.00
744	Medium Heavy Duty Diesel Truck	74.05	75.60	20.15	1.91	0.00	0.00	0.00	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	606.31	619.00	164.99	15.67	0.00	0.00	0.00	0.00	0.00
750	Motorcycles	87.10	45.39	424.81	97.37	0.00	0.00	0.00	0.00	0.00
760	Diesel Urban Buses	52.81	53.91	14.37	1.36	0.00	0.00	0.00	0.00	0.00
762	Gas Urban Buses	2.83	1.67	23.81	5.24	0.00	0.00	0.00	0.00	0.00
770	School Buses	25.32	25.57	12.14	1.81	0.00	0.00	0.00	0.00	0.00
776	Other Bus	7.29	6.88	10.95	2.35	0.00	0.00	0.00	0.00	0.00
780	Motor Homes	2.07	1.83	5.82	1.16	0.00	0.00	0.00	0.00	0.00
	Total	**1194.92**	**1064.30**	**3298.93**	**562.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	1322.30	5.57	630.14	515.01	0.00	0.00	0.00	0.00	0.00
820	Trains	133.85	136.65	36.42	3.46	0.00	0.00	0.00	0.00	0.00
830	Ships and Commercial Boats	268.16	273.77	174.73	6.93	0.00	0.00	0.00	0.00	0.00
840	Recreational Boats	160.15	113.86	418.14	80.47	0.00	0.00	0.00	0.00	0.00
850	Off-Road Recreational Vehicles	50.70	24.47	195.29	43.27	0.00	0.00	0.00	0.00	0.00
860	Off-Road Equipment	1904.97	1649.18	2364.77	502.81	0.00	0.00	0.00	0.00	0.00
870	Farm Equipment	65.76	66.18	24.08	3.17	0.00	0.00	0.00	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	36.64	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**3905.89**	**2269.68**	**3880.22**	**1155.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Stationary and Area Sources	**677.87**	**26375.95**	**1461.33**	**704.07**	**10.46**	**244.58**	**0.59**	**1.45**	**2.23**
	Total On-Road Vehicles	**1194.92**	**1064.30**	**3298.93**	**562.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Other Mobile	**3905.89**	**2269.68**	**3880.22**	**1155.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Anthropogenic	**5778.69**	**29709.92**	**8640.48**	**2421.19**	**10.46**	**244.58**	**0.59**	**1.45**	**2.23**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Fuel Combustion									
10	Electric Utilities	0.00	0.00	464.19	4.08	0.00	0.00	0.24	0.00	0.00
20	Cogeneration	0.00	0.00	10.39	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	0.00	0.00	50.42	0.17	0.00	0.00	0.01	0.00	0.00
40	Petroleum Refining	0.00	0.00	197.43	0.01	0.00	0.00	0.02	0.00	0.00
50	Manufacturing and Industrial	0.00	0.00	413.33	2.88	0.00	0.00	0.31	0.00	0.00
52	Food and Agricultural Processing	0.00	0.00	25.38	0.65	0.00	0.00	0.04	0.00	0.00
60	Service and Commercial	0.00	0.00	361.51	4.45	0.00	0.00	0.66	0.00	0.00
99	Other	0.00	0.00	29.26	1.06	0.00	0.00	0.83	0.00	0.00
	Total	**0.00**	**0.00**	**1551.92**	**13.30**	**0.00**	**0.00**	**2.11**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	1.24	0.39	24.30	0.00	345.82	0.00	0.00	34.25	281.76
120	Landfills	0.10	0.00	53.83	1.28	3.07	0.00	0.00	0.00	1.56
130	Incineration	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.09	0.00	1.80	0.00	26.31	0.00	0.00	2.61	21.44
	Total	**1.43**	**0.39**	**80.54**	**1.28**	**375.20**	**0.00**	**0.00**	**36.85**	**304.76**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	876.73
220	Degreasing	0.00	0.00	0.00	1299.78	6511.59	0.00	30.73	0.00	749.63
230	Coatings and Related Processes	0.01	0.00	0.02	2034.46	9.04	0.00	5.13	0.02	167.00
240	Printing	0.00	0.00	0.00	436.38	0.00	0.00	12.81	0.00	1.82
250	Adhesives and Sealants	0.00	0.00	0.00	1053.95	34.14	0.00	0.00	0.00	0.00
299	Other	0.00	19.76	0.00	0.01	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**19.76**	**0.02**	**4824.59**	**6554.77**	**0.00**	**48.67**	**0.02**	**1795.17**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	2.71	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	109.56	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	0.00	0.00	1.34	0.00	0.00	1.34	2.83	0.00	0.00
399	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**113.61**	**0.00**	**0.00**	**1.34**	**2.83**	**0.00**	**0.00**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Industrial Processes									
410	Chemical	55.78	1.55	1.15	46.87	0.00	37.52	0.28	71.28	0.00
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	12.87	0.00	0.00	0.00	3.10	0.00	0.00
440	Metal Processes	0.33	0.01	0.36	0.25	0.00	0.00	0.02	0.42	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	0.15	0.00	0.00	0.00	0.02	0.00	0.00
499	Other	0.78	0.02	2.73	0.79	0.00	0.13	0.05	1.00	0.00
	Total	**56.89**	**1.58**	**17.27**	**47.90**	**0.00**	**37.65**	**3.47**	**72.70**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.00	50.72	8.65	1903.95	6928.82	0.00	372.97	3251.48	4650.38
520	Architectural Coatings & Related Solvent	0.00	0.00	1.07	465.60	204.72	0.00	43.55	0.00	5.15
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	0.00	0.00	0.00	0.00	111.92	0.00	0.00
	Total	**0.00**	**50.72**	**9.72**	**2369.55**	**7133.55**	**0.00**	**528.45**	**3251.48**	**4655.53**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	1091.30	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**1091.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	0.00	343.48	9.97	0.00	0.00	57.16	0.00	0.00
722	Light Duty Trucks 1	0.00	0.00	69.26	2.36	0.00	0.00	12.78	0.00	0.00
723	Light Duty Trucks 2	0.00	0.00	257.22	6.95	0.00	0.00	46.20	0.00	0.00
724	Medium Duty Trucks	0.00	0.00	190.36	5.28	0.00	0.00	24.50	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	0.00	0.00	79.08	2.80	0.00	0.00	11.21	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	0.00	13.00	0.51	0.00	0.00	2.04	0.00	0.00
734	Medium Heavy Duty Gas Trucks	0.00	0.00	27.37	1.14	0.00	0.00	2.49	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	0.00	20.71	0.62	0.00	0.00	1.10	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.00	50.44	5.06	0.00	0.00	0.29	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	0.00	0.00	45.02	4.52	0.00	0.00	0.26	0.00	0.00
744	Medium Heavy Duty Diesel Truck	0.00	0.00	148.19	14.87	0.00	0.00	0.86	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	0.00	0.00	1213.27	121.78	0.00	0.00	7.01	0.00	0.00
750	Motorcycles	0.00	0.00	300.19	6.63	0.00	0.00	14.65	0.00	0.00
760	Diesel Urban Buses	0.00	0.00	105.67	10.61	0.00	0.00	0.61	0.00	0.00
762	Gas Urban Buses	0.00	0.00	14.56	0.21	0.00	0.00	0.56	0.00	0.00
770	School Buses	0.00	0.00	52.52	5.01	0.00	0.00	0.44	0.00	0.00
776	Other Bus	0.00	0.00	15.76	1.33	0.00	0.00	0.48	0.00	0.00
780	Motor Homes	0.00	0.00	6.13	0.33	0.00	0.00	0.16	0.00	0.00
	Total	**0.00**	**0.00**	**2952.21**	**199.98**	**0.00**	**0.00**	**182.81**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	0.00	0.00	4256.84	1.56	0.00	5.79	162.33	0.00	0.00
820	Trains	0.00	0.00	267.84	26.88	0.00	0.00	1.55	0.00	0.00
830	Ships and Commercial Boats	0.00	0.00	541.31	53.86	0.00	0.00	6.39	0.00	0.00
840	Recreational Boats	0.00	0.00	419.87	19.41	0.00	0.00	13.35	0.00	0.00
850	Off-Road Recreational Vehicles	0.00	0.00	156.11	3.17	0.00	0.00	6.91	0.00	0.00
860	Off-Road Equipment	0.00	0.00	4418.39	306.67	0.00	0.00	90.36	0.00	0.00
870	Farm Equipment	0.00	0.00	133.49	12.96	0.00	0.00	0.98	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**10193.86**	**424.52**	**0.00**	**5.79**	**281.88**	**0.00**	**0.00**
	Total Stationary and Area Sources	**58.33**	**72.45**	**2864.37**	**7256.62**	**14063.52**	**38.98**	**585.54**	**3361.05**	**6755.46**
	Total On-Road Vehicles	**0.00**	**0.00**	**2952.21**	**199.98**	**0.00**	**0.00**	**182.81**	**0.00**	**0.00**
	Total Other Mobile	**0.00**	**0.00**	**10193.86**	**424.52**	**0.00**	**5.79**	**281.88**	**0.00**	**0.00**
	Total Anthropogenic	**58.33**	**72.45**	**16010.45**	**7881.12**	**14063.52**	**44.78**	**1050.23**	**3361.05**	**6755.46**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Fuel Combustion									
10	Electric Utilities	0.00	0.16	99.23	0.00	0.00	0.00	0.00	0.09	185.53
20	Cogeneration	0.00	0.00	5.44	0.00	0.00	0.00	0.00	0.05	0.00
30	Oil and Gas Production	0.00	0.01	7.60	0.00	0.00	0.75	0.08	0.92	10.54
40	Petroleum Refining	0.00	0.02	5.79	0.00	0.00	0.00	1.16	12.91	0.00
50	Manufacturing and Industrial	0.00	0.25	68.84	0.00	0.00	0.02	0.20	2.46	109.27
52	Food and Agricultural Processing	0.00	0.03	5.99	0.00	0.00	0.00	0.02	0.19	34.98
60	Service and Commercial	0.00	0.49	65.51	0.00	0.00	0.03	0.01	0.22	140.62
99	Other	0.00	0.82	45.80	0.00	0.00	0.00	0.04	0.42	173.96
	Total	**0.00**	**1.79**	**304.20**	**0.00**	**0.00**	**0.81**	**1.52**	**17.25**	**654.90**
	Waste Disposal									
110	Sewage Treatment	0.12	0.88	293.86	34.64	1.51	0.00	0.00	0.00	0.00
120	Landfills	0.00	0.00	38.39	0.93	1.15	0.00	0.00	0.12	0.00
130	Incineration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.00	0.05	67.97	2.64	0.11	0.31	0.03	0.31	0.00
	Total	**0.12**	**0.93**	**400.22**	**38.20**	**2.77**	**0.31**	**0.03**	**0.43**	**0.00**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	2.42	738.41	590.19	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	0.40	12457.88	37.88	0.01	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	19.03	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	322.83	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.00	91.49	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**2.82**	**13629.64**	**628.82**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	13.69	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	195.21	0.00	0.00	0.45	0.00	0.00	0.00
330	Petroleum Marketing	1.34	0.00	939.66	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.34**	**0.00**	**1148.94**	**0.00**	**0.00**	**0.45**	**0.00**	**0.00**	**0.00**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Industrial Processes									
410	Chemical	0.47	1606.29	1313.56	0.00	43.56	0.00	0.42	0.18	0.00
420	Food and Agriculture	0.00	0.00	55.90	0.00	0.00	0.02	0.00	0.65	0.00
430	Mineral Processes	0.00	0.05	7.20	0.00	0.00	10.78	0.78	21.77	0.00
440	Metal Processes	0.00	0.68	5.70	0.00	0.21	0.49	0.49	19.74	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.10	0.00
460	Glass and Related Products	0.00	0.00	3.44	0.00	0.00	8.57	0.00	2.36	0.00
470	Electronics	0.00	0.03	13.30	0.00	0.00	0.00	0.01	0.01	0.00
499	Other	0.13	1.40	793.12	0.00	0.50	0.01	0.02	0.08	0.00
	Total	**0.61**	**1608.46**	**2192.21**	**0.00**	**44.26**	**19.87**	**1.76**	**44.89**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.20	11.14	8257.14	550.51	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	43.23	1885.59	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	14.48	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.20**	**54.38**	**10157.43**	**550.51**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	297.02	0.00	0.00	0.13	0.06	0.09	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.41	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	4.24	5.24	55.90	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	7.36	1.70	9.62	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.52	0.45	0.59	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.11	0.16	1.58	0.00
660	Fires	0.00	0.00	55.11	0.00	0.00	0.00	0.02	0.01	0.00
670	Waste Burning and Disposal	0.00	0.00	0.75	0.00	0.00	0.24	0.03	0.01	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	518.26	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**871.14**	**0.00**	**0.00**	**12.63**	**7.69**	**68.21**	**0.00**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	45.64	3410.22	0.00	0.00	0.06	0.00	10.41	12.72
722	Light Duty Trucks 1	0.00	7.94	704.99	0.00	0.00	0.01	0.00	1.65	28.17
723	Light Duty Trucks 2	0.00	32.91	2654.22	0.00	0.00	0.03	0.00	7.05	3.79
724	Medium Duty Trucks	0.00	22.96	1516.57	0.00	0.00	0.01	0.00	3.27	4.30
732	Light Heavy Duty Gas Trucks 1	0.00	12.33	692.47	0.00	0.00	0.00	0.00	0.34	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	2.22	123.27	0.00	0.00	0.00	0.00	0.07	0.00
734	Medium Heavy Duty Gas Trucks	0.00	4.75	191.45	0.00	0.00	0.00	0.00	0.05	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	2.85	106.60	0.00	0.00	0.00	0.00	0.02	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.20	8.92	0.00	0.00	0.00	0.01	0.06	81.62
743	Light Heavy Duty Diesel Trucks 2	0.00	0.18	7.96	0.00	0.00	0.00	0.00	0.04	59.07
744	Medium Heavy Duty Diesel Truck	0.00	0.58	26.21	0.00	0.00	0.00	0.03	0.19	486.86
746	Heavy Heavy Duty Diesel Trucks	0.00	4.78	214.61	0.00	0.00	0.01	0.10	0.89	1454.21
750	Motorcycles	0.00	19.41	1045.67	0.00	0.00	0.00	0.00	0.12	0.00
760	Diesel Urban Buses	0.00	0.42	18.69	0.00	0.00	0.00	0.02	0.02	264.59
762	Gas Urban Buses	0.00	1.26	58.93	0.00	0.00	0.00	0.00	0.02	0.00
770	School Buses	0.00	0.49	22.99	0.00	0.00	0.00	0.02	0.02	298.04
776	Other Bus	0.00	0.80	33.10	0.00	0.00	0.00	0.00	0.02	70.96
780	Motor Homes	0.00	0.27	14.45	0.00	0.00	0.00	0.00	0.05	23.41
	Total	**0.00**	**159.99**	**10851.32**	**0.00**	**0.00**	**0.13**	**0.19**	**24.27**	**2787.74**
	Other Mobile Sources									
810	Aircraft	0.00	118.50	318.90	0.00	0.00	5.45	0.51	6.15	0.00
820	Trains	0.00	1.06	56.21	0.00	0.00	0.00	0.03	0.00	452.39
830	Ships and Commercial Boats	0.00	2.12	196.20	0.00	0.00	0.00	0.00	0.00	2699.92
840	Recreational Boats	0.00	13.10	1081.60	0.00	0.00	0.00	0.00	0.69	62.45
850	Off-Road Recreational Vehicles	0.00	6.91	459.02	0.00	0.00	0.00	0.00	0.08	0.00
860	Off-Road Equipment	0.00	85.38	4870.93	0.00	0.00	0.01	0.16	1.95	2343.69
870	Farm Equipment	0.00	0.75	37.91	0.00	0.00	0.00	0.02	0.01	232.52
890	Fuel Storage and Handling	0.00	0.00	183.55	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**227.81**	**7204.32**	**0.00**	**0.00**	**5.46**	**0.72**	**8.90**	**5790.98**
	Total Stationary and Area Sources	**2.26**	**1668.36**	**28703.78**	**1217.54**	**47.05**	**34.07**	**10.99**	**130.77**	**654.90**
	Total On-Road Vehicles	**0.00**	**159.99**	**10851.32**	**0.00**	**0.00**	**0.13**	**0.19**	**24.27**	**2787.74**
	Total Other Mobile	**0.00**	**227.81**	**7204.32**	**0.00**	**0.00**	**5.46**	**0.72**	**8.90**	**5790.98**
	Total Anthropogenic	**2.26**	**2056.16**	**46759.42**	**1217.54**	**47.05**	**39.66**	**11.90**	**163.94**	**9233.62**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Fuel Combustion									
10	Electric Utilities	179.40	1068.18	1066.26	0.00	0.00	0.09	17.23	0.01	1.25
20	Cogeneration	0.00	18.52	18.37	0.00	0.00	0.05	0.00	0.00	0.00
30	Oil and Gas Production	10.19	33.81	32.91	0.04	0.80	0.23	0.00	0.22	0.06
40	Petroleum Refining	0.00	348.83	337.05	0.01	1.16	12.91	0.00	12.78	0.00
50	Manufacturing and Industrial	105.66	805.56	802.69	0.01	0.22	2.44	0.00	2.24	0.60
52	Food and Agricultural Processing	32.80	45.81	45.55	0.00	0.02	0.19	0.00	0.19	0.19
60	Service and Commercial	135.92	1216.74	1216.06	0.01	0.04	0.19	0.00	0.07	0.77
99	Other	161.09	20.09	19.10	0.00	0.04	0.42	0.00	0.40	0.96
	Total	**625.07**	**3557.54**	**3537.99**	**0.07**	**2.28**	**16.52**	**17.23**	**15.89**	**3.83**
	Waste Disposal									
110	Sewage Treatment	0.00	3.32	3.32	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	0.00	248.81	225.99	0.00	0.15	0.07	82.55	0.00	0.00
130	Incineration	0.00	103.63	103.63	0.00	0.00	10.68	0.00	0.00	10.68
199	Other	0.00	8.74	8.44	0.02	0.32	0.03	0.12	0.03	0.53
	Total	**0.00**	**364.49**	**341.37**	**0.02**	**0.47**	**10.78**	**82.67**	**0.03**	**11.21**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	743.08	688.33	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	62.56	57.87	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**805.74**	**746.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	110.25	105.93	0.00	0.45	0.45	0.00	0.00	89.42
330	Petroleum Marketing	0.00	16.50	15.27	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**130.59**	**125.03**	**0.00**	**0.45**	**0.45**	**0.00**	**0.00**	**89.42**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Industrial Processes									
410	Chemical	0.00	132.51	116.78	0.01	0.20	0.48	66.51	0.00	2.40
420	Food and Agriculture	0.00	335.87	3.29	0.00	0.00	0.38	0.00	0.00	183.32
430	Mineral Processes	0.00	393.57	85.05	0.16	0.80	6.00	19.34	1.50	1433.58
440	Metal Processes	0.00	230.15	127.10	0.20	5.56	5.47	96.83	0.00	0.00
450	Wood and Paper	0.00	92.51	28.19	0.00	0.14	0.14	114.40	0.00	0.80
460	Glass and Related Products	0.00	48.86	49.52	0.12	2.36	0.23	0.00	16.29	14.04
470	Electronics	0.00	1.89	0.45	0.00	0.03	0.01	6.56	0.01	1.81
499	Other	0.00	227.92	147.65	0.00	0.28	0.14	46.28	0.08	32.73
	Total	**0.00**	**1463.28**	**558.05**	**0.48**	**9.36**	**12.85**	**349.92**	**17.87**	**1668.69**
	Solvent Evaporation									
510	Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	31.52	29.15	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**31.52**	**29.15**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	5002.00	4228.95	0.00	0.23	0.01	6376.18	0.02	0.19
620	Farming Operations	0.00	8.63	0.70	0.00	0.12	0.10	52.67	0.00	368.85
630	Construction and Demolition	0.00	1153.92	75.54	0.00	139.00	14.72	10969.02	0.50	47467.61
640	Paved Road Dust	0.00	4366.83	301.31	0.51	70.16	6.79	33801.91	1.13	171817.61
645	Unpaved Road Dust	0.00	40.27	2.36	0.00	4.50	1.28	1165.28	0.10	11237.60
650	Fugitive Windblown Dust	0.00	19.37	1.20	0.00	3.20	0.39	199.38	0.01	1347.68
660	Fires	0.00	219.29	193.06	0.00	0.05	0.00	215.66	0.00	37.27
670	Waste Burning and Disposal	0.00	2225.13	1853.68	0.00	0.46	0.01	5814.48	0.03	15.69
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	15698.04	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**13035.44**	**6656.81**	**0.51**	**217.72**	**23.30**	**74292.63**	**1.81**	**232292.52**

Table B-6: 2020 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	11.70	2258.19	1432.35	0.51	0.88	7.30	2374.40	0.19	404.16
722	Light Duty Trucks 1	25.92	380.60	252.12	0.08	0.13	1.18	377.04	0.03	61.17
723	Light Duty Trucks 2	3.48	1951.98	1483.25	0.35	0.40	5.64	1080.93	0.09	184.22
724	Medium Duty Trucks	3.95	903.57	685.94	0.16	0.19	2.61	504.25	0.04	85.65
732	Light Heavy Duty Gas Trucks 1	0.00	82.36	44.10	0.02	0.04	0.23	112.44	0.01	14.13
733	Light Heavy Duty Gas Trucks 2	0.00	17.07	9.14	0.00	0.01	0.05	23.32	0.00	2.94
734	Medium Heavy Duty Gas Trucks	0.00	13.74	7.77	0.00	0.01	0.04	17.20	0.00	2.15
736	Heavy Heavy Duty Gas Trucks	0.00	2.74	1.70	0.00	0.00	0.01	3.23	0.00	0.74
742	Light Heavy Duty Diesel Trucks 1	75.09	32.29	22.89	0.00	0.01	0.04	82.78	0.00	3.59
743	Light Heavy Duty Diesel Trucks 2	54.35	22.53	16.34	0.00	0.01	0.02	57.93	0.00	2.35
744	Medium Heavy Duty Diesel Truck	447.91	159.68	127.69	0.01	0.04	0.11	416.04	0.01	11.63
746	Heavy Heavy Duty Diesel Trucks	1337.87	586.52	409.97	0.05	0.22	0.53	1490.89	0.04	53.12
750	Motorcycles	0.00	35.93	22.56	0.01	0.01	0.10	14.58	0.00	2.51
760	Diesel Urban Buses	243.42	70.23	64.96	0.00	0.01	0.01	187.20	0.00	1.68
762	Gas Urban Buses	0.00	4.19	2.68	0.00	0.00	0.01	4.08	0.00	0.50
770	School Buses	274.20	79.60	73.50	0.00	0.01	0.01	210.94	0.00	1.60
776	Other Bus	65.28	21.90	18.76	0.00	0.00	0.01	55.46	0.00	1.06
780	Motor Homes	21.54	15.31	8.96	0.00	0.01	0.03	35.18	0.00	2.47
	Total	**2564.72**	**6638.42**	**4684.68**	**1.21**	**1.99**	**17.94**	**7047.88**	**0.42**	**835.66**
	Other Mobile Sources									
810	Aircraft	0.00	436.14	396.09	0.31	5.66	1.22	0.00	0.51	0.00
820	Trains	400.49	116.32	105.88	0.00	0.01	0.01	310.84	0.00	1.30
830	Ships and Commercial Boats	2518.58	108.00	100.74	0.01	0.00	0.00	0.00	0.00	14.85
840	Recreational Boats	57.47	291.88	202.75	0.03	0.00	0.69	42.91	0.00	0.18
850	Off-Road Recreational Vehicles	0.00	33.12	22.52	0.00	0.00	0.08	0.00	0.00	0.00
860	Off-Road Equipment	2156.30	1373.73	1109.93	0.10	0.07	1.97	1610.37	0.01	6.72
870	Farm Equipment	213.92	63.91	59.36	0.00	0.01	0.01	159.76	0.00	0.67
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**5346.76**	**2423.11**	**1997.27**	**0.46**	**5.75**	**3.98**	**2123.89**	**0.53**	**23.72**
	Total Stationary and Area Sources	**625.07**	**19388.60**	**11994.69**	**1.09**	**230.29**	**63.90**	**74742.45**	**35.60**	**234065.67**
	Total On-Road Vehicles	**2564.72**	**6638.42**	**4684.68**	**1.21**	**1.99**	**17.94**	**7047.88**	**0.42**	**835.66**
	Total Other Mobile	**5346.76**	**2423.11**	**1997.27**	**0.46**	**5.75**	**3.98**	**2123.89**	**0.53**	**23.72**
	Total Anthropogenic	**8536.54**	**28450.13**	**18676.64**	**2.76**	**238.02**	**85.82**	**83914.23**	**36.54**	**234925.05**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Fuel Combustion									
10	Electric Utilities	22.92	20.72	188.79	0.53	0	0	0	0	0
20	Cogeneration	0.48	0	1.75	0	0	0	0	0	0
30	Oil and Gas Production	2.07	0.89	17.41	0.03	0	0	0	0	0
40	Petroleum Refining	1.3	0.11	12.02	0.2	0	0	0	0	0
50	Manufacturing and Industrial	24.76	16.89	145.8	1.38	0	0	0	0	0
52	Food and Agricultural Processing	2.79	2.84	11.92	0.09	0	0	0	0	0
60	Service and Commercial	33.55	26.22	126.01	3.02	0	0	0	0	0
99	Other	9.66	6.55	21.87	5.07	0	0	0	0	0
	Total	**97.52**	**74.22**	**525.56**	**10.3**	**0**	**0**	**0**	**0**	**0**
	Waste Disposal									
110	Sewage Treatment	4.73	5.24	14.38	0	2.11	233.96	0	0.93	0.71
120	Landfills	0	1.06	2.26	0	0	0	0.61	0	0
130	Incineration	0	0	102.23	0	0	0	0	0	0
199	Other	0.37	2599.75	1.07	0	0.17	18.58	0	0.07	0.06
	Total	**5.1**	**2606.05**	**119.95**	**0**	**2.28**	**252.54**	**0.61**	**1**	**0.77**
	Cleaning and Surface Coatings									
210	Laundering	0	0	0	0	0	0	0	0	0
220	Degreasing	0	3314.14	0	0	0	0	0	0	0
230	Coatings and Related Processes	0.01	1064.42	12.26	0.01	0	0	0	0	0
240	Printing	0	1.89	0	0	0	0	0	0	0
250	Adhesives and Sealants	0	1327.63	1.95	0	0	0	0	0	0
299	Other	0	0.02	0	0	0	0	0	0	0
	Total	**0.01**	**5708.1**	**14.2**	**0.01**	**0**	**0**	**0**	**0**	**0**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0	0	24.17	0	0	0	0	0	0
320	Petroleum Refining	0	0	40.8	0	0	0	0	0	0
330	Petroleum Marketing	1.35	0	240.39	0	1.35	1.35	0	0	1.35
399	Other	0	0	0.08	0	0	0	0	0	0
	Total	**1.35**	**0**	**305.43**	**0**	**1.35**	**1.35**	**0**	**0**	**1.35**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Industrial Processes									
410	Chemical	59.12	88.04	460.62	1039.71	9.57	1.32	0	0	0.05
420	Food and Agriculture	0	0	0	0	0	0	0	0	0
430	Mineral Processes	0	0	12.54	0.05	0	0	0	0	0
440	Metal Processes	0.26	0.38	1.86	0.13	0.04	0.01	0	0	0
450	Wood and Paper	0	0	0	0	0	0	0	0	0
460	Glass and Related Products	0	0	0.01	0	0	0	0	0	0
470	Electronics	0	0	7.67	0	0	0	0	0	0
499	Other	0.79	1.37	14.93	0.4	0.29	0.21	0	0	0.19
	Total	**60.17**	**89.8**	**497.63**	**1040.29**	**9.91**	**1.54**	**0**	**0**	**0.24**
	Solvent Evaporation									
510	Consumer Products	0	18683.81	1.13	0	0	0	0	0	0
520	Architectural Coatings & Related Solvent	5.05	1001.46	15.68	0	0	0	0	0.51	0
530	Pesticides/Fertilizers	0	0.19	0	0	0	0	0	0	0
540	Asphalt Paving/Roofing	0	0	6.36	0	0	0	0	0	0
	Total	**5.05**	**19685.46**	**23.17**	**0**	**0**	**0**	**0**	**0.51**	**0**
	Miscellaneous Processes									
610	Residential Fuel Combustion	549.24	405.3	254.55	0	0	0	0	0	0
620	Farming Operations	0	1735.64	0	0	0	0	0	0	0
630	Construction and Demolition	0	0	0	0	0	0	0	0	0
640	Paved Road Dust	0	0	0	0	0	0	0	0	0
645	Unpaved Road Dust	0	0	0	0	0	0	0	0	0
650	Fugitive Windblown Dust	0	0	0	0	0	0	0	0	0
660	Fires	0	0	0	0	0	0	0	0	0
670	Waste Burning and Disposal	0	0	0	96.17	0	0	0	0	0
680	Utility Equipment	0	0	0	0	0	0	0	0	0
690	Cooking	0	0	0	0	0	0	0	0	0
699	Other (Miscellaneous Processes	0	0	0	0	0	0	0	0	0
	Total	**549.24**	**2140.94**	**254.55**	**96.17**	**0**	**0**	**0**	**0**	**0**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	84.09	53.81	863.64	130.41	0	0	0	0	0
722	Light Duty Trucks 1	17.78	12.4	178.38	23.59	0	0	0	0	0
723	Light Duty Trucks 2	66.25	42.03	727.74	104.85	0	0	0	0	0
724	Medium Duty Trucks	43.85	28.02	413.61	67.96	0	0	0	0	0
732	Light Heavy Duty Gas Trucks 1	25.46	16.63	203.89	37.16	0	0	0	0	0
733	Light Heavy Duty Gas Trucks 2	4.13	2.72	32.1	5.89	0	0	0	0	0
734	Medium Heavy Duty Gas Trucks	8.02	5.3	48.45	11.28	0	0	0	0	0
736	Heavy Heavy Duty Gas Trucks	4.31	2.77	26.72	6.58	0	0	0	0	0
742	Light Heavy Duty Diesel Trucks 1	31.1	31.75	8.46	0.8	0	0	0	0	0
743	Light Heavy Duty Diesel Trucks 2	22.27	22.74	6.06	0.58	0	0	0	0	0
744	Medium Heavy Duty Diesel Truck	118.03	120.5	32.12	3.05	0	0	0	0	0
746	Heavy Heavy Duty Diesel Trucks	886.1	904.66	241.13	22.9	0	0	0	0	0
750	Motorcycles	115.52	60.44	564.02	130.71	0	0	0	0	0
760	Diesel Urban Buses	51.04	52.11	13.89	1.32	0	0	0	0	0
762	Gas Urban Buses	2.87	1.7	24.36	5.34	0	0	0	0	0
770	School Buses	26.69	27.05	11.14	1.53	0	0	0	0	0
776	Other Bus	7.04	6.75	9.17	1.87	0	0	0	0	0
780	Motor Homes	1.76	1.63	3.93	0.76	0	0	0	0	0
	Total	**1516.32**	**1393.01**	**3408.81**	**556.58**	**0**	**0**	**0**	**0**	**0**
	Other Mobile Sources									
810	Aircraft	1455.96	5.74	688.26	566.26	0	0	0	0	0
820	Trains	461.15	470.81	125.49	11.92	0	0	0	0	0
830	Ships and Commercial Boats	272.81	278.52	191.09	7.05	0	0	0	0	0
840	Recreational Boats	443.2	253.93	1421.44	316.7	0	0	0	0	0
850	Off-Road Recreational Vehicles	121.69	58.72	454.29	103.86	0	0	0	0	0
860	Off-Road Equipment	2524.93	2276.75	2563.37	527.09	0	0	0	0	0
870	Farm Equipment	52.52	52.7	20.25	2.78	0	0	0	0	0
890	Fuel Storage and Handling	0	0	33.25	0	0	0	0	0	0
895	Truck Stops	0	0	0	0	0	0	0	0	0
	Total	**5332.25**	**3397.16**	**5497.43**	**1535.66**	**0**	**0**	**0**	**0**	**0**
	Total Stationary and Area Sources	**718.45**	**30304.57**	**1740.5**	**1146.77**	**13.54**	**255.43**	**0.61**	**1.51**	**2.36**
	Total On-Road Vehicles	**1516.32**	**1393.01**	**3408.81**	**556.58**	**0**	**0**	**0**	**0**	**0**
	Total Other Mobile	**5332.25**	**3397.16**	**5497.43**	**1535.66**	**0**	**0**	**0**	**0**	**0**
	Total Anthropogenic	**7567.03**	**35094.74**	**10646.74**	**3239.01**	**13.54**	**255.43**	**0.61**	**1.51**	**2.36**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Fuel Combustion									
10	Electric Utilities	0	0	464.7	4.08	0	0	0.24	0	0
20	Cogeneration	0	0	12.86	0	0	0	0	0	0
30	Oil and Gas Production	0	0	59.6	0.18	0	0	0.01	0	0
40	Petroleum Refining	0	0	275.68	0.01	0	0	0.03	0	0
50	Manufacturing and Industrial	0	0	481.37	3.29	0	0	0.35	0	0
52	Food and Agricultural Processing	0	0	27.78	0.56	0	0	0.04	0	0
60	Service and Commercial	0	0	379	5.12	0	0	0.76	0	0
99	Other	0	0	29.88	1.1	0	0	0.84	0	0
	Total	**0**	**0**	**1730.87**	**14.33**	**0**	**0**	**2.26**	**0**	**0**
	Waste Disposal									
110	Sewage Treatment	1.29	0.39	25.25	0	359.51	0	0	35.6	292.91
120	Landfills	0.1	0	55.33	1.33	3.17	0	0	0	1.61
130	Incineration	0	0	0.78	0	0	0	0	0	0
199	Other	0.1	0	1.95	0	28.54	0	0	2.83	23.26
	Total	**1.49**	**0.39**	**83.32**	**1.33**	**391.23**	**0**	**0**	**38.43**	**317.79**
	Cleaning and Surface Coatings									
210	Laundering	0	0	0	0	0	0	0	0	0
220	Degreasing	0	0	0	1348.97	6735.83	0	31.84	0	826.83
230	Coatings and Related Processes	0.01	0	0.02	2173.83	15.29	0	5.24	0.02	204.97
240	Printing	0	0	0	584.67	0	0	14.16	0	1.89
250	Adhesives and Sealants	0	0	0	1116.35	35.69	0	0	0	0
299	Other	0	20.98	0	0.01	0	0	0	0	0
	Total	**0.01**	**20.98**	**0.02**	**5223.83**	**6786.81**	**0**	**51.24**	**0.02**	**1033.69**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0	0	2.79	0	0	0	0	0	0
320	Petroleum Refining	0	0	116.4	0	0	0	0	0	0
330	Petroleum Marketing	0	0	1.35	0	0	1.35	3.14	0	0
399	Other	0	0	0	0	0	0	0	0	0
	Total	**0**	**0**	**120.54**	**0**	**0**	**1.35**	**3.15**	**0**	**0**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Industrial Processes									
410	Chemical	80.04	2.22	1.47	67.91	0	63.93	0.31	102.28	0
420	Food and Agriculture	0	0	0	0	0	0	0	0	0
430	Mineral Processes	0	0	14.56	0	0	0	4.46	0	0
440	Metal Processes	0.35	0.01	0.38	0.27	0	0	0.02	0.45	0
450	Wood and Paper	0	0	0	0	0	0	0	0	0
460	Glass and Related Products	0	0	0	0	0	0	0	0	0
470	Electronics	0	0	0.15	0	0	0	0.02	0	0
499	Other	0.81	0.02	2.91	0.81	0	0.19	0.05	1.03	0
	Total	**81.2**	**2.26**	**19.49**	**68.99**	**0**	**64.12**	**4.86**	**103.75**	**0**
	Solvent Evaporation									
510	Consumer Products	0	61.89	10.56	2314.05	8452.99	0	454.94	3967.93	5675.32
520	Architectural Coatings & Related Solvent	0	0	1.13	488.77	214.91	0	45.72	0	5.41
530	Pesticides/Fertilizers	0	0	0	0	0	0	0.01	0	0
540	Asphalt Paving/Roofing	0	0	0	0	0	0	118.37	0	0
	Total	**0**	**61.89**	**11.68**	**2802.82**	**8667.9**	**0**	**619.04**	**3967.93**	**5680.72**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0	0	1102.95	0	0	0	0	0	0
620	Farming Operations	0	0	0	0	0	0	0	0	0
630	Construction and Demolition	0	0	0	0	0	0	0	0	0
640	Paved Road Dust	0	0	0	0	0	0	0	0	0
645	Unpaved Road Dust	0	0	0	0	0	0	0	0	0
650	Fugitive Windblown Dust	0	0	0	0	0	0	0	0	0
660	Fires	0	0	0	0	0	0	0	0	0
670	Waste Burning and Disposal	0	0	0	0	0	0	0	0	0
680	Utility Equipment	0	0	0	0	0	0	0	0	0
690	Cooking	0	0	0	0	0	0	0	0	0
699	Other (Miscellaneous Processes	0	0	0	0	0	0	0	0	0
	Total	**0**	**0**	**1102.95**	**0**	**0**	**0**	**0**	**0**	**0**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0	0	300.55	8.46	0	0	55.91	0	0
722	Light Duty Trucks 1	0	0	61.03	2.04	0	0	12.99	0	0
723	Light Duty Trucks 2	0	0	245.59	6.49	0	0	49.2	0	0
724	Medium Duty Trucks	0	0	157.36	4.39	0	0	24.84	0	0
732	Light Heavy Duty Gas Trucks 1	0	0	76.56	2.78	0	0	12.66	0	0
733	Light Heavy Duty Gas Trucks 2	0	0	11.67	0.46	0	0	2.05	0	0
734	Medium Heavy Duty Gas Trucks	0	0	21.87	0.91	0	0	2.21	0	0
736	Heavy Heavy Duty Gas Trucks	0	0	14.53	0.45	0	0	0.81	0	0
742	Light Heavy Duty Diesel Trucks 1	0	0	62.24	6.25	0	0	0.36	0	0
743	Light Heavy Duty Diesel Trucks 2	0	0	44.57	4.47	0	0	0.26	0	0
744	Medium Heavy Duty Diesel Truck	0	0	236.19	23.71	0	0	1.36	0	0
746	Heavy Heavy Duty Diesel Trucks	0	0	1773.17	177.98	0	0	10.24	0	0
750	Motorcycles	0	0	400.54	8.81	0	0	18.82	0	0
760	Diesel Urban Buses	0	0	102.14	10.25	0	0	0.59	0	0
762	Gas Urban Buses	0	0	14.82	0.21	0	0	0.58	0	0
770	School Buses	0	0	54.73	5.3	0	0	0.43	0	0
776	Other Bus	0	0	14.95	1.31	0	0	0.43	0	0
780	Motor Homes	0	0	4.78	0.3	0	0	0.12	0	0
	Total	**0**	**0**	**3597.28**	**264.6**	**0**	**0**	**193.85**	**0**	**0**
	Other Mobile Sources									
810	Aircraft	0	0	4688.54	1.61	0	5.97	178.66	0	0
820	Trains	0	0	922.8	92.63	0	0	5.33	0	0
830	Ships and Commercial Boats	0	0	551.32	54.79	0	0	6.94	0	0
840	Recreational Boats	0	0	1284.36	37.99	0	0	51.12	0	0
850	Off-Road Recreational Vehicles	0	0	374.65	7.61	0	0	16.58	0	0
860	Off-Road Equipment	0	0	5669.54	429.81	0	0	98.77	0	0
870	Farm Equipment	0	0	106.95	10.31	0	0	0.82	0	0
890	Fuel Storage and Handling	0	0	0	0	0	0	0	0	0
895	Truck Stops	0	0	0	0	0	0	0	0	0
	Total	**0**	**0**	**13598.16**	**634.75**	**0**	**5.97**	**358.22**	**0**	**0**
	Total Stationary and Area Sources	**82.7**	**85.52**	**3068.87**	**8111.31**	**15845.94**	**65.47**	**680.55**	**4110.13**	**7032.2**
	Total On-Road Vehicles	**0**	**0**	**3597.28**	**264.6**	**0**	**0**	**193.85**	**0**	**0**
	Total Other Mobile	**0**	**0**	**13598.16**	**634.75**	**0**	**5.97**	**358.22**	**0**	**0**
	Total Anthropogenic	**82.7**	**85.52**	**20264.3**	**9010.65**	**15845.94**	**71.44**	**1232.62**	**4110.13**	**7032.2**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Fuel Combustion									
10	Electric Utilities	0	0.16	99.25	0	0	0	0	0.1	185.53
20	Cogeneration	0	0	5.56	0	0	0	0	0.05	0
30	Oil and Gas Production	0	0.01	8.33	0	0	1.07	0.11	1.24	15.01
40	Petroleum Refining	0	0.03	6.71	0	0	0	1.44	15.95	0
50	Manufacturing and Industrial	0	0.28	78.77	0	0	0.02	0.28	3.35	146.22
52	Food and Agricultural Processing	0	0.03	6.69	0	0	0	0.02	0.2	29.99
60	Service and Commercial	0	0.58	69.89	0	0	0.04	0.01	0.28	204.19
99	Other	0	0.82	45.88	0	0	0	0.04	0.42	201.27
	Total	**0**	**1.9**	**321.08**	**0**	**0**	**1.13**	**1.9**	**21.59**	**782.21**
	Waste Disposal									
110	Sewage Treatment	0.12	0.91	305.48	36.01	1.57	0	0	0	0
120	Landfills	0	0	39.72	0.96	1.19	0	0	0.12	0
130	Incineration	0	0	0	0	0	0	0	0	0
199	Other	0	0.05	95.94	2.86	0.12	0.32	0.03	0.32	0
	Total	**0.12**	**0.96**	**441.15**	**39.83**	**2.88**	**0.32**	**0.03**	**0.44**	**0**
	Cleaning and Surface Coatings									
210	Laundering	0	0	0	0	0	0	0	0	0
220	Degreasing	0	2.51	764.08	661.71	0	0	0	0	0
230	Coatings and Related Processes	0	0.4	14121.4	52.71	0.01	0	0	0	0
240	Printing	0	0	20.98	0	0	0	0	0	0
250	Adhesives and Sealants	0	0	341.94	0	0	0	0	0	0
299	Other	0	0	94.98	0	0	0	0	0	0
	Total	**0**	**2.91**	**15343.38**	**714.42**	**0.01**	**0**	**0**	**0**	**0**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0	0	13.84	0	0	0	0	0	0
320	Petroleum Refining	0	0	273.78	0	0	0.54	0	0	0
330	Petroleum Marketing	1.35	0	1137.79	0	0	0	0	0	0
399	Other	0	0	0.4	0	0	0	0	0	0
	Total	**1.35**	**0**	**1425.81**	**0**	**0**	**0.54**	**0**	**0**	**0**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Industrial Processes									
410	Chemical	0.68	2095.51	1620.09	0	59.38	0	0.5	0.2	0
420	Food and Agriculture	0	0	89	0	0	0.02	0	0.67	0
430	Mineral Processes	0	0.05	8.28	0	0	10.78	0.95	23.04	0
440	Metal Processes	0	0.73	5.76	0	0.22	0.73	0.73	29.13	0
450	Wood and Paper	0	0	0	0	0	0	0.04	0.1	0
460	Glass and Related Products	0	0	3.44	0	0	12.65	0	3.48	0
470	Electronics	0	0.05	21.16	0	0	0	0.01	0.01	0
499	Other	0.2	1.44	1160.86	0	0.51	0.01	0.02	0.08	0
	Total	**0.88**	**2097.78**	**2908.59**	**0**	**60.12**	**24.19**	**2.25**	**56.72**	**0**
	Solvent Evaporation									
510	Consumer Products	0.24	13.59	10022.29	671.82	0	0	0	0	0
520	Architectural Coatings & Related Solvent	0	45.38	1979.44	0	0	0	0	0	0
530	Pesticides/Fertilizers	0	0	0.22	0	0	0	0	0	0
540	Asphalt Paving/Roofing	0	0	15.09	0	0	0	0	0	0
	Total	**0.24**	**58.97**	**12017.05**	**671.82**	**0**	**0**	**0**	**0**	**0**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0	0	300.58	0	0	0.16	0.07	0.11	0
620	Farming Operations	0	0	0	0	0	0.03	0.04	0.38	0
630	Construction and Demolition	0	0	0	0	0	4.85	5.99	63.9	0
640	Paved Road Dust	0	0	0	0	0	7.46	1.72	9.75	0
645	Unpaved Road Dust	0	0	0	0	0	0.52	0.45	0.59	0
650	Fugitive Windblown Dust	0	0	0	0	0	0.1	0.15	1.5	0
660	Fires	0	0	55.11	0	0	0	0.02	0.01	0
670	Waste Burning and Disposal	0	0	0.75	0	0	0.24	0.03	0.01	0
680	Utility Equipment	0	0	0	0	0	0	0	0	0
690	Cooking	0	0	532.99	0	0	0	0	0	0
699	Other (Miscellaneous Processes	0	0	0	0	0	0	0	0	0
	Total	**0**	**0**	**889.42**	**0**	**0**	**13.35**	**8.46**	**76.24**	**0**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0	39.39	3227.85	0	0	0.06	0	10.66	7.61
722	Light Duty Trucks 1	0	6.98	693.33	0	0	0.01	0	1.73	23.01
723	Light Duty Trucks 2	0	31.08	2748.86	0	0	0.03	0	7.47	2.73
724	Medium Duty Trucks	0	20.44	1487.37	0	0	0.01	0	3.47	3.7
732	Light Heavy Duty Gas Trucks 1	0	12.32	743.6	0	0	0	0	0.36	0
733	Light Heavy Duty Gas Trucks 2	0	2.01	119.18	0	0	0	0	0.07	0
734	Medium Heavy Duty Gas Trucks	0	3.92	161.57	0	0	0	0	0.06	0
736	Heavy Heavy Duty Gas Trucks	0	2.06	76.76	0	0	0	0	0.02	0
742	Light Heavy Duty Diesel Trucks 1	0	0.25	11.01	0	0	0	0.01	0.06	91.65
743	Light Heavy Duty Diesel Trucks 2	0	0.18	7.88	0	0	0	0	0.04	61.4
744	Medium Heavy Duty Diesel Truck	0	0.93	41.78	0	0	0.01	0.11	0.2	1576.38
746	Heavy Heavy Duty Diesel Trucks	0	6.99	313.65	0	0	0.03	0.3	0.99	4446.39
750	Motorcycles	0	26.39	1374.27	0	0	0	0	0.11	0
760	Diesel Urban Buses	0	0.4	18.07	0	0	0	0.02	0.02	285.49
762	Gas Urban Buses	0	1.29	60.56	0	0	0	0	0.02	0
770	School Buses	0	0.42	20.11	0	0	0	0.02	0.02	341.06
776	Other Bus	0	0.64	27.87	0	0	0	0.01	0.02	78.38
780	Motor Homes	0	0.18	9.91	0	0	0	0	0.05	24.37
	Total	**0**	**155.88**	**11143.63**	**0**	**0**	**0.15**	**0.47**	**25.35**	**6942.18**
	Other Mobile Sources									
810	Aircraft	0	130.11	339.04	0	0	5.85	0.55	6.58	0
820	Trains	0	3.64	171.76	0	0	0.01	0.12	0.02	1792.59
830	Ships and Commercial Boats	0	2.15	212.87	0	0	0	0	0	11875.54
840	Recreational Boats	0	50.85	3268.53	0	0	0	0.01	6.69	76.79
850	Off-Road Recreational Vehicles	0	16.58	1029.55	0	0	0	0	0.09	0
860	Off-Road Equipment	0	91.55	5159.1	0	0	0.02	0.31	2.03	4581.97
870	Farm Equipment	0	0.63	32.58	0	0	0	0.01	0.01	174.38
890	Fuel Storage and Handling	0	0	166.54	0	0	0	0	0	0
895	Truck Stops	0	0	0	0	0	0	0	0	0
	Total	**0**	**295.52**	**10379.96**	**0**	**0**	**5.88**	**1**	**15.42**	**18501.27**
	Total Stationary and Area Sources	**2.6**	**2162.53**	**33346.48**	**1426.07**	**63.01**	**39.53**	**12.64**	**154.99**	**782.21**
	Total On-Road Vehicles	**0**	**155.88**	**11143.63**	**0**	**0**	**0.15**	**0.47**	**25.35**	**6942.18**
	Total Other Mobile	**0**	**295.52**	**10379.96**	**0**	**0**	**5.88**	**1**	**15.42**	**18501.27**
	Total Anthropogenic	**2.6**	**2613.93**	**54870.07**	**1426.07**	**63.01**	**45.56**	**14.11**	**195.76**	**26225.66**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Fuel Combustion									
10	Electric Utilities	179.4	1069.67	1067.74	0.01	0	0.1	17.23	0.01	1.25
20	Cogeneration	0	18.56	18.41	0	0	0.05	0	0	0
30	Oil and Gas Production	14.51	46.56	45.33	0.05	1.13	0.27	0	0.25	0.08
40	Petroleum Refining	0	432.9	418.33	0.01	1.44	15.95	0	15.8	0
50	Manufacturing and Industrial	141.4	1003.07	999.19	0.02	0.3	3.33	0	3.05	0.8
52	Food and Agricultural Processing	28.13	64.07	63.82	0	0.02	0.2	0	0.2	0.16
60	Service and Commercial	197.37	1260.84	1259.96	0.01	0.04	0.25	0	0.1	1.12
99	Other	186.71	23.33	22.26	0	0.04	0.42	0	0.4	1.11
	Total	**747.52**	**3919.01**	**3895.04**	**0.1**	**2.97**	**20.57**	**17.23**	**19.79**	**4.53**
	Waste Disposal									
110	Sewage Treatment	0	3.37	3.37	0	0	0	0	0	0
120	Landfills	0	347.87	324.54	0	0.15	0.07	84.4	0	0
130	Incineration	0	107.59	107.59	0	0	10.77	0	0	10.77
199	Other	0	9.03	8.72	0.02	0.33	0.03	0.12	0.03	0.54
	Total	**0**	**467.87**	**444.23**	**0.02**	**0.48**	**10.88**	**84.52**	**0.03**	**11.31**
	Cleaning and Surface Coatings									
210	Laundering	0	0	0	0	0	0	0	0	0
220	Degreasing	0	0.1	0.09	0	0	0	0	0	0
230	Coatings and Related Processes	0	1076.11	996.46	0	0	0	0	0	0
240	Printing	0	0	0	0	0	0	0	0	0
250	Adhesives and Sealants	0	0	0	0	0	0	0	0	0
299	Other	0	64.71	59.86	0	0	0	0	0	0
	Total	**0**	**1140.91**	**1056.41**	**0**	**0**	**0**	**0**	**0**	**0**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0	3.74	3.74	0	0	0	0	0	0
320	Petroleum Refining	0	113.9	109.9	0	0.54	0.54	0	0	106.78
330	Petroleum Marketing	0	16.83	15.57	0	0	0	0	0	0
399	Other	0	0.11	0.1	0	0	0	0	0	0
	Total	**0**	**134.58**	**129.32**	**0**	**0.54**	**0.54**	**0**	**0**	**106.78**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Industrial Processes									
410	Chemical	0	179.2	159.54	0.01	0.23	0.56	71.4	0	3.56
420	Food and Agriculture	0	346.46	3.4	0	0	0.39	0	0	189.1
430	Mineral Processes	0	416.43	96.59	0.22	0.95	7.73	19.87	1.76	1625.99
440	Metal Processes	0	325.47	183.81	0.29	8.15	8.06	101.02	0	0
450	Wood and Paper	0	97.55	29.63	0	0.14	0.14	115.38	0	0.81
460	Glass and Related Products	0	72.11	73.1	0.17	3.48	0.33	0	24.04	14.64
470	Electronics	0	1.98	0.48	0	0.03	0.01	6.88	0.01	1.89
499	Other	0	264.74	179.49	0	0.29	0.18	46.95	0.12	33.94
	Total	**0**	**1703.94**	**726.02**	**0.7**	**13.26**	**17.41**	**361.5**	**25.92**	**1869.93**
	Solvent Evaporation									
510	Consumer Products	0	0	0	0	0	0	0	0	0
520	Architectural Coatings & Related Solvent	0	0	0	0	0	0	0	0	0
530	Pesticides/Fertilizers	0	0	0	0	0	0	0	0	0
540	Asphalt Paving/Roofing	0	32.73	30.28	0	0	0	0	0	0
	Total	**0**	**32.73**	**30.28**	**0**	**0**	**0**	**0**	**0**	**0**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0	5752.68	4758.63	0.01	0.28	0.01	8199.1	0.03	0.25
620	Farming Operations	0	7.93	0.64	0	0.11	0.09	48.37	0	338.68
630	Construction and Demolition	0	1319.02	86.35	0	158.89	16.83	12538.38	0.57	54258.9
640	Paved Road Dust	0	4427.15	305.47	0.52	71.13	6.88	34268.86	1.15	174191.16
645	Unpaved Road Dust	0	40.2	2.36	0	4.49	1.28	1163.31	0.1	11218.64
650	Fugitive Windblown Dust	0	17.76	1.11	0	3.18	0.37	189.58	0.01	1279
660	Fires	0	219.29	193.06	0	0.05	0	215.66	0	37.27
670	Waste Burning and Disposal	0	2224.75	1853.39	0	0.46	0.01	5813.85	0.03	15.69
680	Utility Equipment	0	0	0	0	0	0	0	0	0
690	Cooking	0	0	0	0	0	0	17170.47	0	0
699	Other (Miscellaneous Processes	0	0	0	0	0	0	0	0	0
	Total	**0**	**14008.79**	**7201.02**	**0.52**	**238.59**	**25.47**	**79607.57**	**1.9**	**241339.59**

Table B-7: 2023 Baseline Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	7	2341.31	1502.27	0.53	0.89	7.52	2389.99	0.19	407.38
722	Light Duty Trucks 1	21.17	400.35	267.55	0.09	0.14	1.24	382.54	0.03	62.72
723	Light Duty Trucks 2	2.51	2092.84	1602.17	0.37	0.41	6.01	1111.2	0.09	189.52
724	Medium Duty Trucks	3.41	971.88	743.61	0.17	0.19	2.79	519.39	0.04	88.29
732	Light Heavy Duty Gas Trucks 1	0	88.06	48.01	0.02	0.04	0.25	117.04	0.01	14.72
733	Light Heavy Duty Gas Trucks 2	0	18.01	9.67	0	0.01	0.05	24.5	0	3.09
734	Medium Heavy Duty Gas Trucks	0	14.42	8.16	0	0.01	0.04	18.03	0	2.26
736	Heavy Heavy Duty Gas Trucks	0	2.55	1.57	0	0	0.01	3.05	0	0.68
742	Light Heavy Duty Diesel Trucks 1	84.32	35.26	25.44	0	0.01	0.04	90.61	0	3.73
743	Light Heavy Duty Diesel Trucks 2	56.49	23.46	17	0	0.01	0.02	60.32	0	2.44
744	Medium Heavy Duty Diesel Truck	1450.27	440.99	392.99	0.01	0.08	0.13	1167.39	0.01	15.12
746	Heavy Heavy Duty Diesel Trucks	4090.68	1372.2	1142.02	0.06	0.32	0.62	3584.51	0.06	65.47
750	Motorcycles	0	34.08	21.32	0.01	0.01	0.1	14.56	0	2.5
760	Diesel Urban Buses	262.65	75.71	70.07	0	0.01	0.01	201.79	0	1.77
762	Gas Urban Buses	0	4.45	2.87	0	0	0.01	4.25	0	0.55
770	School Buses	313.77	90.69	83.95	0	0.01	0.01	240.69	0	1.79
776	Other Bus	72.11	23.72	20.46	0	0	0.01	60.61	0	1.05
780	Motor Homes	22.42	16.55	9.56	0	0.01	0.03	37.83	0	2.72
	Total	**6386.8**	**8046.53**	**5968.69**	**1.27**	**2.16**	**18.91**	**10028.29**	**0.45**	**865.8**
	Other Mobile Sources									
810	Aircraft	0	456.02	414.71	0.33	6.08	1.28	0	0.55	0
820	Trains	1634.18	460.93	432.02	0.01	0.05	0.03	1231.7	0.01	5.14
830	Ships and Commercial Boats	11106.59	475.02	444.26	0.04	0	0	0	0	65.32
840	Recreational Boats	70.66	2695.46	1838.17	0.33	0	6.69	52.77	0	0.22
850	Off-Road Recreational Vehicles	0	36.48	24.81	0	0	0.09	0	0	0
860	Off-Road Equipment	4215.55	1970.58	1669.29	0.11	0.14	2.05	3148.31	0.02	13.15
870	Farm Equipment	160.43	49.2	45.39	0	0.01	0.01	119.82	0	0.5
890	Fuel Storage and Handling	0	0	0	0	0	0	0	0	0
895	Truck Stops	0	0	0	0	0	0	0	0	0
	Total	**17187.41**	**6143.7**	**4868.65**	**0.82**	**6.27**	**10.16**	**4552.6**	**0.59**	**84.32**
	Total Stationary and Area Sources	**747.52**	**21407.84**	**13482.32**	**1.34**	**255.85**	**74.87**	**80070.83**	**47.63**	**243332.14**
	Total On-Road Vehicles	**6386.8**	**8046.53**	**5968.69**	**1.27**	**2.16**	**18.91**	**10028.29**	**0.45**	**865.8**
	Total Other Mobile	**17187.41**	**6143.7**	**4868.65**	**0.82**	**6.27**	**10.16**	**4552.6**	**0.59**	**84.32**
	Total Anthropogenic	**24321.73**	**35598.08**	**24319.66**	**3.43**	**264.28**	**103.94**	**94651.72**	**48.67**	**244282.27**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Fuel Combustion									
10	Electric Utilities	22.90	20.72	188.73	0.53	0.00	0.00	0.00	0.00	0.00
20	Cogeneration	0.37	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	1.71	0.88	15.28	0.03	0.00	0.00	0.00	0.00	0.00
40	Petroleum Refining	0.91	0.08	10.61	0.14	0.00	0.00	0.00	0.00	0.00
50	Manufacturing and Industrial	21.74	15.31	126.49	1.30	0.00	0.00	0.00	0.00	0.00
52	Food and Agricultural Processing	2.75	2.80	10.20	0.09	0.00	0.00	0.00	0.00	0.00
60	Service and Commercial	29.86	22.82	121.98	2.61	0.00	0.00	0.00	0.00	0.00
99	Other	9.56	6.45	21.84	5.07	0.00	0.00	0.00	0.00	0.00
	Total	**89.80**	**69.07**	**496.49**	**9.76**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	4.65	5.15	14.15	0.00	2.08	229.93	0.00	0.91	0.70
120	Landfills	0.00	1.05	2.24	0.00	0.00	0.00	0.60	0.00	0.00
130	Incineration	0.00	0.00	67.41	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.36	2599.74	1.05	0.00	0.16	18.10	0.00	0.07	0.05
	Total	**5.01**	**2605.95**	**84.85**	**0.00**	**2.24**	**248.02**	**0.60**	**0.98**	**0.75**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	3314.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.01	999.69	11.61	0.01	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	1.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	1306.33	1.95	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**5622.08**	**13.55**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	23.75	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	35.77	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	1.34	0.00	199.72	0.00	1.34	1.34	0.00	0.00	1.34
399	Other	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.34**	**0.00**	**259.31**	**0.00**	**1.34**	**1.34**	**0.00**	**0.00**	**1.34**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	Industrial Processes									
410	Chemical	39.92	58.51	284.93	553.28	6.46	0.89	0.00	0.00	0.03
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	9.05	0.05	0.00	0.00	0.00	0.00	0.00
440	Metal Processes	0.26	0.38	1.86	0.13	0.04	0.01	0.00	0.00	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	7.53	0.00	0.00	0.00	0.00	0.00	0.00
499	Other	0.70	1.36	11.28	0.34	0.21	0.13	0.00	0.00	0.12
	Total	**40.88**	**60.25**	**314.66**	**553.80**	**6.72**	**1.03**	**0.00**	**0.00**	**0.15**
	Solvent Evaporation									
510	Consumer Products	0.00	15657.04	0.95	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	4.95	981.43	15.36	0.00	0.00	0.00	0.00	0.50	0.00
530	Pesticides/Fertilizers	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	6.36	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**4.95**	**16638.65**	**22.67**	**0.00**	**0.00**	**0.00**	**0.00**	**0.50**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	549.24	405.30	254.55	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	1432.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	96.17	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**549.24**	**1837.66**	**254.55**	**96.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Acetalde-hyde	Acetone	Benzene	1,3 Butadiene	Carbon tetrachloride	Chloroform	1,1 Dichloro-ethane	1,4 dioxane	Ethylene dibromide
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	77.14	49.34	786.51	119.71	0.00	0.00	0.00	0.00	0.00
722	Light Duty Trucks 1	16.13	11.18	162.19	21.65	0.00	0.00	0.00	0.00	0.00
723	Light Duty Trucks 2	60.80	38.56	662.48	96.25	0.00	0.00	0.00	0.00	0.00
724	Medium Duty Trucks	40.22	25.69	377.07	62.38	0.00	0.00	0.00	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	21.49	14.03	170.96	31.36	0.00	0.00	0.00	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	3.76	2.48	28.98	5.36	0.00	0.00	0.00	0.00	0.00
734	Medium Heavy Duty Gas Trucks	8.02	5.30	48.26	11.28	0.00	0.00	0.00	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	4.31	2.77	26.69	6.58	0.00	0.00	0.00	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	24.38	24.89	6.64	0.63	0.00	0.00	0.00	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	20.27	20.69	5.52	0.52	0.00	0.00	0.00	0.00	0.00
744	Medium Heavy Duty Diesel Truck	82.86	84.59	22.55	2.14	0.00	0.00	0.00	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	622.04	635.07	169.27	16.07	0.00	0.00	0.00	0.00	0.00
750	Motorcycles	85.02	44.48	420.28	96.20	0.00	0.00	0.00	0.00	0.00
760	Diesel Urban Buses	51.04	52.11	13.89	1.32	0.00	0.00	0.00	0.00	0.00
762	Gas Urban Buses	2.87	1.70	24.34	5.34	0.00	0.00	0.00	0.00	0.00
770	School Buses	26.69	27.05	11.14	1.53	0.00	0.00	0.00	0.00	0.00
776	Other Bus	7.04	6.75	9.14	1.87	0.00	0.00	0.00	0.00	0.00
780	Motor Homes	1.76	1.63	3.92	0.76	0.00	0.00	0.00	0.00	0.00
	Total	**1155.83**	**1048.32**	**2949.82**	**480.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	1455.96	5.74	688.26	566.26	0.00	0.00	0.00	0.00	0.00
820	Trains	128.12	130.80	34.86	3.31	0.00	0.00	0.00	0.00	0.00
830	Ships and Commercial Boats	272.81	278.52	191.09	7.05	0.00	0.00	0.00	0.00	0.00
840	Recreational Boats	151.97	113.38	364.07	68.14	0.00	0.00	0.00	0.00	0.00
850	Off-Road Recreational Vehicles	62.91	30.36	234.48	53.69	0.00	0.00	0.00	0.00	0.00
860	Off-Road Equipment	1966.09	1706.20	2409.10	512.65	0.00	0.00	0.00	0.00	0.00
870	Farm Equipment	52.52	52.70	20.24	2.78	0.00	0.00	0.00	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	33.25	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**4090.38**	**2317.70**	**3975.35**	**1213.89**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Stationary and Area Sources	**691.23**	**26833.65**	**1446.07**	**659.73**	**10.30**	**250.39**	**0.60**	**1.48**	**2.24**
	Total On-Road Vehicles	**1155.83**	**1048.32**	**2949.82**	**480.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Other Mobile	**4090.38**	**2317.70**	**3975.35**	**1213.89**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Anthropogenic	**5937.45**	**30199.67**	**8371.24**	**2354.61**	**10.30**	**250.39**	**0.60**	**1.48**	**2.24**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Fuel Combustion									
10	Electric Utilities	0.00	0.00	464.24	4.08	0.00	0.00	0.24	0.00	0.00
20	Cogeneration	0.00	0.00	10.05	0.00	0.00	0.00	0.00	0.00	0.00
30	Oil and Gas Production	0.00	0.00	48.36	0.17	0.00	0.00	0.01	0.00	0.00
40	Petroleum Refining	0.00	0.00	197.43	0.01	0.00	0.00	0.02	0.00	0.00
50	Manufacturing and Industrial	0.00	0.00	410.99	2.98	0.00	0.00	0.32	0.00	0.00
52	Food and Agricultural Processing	0.00	0.00	24.32	0.55	0.00	0.00	0.03	0.00	0.00
60	Service and Commercial	0.00	0.00	364.58	4.46	0.00	0.00	0.67	0.00	0.00
99	Other	0.00	0.00	29.68	1.08	0.00	0.00	0.84	0.00	0.00
	Total	**0.00**	**0.00**	**1549.64**	**13.33**	**0.00**	**0.00**	**2.13**	**0.00**	**0.00**
	Waste Disposal									
110	Sewage Treatment	1.27	0.39	24.83	0.00	353.31	0.00	0.00	34.99	287.87
120	Landfills	0.10	0.00	55.33	1.32	3.15	0.00	0.00	0.00	1.60
130	Incineration	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.10	0.00	1.90	0.00	27.81	0.00	0.00	2.75	22.65
	Total	**1.46**	**0.39**	**82.66**	**1.32**	**384.27**	**0.00**	**0.00**	**37.74**	**312.12**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	0.00	0.00	1344.21	6735.83	0.00	31.82	0.00	768.03
230	Coatings and Related Processes	0.01	0.00	0.02	2067.08	8.42	0.00	5.24	0.02	167.78
240	Printing	0.00	0.00	0.00	419.45	0.00	0.00	12.99	0.00	1.89
250	Adhesives and Sealants	0.00	0.00	0.00	1098.44	35.69	0.00	0.00	0.00	0.00
299	Other	0.00	20.98	0.00	0.01	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**20.98**	**0.02**	**4929.19**	**6779.94**	**0.00**	**50.06**	**0.02**	**937.70**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	2.69	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	109.56	0.00	0.00	0.00	0.00	0.00	0.00
330	Petroleum Marketing	0.00	0.00	1.34	0.00	0.00	1.34	2.91	0.00	0.00
399	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**113.59**	**0.00**	**0.00**	**1.34**	**2.91**	**0.00**	**0.00**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	Industrial Processes									
410	Chemical	54.05	1.50	1.15	45.22	0.00	32.62	0.30	69.06	0.00
420	Food and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
430	Mineral Processes	0.00	0.00	12.60	0.00	0.00	0.00	2.86	0.00	0.00
440	Metal Processes	0.35	0.01	0.38	0.27	0.00	0.00	0.02	0.45	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
460	Glass and Related Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
470	Electronics	0.00	0.00	0.15	0.00	0.00	0.00	0.02	0.00	0.00
499	Other	0.79	0.02	2.83	0.80	0.00	0.12	0.05	1.01	0.00
	Total	**55.19**	**1.54**	**17.11**	**46.29**	**0.00**	**32.74**	**3.24**	**70.52**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.00	51.86	8.85	1939.17	7083.60	0.00	381.24	3325.12	4755.91
520	Architectural Coatings & Related Solvent	0.00	0.00	1.10	479.00	210.61	0.00	44.80	0.00	5.30
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	0.00	0.00	0.00	0.00	118.37	0.00	0.00
	Total	**0.00**	**51.86**	**9.95**	**2418.17**	**7294.21**	**0.00**	**544.43**	**3325.12**	**4761.21**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	1102.95	0.00	0.00	0.00	0.00	0.00	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
660	Fires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
670	Waste Burning and Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**1102.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Ethylene dichloride	Ethylene oxide	Formalde-hyde	Methyl ethyl ketone	Methylene chloride	MTBE	Naphthalene	p-Dichloro-benzene	Perchloro-ethylene
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	0.00	275.79	7.75	0.00	0.00	50.54	0.00	0.00
722	Light Duty Trucks 1	0.00	0.00	55.63	1.83	0.00	0.00	11.73	0.00	0.00
723	Light Duty Trucks 2	0.00	0.00	225.41	5.96	0.00	0.00	44.46	0.00	0.00
724	Medium Duty Trucks	0.00	0.00	144.39	4.03	0.00	0.00	22.47	0.00	0.00
732	Light Heavy Duty Gas Trucks 1	0.00	0.00	64.62	2.35	0.00	0.00	10.53	0.00	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	0.00	10.62	0.42	0.00	0.00	1.83	0.00	0.00
734	Medium Heavy Duty Gas Trucks	0.00	0.00	21.87	0.91	0.00	0.00	2.18	0.00	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	0.00	14.53	0.45	0.00	0.00	0.81	0.00	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.00	48.79	4.90	0.00	0.00	0.28	0.00	0.00
743	Light Heavy Duty Diesel Trucks 2	0.00	0.00	40.56	4.07	0.00	0.00	0.23	0.00	0.00
744	Medium Heavy Duty Diesel Truck	0.00	0.00	165.81	16.64	0.00	0.00	0.96	0.00	0.00
746	Heavy Heavy Duty Diesel Trucks	0.00	0.00	1244.76	124.94	0.00	0.00	7.19	0.00	0.00
750	Motorcycles	0.00	0.00	294.80	6.49	0.00	0.00	14.37	0.00	0.00
760	Diesel Urban Buses	0.00	0.00	102.14	10.25	0.00	0.00	0.59	0.00	0.00
762	Gas Urban Buses	0.00	0.00	14.82	0.21	0.00	0.00	0.57	0.00	0.00
770	School Buses	0.00	0.00	54.73	5.30	0.00	0.00	0.43	0.00	0.00
776	Other Bus	0.00	0.00	14.95	1.31	0.00	0.00	0.43	0.00	0.00
780	Motor Homes	0.00	0.00	4.78	0.30	0.00	0.00	0.11	0.00	0.00
	Total	**0.00**	**0.00**	**2798.98**	**198.12**	**0.00**	**0.00**	**169.72**	**0.00**	**0.00**
	Other Mobile Sources									
810	Aircraft	0.00	0.00	4688.54	1.61	0.00	5.97	178.66	0.00	0.00
820	Trains	0.00	0.00	256.38	25.73	0.00	0.00	1.48	0.00	0.00
830	Ships and Commercial Boats	0.00	0.00	551.32	54.79	0.00	0.00	6.94	0.00	0.00
840	Recreational Boats	0.00	0.00	387.73	19.79	0.00	0.00	11.43	0.00	0.00
850	Off-Road Recreational Vehicles	0.00	0.00	193.69	3.93	0.00	0.00	8.57	0.00	0.00
860	Off-Road Equipment	0.00	0.00	4551.25	317.57	0.00	0.00	92.31	0.00	0.00
870	Farm Equipment	0.00	0.00	106.95	10.31	0.00	0.00	0.82	0.00	0.00
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**10735.86**	**433.74**	**0.00**	**5.97**	**300.22**	**0.00**	**0.00**
	Total Stationary and Area Sources	**56.67**	**74.77**	**2875.92**	**7408.30**	**14458.42**	**34.07**	**602.78**	**3433.40**	**6011.03**
	Total On-Road Vehicles	**0.00**	**0.00**	**2798.98**	**198.12**	**0.00**	**0.00**	**169.72**	**0.00**	**0.00**
	Total Other Mobile	**0.00**	**0.00**	**10735.86**	**433.74**	**0.00**	**5.97**	**300.22**	**0.00**	**0.00**
	Total Anthropogenic	**56.67**	**74.77**	**16410.77**	**8040.16**	**14458.42**	**40.04**	**1072.71**	**3433.40**	**6011.03**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Fuel Combustion									
10	Electric Utilities	0.00	0.16	99.23	0.00	0.00	0.00	0.00	0.09	185.53
20	Cogeneration	0.00	0.00	5.43	0.00	0.00	0.00	0.00	0.05	0.00
30	Oil and Gas Production	0.00	0.01	7.44	0.00	0.00	0.65	0.07	0.81	9.07
40	Petroleum Refining	0.00	0.02	5.79	0.00	0.00	0.00	1.16	12.91	0.00
50	Manufacturing and Industrial	0.00	0.26	69.30	0.00	0.00	0.02	0.20	2.36	104.74
52	Food and Agricultural Processing	0.00	0.02	5.79	0.00	0.00	0.00	0.02	0.19	29.67
60	Service and Commercial	0.00	0.50	65.23	0.00	0.00	0.03	0.01	0.21	125.34
99	Other	0.00	0.82	45.84	0.00	0.00	0.00	0.04	0.42	171.48
	Total	**0.00**	**1.80**	**304.05**	**0.00**	**0.00**	**0.70**	**1.50**	**17.03**	**625.83**
	Waste Disposal									
110	Sewage Treatment	0.12	0.90	300.22	35.39	1.54	0.00	0.00	0.00	0.00
120	Landfills	0.00	0.00	39.45	0.96	1.19	0.00	0.00	0.12	0.00
130	Incineration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
199	Other	0.00	0.05	64.92	2.79	0.12	0.32	0.03	0.32	0.00
	Total	**0.12**	**0.95**	**404.59**	**39.13**	**2.84**	**0.32**	**0.03**	**0.44**	**0.00**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	2.51	763.96	602.91	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	0.40	12670.44	36.75	0.01	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	19.32	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	336.45	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	0.00	94.98	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**2.91**	**13885.15**	**639.65**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	0.00	13.65	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	0.00	195.21	0.00	0.00	0.45	0.00	0.00	0.00
330	Petroleum Marketing	1.34	0.00	962.20	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.34**	**0.00**	**1171.46**	**0.00**	**0.00**	**0.45**	**0.00**	**0.00**	**0.00**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	Industrial Processes									
410	Chemical	0.46	1603.55	1327.84	0.00	42.77	0.00	0.42	0.19	0.00
420	Food and Agriculture	0.00	0.00	50.40	0.00	0.00	0.02	0.00	0.67	0.00
430	Mineral Processes	0.00	0.05	7.30	0.00	0.00	10.78	0.77	21.56	0.00
440	Metal Processes	0.00	0.73	5.76	0.00	0.22	0.44	0.44	17.65	0.00
450	Wood and Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.10	0.00
460	Glass and Related Products	0.00	0.00	3.44	0.00	0.00	7.64	0.00	2.10	0.00
470	Electronics	0.00	0.03	12.27	0.00	0.00	0.00	0.01	0.01	0.00
499	Other	0.12	1.42	809.02	0.00	0.51	0.01	0.01	0.08	0.00
	Total	**0.58**	**1605.78**	**2216.01**	**0.00**	**43.50**	**18.89**	**1.70**	**42.37**	**0.00**
	Solvent Evaporation									
510	Consumer Products	0.20	11.39	8398.69	562.99	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	44.48	1939.85	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	0.00	15.09	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.20**	**55.86**	**10353.85**	**562.99**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	0.00	300.58	0.00	0.00	0.13	0.06	0.10	0.00
620	Farming Operations	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.38	0.00
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	4.49	5.54	59.10	0.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	7.46	1.72	9.75	0.00
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	0.52	0.45	0.59	0.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	0.10	0.15	1.50	0.00
660	Fires	0.00	0.00	55.11	0.00	0.00	0.00	0.02	0.01	0.00
670	Waste Burning and Disposal	0.00	0.00	0.75	0.00	0.00	0.24	0.03	0.01	0.00
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	532.99	0.00	0.00	0.00	0.00	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**889.42**	**0.00**	**0.00**	**12.97**	**8.00**	**71.44**	**0.00**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	Propylene oxide	Styrene	Toluene	Trichloro-ethylene	Vinyl chloride	Arsenic	Cadmium	Chromium	Diesel PM (DPM)
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	0.00	36.16	2929.91	0.00	0.00	0.06	0.00	10.56	6.70
722	Light Duty Trucks 1	0.00	6.41	628.43	0.00	0.00	0.01	0.00	1.71	20.25
723	Light Duty Trucks 2	0.00	28.53	2493.95	0.00	0.00	0.03	0.00	7.35	2.39
724	Medium Duty Trucks	0.00	18.77	1351.57	0.00	0.00	0.01	0.00	3.41	3.25
732	Light Heavy Duty Gas Trucks 1	0.00	10.40	621.65	0.00	0.00	0.00	0.00	0.35	0.00
733	Light Heavy Duty Gas Trucks 2	0.00	1.83	107.21	0.00	0.00	0.00	0.00	0.07	0.00
734	Medium Heavy Duty Gas Trucks	0.00	3.92	160.57	0.00	0.00	0.00	0.00	0.06	0.00
736	Heavy Heavy Duty Gas Trucks	0.00	2.06	76.59	0.00	0.00	0.00	0.00	0.02	0.00
742	Light Heavy Duty Diesel Trucks 1	0.00	0.19	8.63	0.00	0.00	0.00	0.01	0.06	79.92
743	Light Heavy Duty Diesel Trucks 2	0.00	0.16	7.17	0.00	0.00	0.00	0.00	0.04	54.71
744	Medium Heavy Duty Diesel Truck	0.00	0.65	29.33	0.00	0.00	0.00	0.05	0.20	775.58
746	Heavy Heavy Duty Diesel Trucks	0.00	4.91	220.18	0.00	0.00	0.01	0.12	0.96	1742.98
750	Motorcycles	0.00	19.42	1038.46	0.00	0.00	0.00	0.00	0.11	0.00
760	Diesel Urban Buses	0.00	0.40	18.07	0.00	0.00	0.00	0.02	0.02	256.94
762	Gas Urban Buses	0.00	1.29	60.47	0.00	0.00	0.00	0.00	0.02	0.00
770	School Buses	0.00	0.42	20.07	0.00	0.00	0.00	0.02	0.02	306.94
776	Other Bus	0.00	0.64	27.69	0.00	0.00	0.00	0.00	0.02	70.54
780	Motor Homes	0.00	0.18	9.87	0.00	0.00	0.00	0.00	0.05	21.93
	Total	**0.00**	**136.35**	**9809.82**	**0.00**	**0.00**	**0.14**	**0.22**	**25.02**	**3342.13**
	Other Mobile Sources									
810	Aircraft	0.00	130.11	339.04	0.00	0.00	5.85	0.55	6.58	0.00
820	Trains	0.00	1.01	53.88	0.00	0.00	0.00	0.04	0.01	572.73
830	Ships and Commercial Boats	0.00	2.15	212.87	0.00	0.00	0.00	0.00	0.00	2487.98
840	Recreational Boats	0.00	11.16	954.09	0.00	0.00	0.00	0.00	0.79	69.11
850	Off-Road Recreational Vehicles	0.00	8.57	530.33	0.00	0.00	0.00	0.00	0.09	0.00
860	Off-Road Equipment	0.00	87.15	4939.24	0.00	0.00	0.01	0.11	2.00	1569.28
870	Farm Equipment	0.00	0.63	32.52	0.00	0.00	0.00	0.01	0.01	156.91
890	Fuel Storage and Handling	0.00	0.00	166.54	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**240.79**	**7228.51**	**0.00**	**0.00**	**5.86**	**0.71**	**9.48**	**4856.01**
	Total Stationary and Area Sources	**2.24**	**1667.30**	**29224.54**	**1241.77**	**46.36**	**33.34**	**11.23**	**131.28**	**625.83**
	Total On-Road Vehicles	**0.00**	**136.35**	**9809.82**	**0.00**	**0.00**	**0.14**	**0.22**	**25.02**	**3342.13**
	Total Other Mobile	**0.00**	**240.79**	**7228.51**	**0.00**	**0.00**	**5.86**	**0.71**	**9.48**	**4856.01**
	Total Anthropogenic	**2.24**	**2044.44**	**46262.86**	**1241.77**	**46.36**	**39.34**	**12.16**	**165.78**	**8823.97**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Fuel Combustion									
10	Electric Utilities	179.40	1067.97	1066.06	0.00	0.00	0.09	17.23	0.01	1.25
20	Cogeneration	0.00	18.56	18.41	0.00	0.00	0.05	0.00	0.00	0.00
30	Oil and Gas Production	8.77	29.56	28.77	0.03	0.69	0.22	0.00	0.21	0.05
40	Petroleum Refining	0.00	348.83	337.05	0.01	1.16	12.91	0.00	12.78	0.00
50	Manufacturing and Industrial	101.28	767.79	765.07	0.01	0.22	2.34	0.00	2.15	0.58
52	Food and Agricultural Processing	27.82	41.07	40.82	0.00	0.02	0.19	0.00	0.19	0.16
60	Service and Commercial	121.16	1195.70	1195.06	0.01	0.04	0.18	0.00	0.06	0.69
99	Other	158.70	19.62	18.64	0.00	0.04	0.42	0.00	0.40	0.94
	Total	**597.12**	**3489.10**	**3469.86**	**0.07**	**2.16**	**16.39**	**17.23**	**15.79**	**3.67**
	Waste Disposal									
110	Sewage Treatment	0.00	3.37	3.37	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	0.00	221.91	198.57	0.00	0.15	0.07	84.40	0.00	0.00
130	Incineration	0.00	107.59	107.59	0.00	0.00	10.77	0.00	0.00	10.77
199	Other	0.00	9.03	8.72	0.02	0.33	0.03	0.12	0.03	0.54
	Total	**0.00**	**341.91**	**318.26**	**0.02**	**0.48**	**10.88**	**84.52**	**0.03**	**11.31**
	Cleaning and Surface Coatings									
210	Laundering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	0.00	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	0.00	683.15	632.95	0.00	0.00	0.00	0.00	0.00	0.00
240	Printing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
299	Other	0.00	64.71	59.86	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**747.96**	**692.90**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Petroleum Production and Marketing									
310	Oil and Gas Production	0.00	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00
320	Petroleum Refining	0.00	110.30	105.98	0.00	0.45	0.45	0.00	0.00	89.42
330	Petroleum Marketing	0.00	16.83	15.57	0.00	0.00	0.00	0.00	0.00	0.00
399	Other	0.00	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**130.98**	**125.40**	**0.00**	**0.45**	**0.45**	**0.00**	**0.00**	**89.42**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	Industrial Processes									
410	Chemical	0.00	120.05	104.83	0.01	0.21	0.49	71.40	0.00	2.15
420	Food and Agriculture	0.00	346.46	3.40	0.00	0.00	0.39	0.00	0.00	189.10
430	Mineral Processes	0.00	402.56	83.71	0.15	0.80	5.74	19.87	1.45	1463.61
440	Metal Processes	0.00	210.69	114.94	0.18	4.99	4.90	101.02	0.00	0.00
450	Wood and Paper	0.00	97.55	29.63	0.00	0.14	0.14	115.38	0.00	0.81
460	Glass and Related Products	0.00	43.55	44.15	0.11	2.10	0.21	0.00	14.52	14.64
470	Electronics	0.00	1.98	0.48	0.00	0.03	0.01	6.88	0.01	1.89
499	Other	0.00	228.57	146.00	0.00	0.29	0.13	46.95	0.07	33.94
	Total	**0.00**	**1451.43**	**527.13**	**0.44**	**8.56**	**12.01**	**361.50**	**16.04**	**1706.14**
	Solvent Evaporation									
510	Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings & Related Solvent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.00	32.73	30.28	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**32.73**	**30.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Miscellaneous Processes									
610	Residential Fuel Combustion	0.00	4980.07	4208.68	0.00	0.24	0.01	6362.50	0.02	0.19
620	Farming Operations	0.00	7.93	0.64	0.00	0.11	0.09	48.37	0.00	338.68
630	Construction and Demolition	0.00	1220.09	79.88	0.00	146.97	15.57	11598.00	0.53	50189.49
640	Paved Road Dust	0.00	4427.15	305.47	0.52	71.13	6.88	34268.86	1.15	174191.16
645	Unpaved Road Dust	0.00	40.20	2.36	0.00	4.49	1.28	1163.31	0.10	11218.64
650	Fugitive Windblown Dust	0.00	17.76	1.11	0.00	3.18	0.37	189.58	0.01	1279.00
660	Fires	0.00	219.29	193.06	0.00	0.05	0.00	215.66	0.00	37.27
670	Waste Burning and Disposal	0.00	2224.75	1853.39	0.00	0.46	0.01	5813.85	0.03	15.69
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	0.00	0.00	0.00	0.00	0.00	0.00	16138.64	0.00	0.00
699	Other (Miscellaneous Processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**13137.25**	**6644.59**	**0.52**	**226.62**	**24.21**	**75798.77**	**1.85**	**237270.11**

Table B-8: 2023 Controlled Emissions (lbs/day) by Major Source Category for the South Coast Air Basin

Code	Source Category	DPM2.5	Elemental carbon (EC)	EC2.5	Hexavalent chromium	Lead	Nickel	Organic carbon	Selenium	Silicon
	On-Road Motor Vehicles									
710	Light Duty Passenger Auto	6.16	2301.40	1466.35	0.52	0.89	7.42	2389.36	0.19	407.38
722	Light Duty Trucks 1	18.63	392.54	260.49	0.08	0.14	1.23	380.64	0.03	62.71
723	Light Duty Trucks 2	2.20	2045.19	1559.27	0.36	0.41	5.89	1110.97	0.09	189.52
724	Medium Duty Trucks	2.99	949.71	723.65	0.17	0.19	2.74	519.08	0.04	88.29
732	Light Heavy Duty Gas Trucks 1	0.00	86.59	46.69	0.02	0.04	0.24	117.04	0.01	14.72
733	Light Heavy Duty Gas Trucks 2	0.00	17.94	9.60	0.00	0.01	0.05	24.50	0.00	3.09
734	Medium Heavy Duty Gas Trucks	0.00	14.42	8.16	0.00	0.01	0.04	18.03	0.00	2.26
736	Heavy Heavy Duty Gas Trucks	0.00	2.55	1.57	0.00	0.00	0.01	3.05	0.00	0.68
742	Light Heavy Duty Diesel Trucks 1	73.53	32.25	22.59	0.00	0.01	0.04	82.54	0.00	3.69
743	Light Heavy Duty Diesel Trucks 2	50.34	21.74	15.37	0.00	0.01	0.02	55.72	0.00	2.42
744	Medium Heavy Duty Diesel Truck	713.53	235.07	198.22	0.01	0.05	0.12	617.15	0.01	12.82
746	Heavy Heavy Duty Diesel Trucks	1603.54	677.06	484.51	0.05	0.24	0.58	1726.97	0.04	57.71
750	Motorcycles	0.00	34.08	21.32	0.01	0.01	0.10	14.56	0.00	2.50
760	Diesel Urban Buses	236.38	68.36	63.13	0.00	0.01	0.01	182.17	0.00	1.68
762	Gas Urban Buses	0.00	4.45	2.87	0.00	0.00	0.01	4.25	0.00	0.55
770	School Buses	282.39	81.92	75.65	0.00	0.01	0.01	217.25	0.00	1.69
776	Other Bus	64.90	21.70	18.56	0.00	0.00	0.01	55.22	0.00	1.03
780	Motor Homes	20.17	15.93	8.96	0.00	0.01	0.03	36.15	0.00	2.71
	Total	**3074.76**	**7002.90**	**4986.96**	**1.25**	**2.05**	**18.56**	**7554.67**	**0.43**	**855.47**
	Other Mobile Sources									
810	Aircraft	0.00	456.02	414.71	0.33	6.08	1.28	0.00	0.55	0.00
820	Trains	511.91	147.27	135.33	0.00	0.02	0.01	393.53	0.00	1.64
830	Ships and Commercial Boats	2322.78	99.52	92.91	0.01	0.00	0.00	0.00	0.00	13.68
840	Recreational Boats	63.59	334.88	232.45	0.04	0.00	0.79	47.49	0.00	0.20
850	Off-Road Recreational Vehicles	0.00	36.48	24.81	0.00	0.00	0.09	0.00	0.00	0.00
860	Off-Road Equipment	1443.83	1195.62	936.35	0.10	0.05	2.01	1078.26	0.01	4.50
870	Farm Equipment	144.36	44.71	41.14	0.00	0.00	0.01	107.81	0.00	0.45
890	Fuel Storage and Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
895	Truck Stops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**4486.46**	**2314.50**	**1877.69**	**0.49**	**6.15**	**4.19**	**1627.09**	**0.56**	**20.48**
	Total Stationary and Area Sources	**597.12**	**19331.36**	**11808.43**	**1.05**	**238.28**	**63.94**	**76262.03**	**33.72**	**239080.66**
	Total On-Road Vehicles	**3074.76**	**7002.90**	**4986.96**	**1.25**	**2.05**	**18.56**	**7554.67**	**0.43**	**855.47**
	Total Other Mobile	**4486.46**	**2314.50**	**1877.69**	**0.49**	**6.15**	**4.19**	**1627.09**	**0.56**	**20.48**
	Total Anthropogenic	**8158.35**	**28648.76**	**18673.08**	**2.78**	**246.48**	**86.69**	**85443.79**	**34.71**	**239956.61**

APPENDIX C

AQMD PUBLIC NUISANCE INVESTIGATION POLICIES & PROCEDURES

South Coast Air Quality Management District Policies & Procedures

Subject: Public Nuisance Investigation
Date: May 1, 1989
No. C-1

1.0 POLICY

The District will investigate public nuisance complaints and issue Notices of Violation for public nuisances. This document identifies the District's authority in these areas and provides guidelines for gathering evidence to substantiate public nuisance complaints.

2.0 GENERAL

An inspector usually conducts a public nuisance investigation in response to complaints from the public. To prosecute a public nuisance violation successfully, the chief prosecutor's office needs documented evidence that the activity or condition is in violation of Health and Safety Code Section 41700. The District is both the investigative and enforcement agency for public nuisance complaints.

3.0 HEALTH AND SAFETY CODE SECTIONS 41700 AND 41705

The complete texts of Sections 41700 and 41705 are given below. In substance, the text of Rule 402 is a restatement of Sections 41700 and 41705.

> 41700. Except as otherwise provided in Section 41705, no person shall discharge from any source whatsoever such quantities of air contaminants or other material which can cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
>
> 41705. Section 41700 shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

4.0 PUBLIC NUISANCE INVESTIAGATION GUIDELINES

The inspector will conduct a public nuisance complaint investigation in accordance with the following guidelines:

a. The inspector will check the complainants' premises or adjacent areas for the emissions

complained of (examples: odors, dust fallout, paint overspray). This may require driving around in the area surrounding the source. The inspector will write in the Violation Notice Report that this was done. Additionally, the inspector will note in the report whether or not another potential source of the emission was found.

1. If evidence of emissions is found, the inspector will track the emissions upwind from the complainants by visual or olfactory observations.
2. If no evidence of emissions is found, the inspector will ask the complainants for a description of the emissions and for other information which may help to determine their source.

b. After identifying the emissions and source, the inspector, using the process of elimination, will check all possible areas surrounding the alleged or known source to exclude any other potential source.

   The inspector will inspect the source premises and establish the specific equipment or process responsible for the emissions. This involves inspecting all vents, stacks, and openings where the emissions occur or may occur, obtaining samples of emissions if possible, and checking for Permits Operate.

c. The inspector will list all persons contacted at the source premises by full name and title (Mr., Mrs., Ms.), and will also include phone number, responsibility in the incident, and information to which each person can testify if called by the prosecutor as a witness.

   The inspector may ask the complainants whether they know of other persons in the neighborhood who have complained of the emissions. If so, the inspector will request the complainants to tell these other persons to contact the District.

d. After establishing the source, the inspector will contact all complainants and, if possible, obtain samples of emissions from the complainants; premises. In more complex cases, the inspector may require a source test, air monitoring, and perhaps assistance from local health officials to establish health endangerment or natural tendency to cause injury or damage to business or property.

e. If a violation is indicated, the inspector will obtain the completed complaint forms from the complainants.

5.0 DISTRIBUTING AND COLLECTING COMPLAINT FORMS

a. Whenever possible, the investigating inspector will personally distribute a complaint form to each complainant. The inspector's report must include the time, place, and date such forms were distributed and collected.

b. The inspector will interview each complainant either at the time of the complaint or when the declaration form is collected.

c. Inspectors who assist the investigating inspection to distribute or collect nuisance complaint forms must comply with the requirements of steps a and b above.

6.0 COMPLETING THE COMPLAINT FORM

a. The complainant must list a residence location on the complaint form (attached), not a post office box number. The business address and telephone number should indicate where the complainant can be contacted from 8:00 a.m. to 4:30 p.m. Monday through Friday.

b. The complainant must complete items 1 through 8 on the form. If the information is not known or is not applicable, the complainant will indicate "not known" or "not applicable" in the space provided.

c. The inspector will check that the signature is the complainant's legal name. If the answer to item 8 is "No," the complainant must complete the declaration on the reverse side, using printing rather than hand writing.

d. The inspector will review the form and complete the "APCD USE ONLY" block.

7.0 REQUIREMENTS FOR ISSUING A PUBLIC NUISANCE VIOLATION NOTICE

a. Before a public nuisance violation notice is issued, the investigating inspector must observe, identify, or otherwise establish evidence of the emissions complained of at or near the complainants' location.

b. The investigating inspector must establish the source of the emissions and eliminate other potential sources.

c. A multiple complaint condition must be documented. As a rule, District Legal Counsel prefers that it be based on a minimum of six (6) to ten (10) complainants from separate households. However, special circumstances

may dictate that a Notice of Violation be issued if supported by fewer complainants. For example, if property damage or a potential health hazard exists, a husband and wife living at the same residence may be considered as separate complainants. A Notice should not be issued only on the basis of complaints from members of a single family living at one location.

d. The investigating inspector should complete the Notice of Violation form. In some instances another inspector may serve the notice.

e. The inspector who establishes the public nuisance violation will write all of the supporting documentation, clearly demonstrating that each element of the violation has been met. Any inspectors who assist in gathering evidence or interviewing witnesses will prepare separate reports, coordinated by the lead inspector on the violation.

APPENDIX D

RESPONSE TO COMMENTS

2010 Clean Communities Plan
Response to Comments

Several comment letters were received from members of the CCP Working Group following the initial meeting of the working group on July 16, 2008. The comments were discussed by the working group at its August 26, 2008 meeting and the draft document was revised in response to the comments. Many of the comments and suggestions are incorporated in the 2010 Draft CCP. The following paragraph summarizes the major issues. Full text of the comment letters submitted by Working Group members are attached for reference at the end of Appendix E.

A letter from two environmental groups suggested ways to better address cumulative impacts through public participation, enhanced enforcement practices, permitting practices to consider cumulative impacts, revisions to existing source-specific toxics rules, and umbrella rules to address cumulative impacts. This letter also expressed support for measures which would promote better land use decisions and allow more community participation in air quality decisions. Many of these ideas have been incorporated in the document. Regarding the issue of addressing cumulative impacts through permitting, the AQMD staff still believes the larger issue is the air toxics and emissions from existing sources. Community-03 is designed to address retrofitting and replacing older, higher emitting equipment in impacted areas. Regarding new sources, the AQMD staff will continue to evaluate tools to more directly address permitting new and modified sources in addition to be more health protective.

Three letters from sanitation and water districts focused primarily on three issues. The first concern was the subjective nature of odor and public nuisance issues and whether that fits with a toxics plan. The comments were taken into consideration and two nuisance measures are part of the 2010 Draft CCP. The AQMD staff has included these measures in the Clean Communities Plan as they are air related "community" issues. The second concern was with a measure addressing accidental exposures to hazardous substances, in that it might overlap with existing accidental release regulation of several state and federal agencies. At the time of this comment, the AQMD had proposed a measure that would require replacement of acutely hazardous materials with less hazardous materials. The AQMD has since revised its proposal to recommend evaluation of use of acutely hazardous materials on a case-by-case basis. This may be done during the CEQA process or during permitting of storage or handling of acutely hazardous materials. The third was a request to coordinate the CCP efforts with the OEHHA Cumulative Impacts and Precautionary Approach Working Group. The AQMD staff has closely followed the meetings of the OEHHA Working Group to coordinate and not duplicate efforts. The fifth letter, from the Western States Petroleum Association, urged the AQMD staff to develop the CCP within the current regulatory framework using good science and fact-based initiatives.

Responses to comments received following release of the 2010 Draft Clean Communities Plan at the April 2, 2010 Governing Board meeting are provided below. Several comments were received that suggested additions or changes in wording to clarify the meaning of the document. Changes have been made throughout the document to address these comments. Comment letters can be found in Appendix E.

General

1. **Comment:** A guidance document shouldn't be the end goal of the pilot program because it would not go far enough to address cumulative and disproportionate impacts. A guidance document may be a start but it will likely take new rules, enforcement practices, permitting processes, etc., to deal with the issue properly. An open mind should be kept as to the remedies that we may identify during the pilot projects and creation of the exposure reduction plans.

   Response: The AQMD staff agrees that a guidance document will be the start. As the AQMD staff implements the pilot program and develops the guidance document for other communities it is expected that there will be enhancements to the AQMD's existing programs. The AQMD staff will use the pilot program to identify programs that can be improved.

2. **Comment:** Add an appendix listing the status of federal NESHAPs that includes the NESHAP, the applicable district source and rule, and whether our sources already comply or are exempt from the NESHAP.

   Response: For brevity, an internet link to the EPA list of NESHAPs has been included for reference in Appendix A. The AQMD Engineering and Compliance staff enforces applicable NESHAPs through permit conditions and inspections.

3. **Comment:** In Chapter 2, please add an explanation of the other limitations of the MATES III data, including limits of our knowledge about the toxicological impacts of TACs and other chemicals, especially when it comes to susceptible and vulnerable populations, and cumulative and synergistic impacts.

   and

   The draft CCP lacks adequate discussion of the uncertainties associated with the cancer risk estimation technique. We do not believe it is sufficient to merely reference the uncertainties section of the MATES III document

   Response: A discussion of the uncertainties related to risk estimation has been added to Chapter 2. A more detailed discussion of the uncertainties and limitations of the MATES III can be found in the Executive Summary and Chapter 1 of the MATES III Final Report (September 2008).

4. **Comment:** We request revision of the statement in Chapter 2 that the Mates III Study shows the highest cancer risks from air toxics in the vicinity of the port areas, with the highest grid cell risk of about 3,700 in a million. The cited risk levels are misleading, as they refer to risk estimates that are either over water or on Port property. It

is not appropriate to use or otherwise communicate these values as being representative of residential risks.

Response: This section has been revised to indicate that the highest residential risk near the ports is 2,900 in a million.

5. **Comment:** When referring to risk reduction, the plan should be clear in stating that reductions are in estimated cancer risk from ***air toxics***, (page ES-2). We also suggest describing the regional background or total cancer risk to put the contribution from air toxics into context.

   Response: The words "air toxics" have been added on page ES-2 as suggested. The overall regional population weighted total cancer risk is discussed on Page ES-2.

6. **Comment:** The measures are conceptual and leave many potential approaches for reducing TACs on the table. The measures should be further defined before taking it to the Board for approval. Without further definition, it is difficult for stakeholders to understand what they are being asked to support. In addition, the AQMD has not analyzed its authority to adopt the measures and conduct the studies it outlines in the plan. If the District chooses to proceed without analysis of its authority to adopt the measures outlined in the plan, it should be revised to include the same disclaimer included in the 2000 ATCP that staff is seeking Board approval of the plan as a planning document for possible future actions. As a result, the Board's action is not binding and does not commit the AQMD to a definitive course of action.

   and

   We remain concerned that some measures are moving forward quickly, without the full transparency of stakeholder engagement, and without sufficient detail.

   Response: The CCP is a planning document and the measures and implementation approaches are staff's initial concept. As measures are developed staff may identify additional implementation approaches or implementation approaches identified will become more refined. If a regulatory approach is selected for implementation, the AQMD staff will analyze its authority. In addition, actual implementation approaches will be determined and fully assessed and analyzed at the time each measure is implemented. Clarifications have been made in the measures to provide more specificity, where appropriate. The suggested disclaimer has been added to the Public Process paragraph on page ES-1. The AQMD remains committed to fostering an inclusive and open dialogue among affected stakeholders in order to ensure transparency throughout the development of this plan. As the measures are further developed, staff will continue to collaborate with stakeholders to analyze and refine the measures and implementation approaches.

7. **Comment:** Pursuant to Health and Safety Code § 40922, have you analyzed any of the measures for cost effectiveness and ranked the proposed measures? If so, what method was used for the analysis and where are the results? If not, when will that analysis take place?

   Response: Health and Safety Code 40922 applies to attainment plans. The Draft 2010 CCP is not an attainment plan.

8. **Comment:** The CCP should include a discussion of how the measures will avoid conflicting with the Senate Bill 375 Vehicle Miles Traveled (VMT) reduction goals.

   Response: California's SB375 is the nation's first law aimed at controlling greenhouse gas emissions through land use, by curbing urban sprawl. Proposed measures or implementation approaches will be fully analyzed during development to ensure that they do not conflict or overlap with any existing regulations.

9. **Comment:** We would appreciate staff developing a timeline or work plan for further development of the plan and in particular of the individual measures as they begin to be implemented, especially the CERPs.

   and

   Please provide clarification on the CCP implementation process as many measures are shown as being implemented simultaneously. We recommend that SCAQMD considers phasing the implementation with a focus on the highest priorities, rather than trying to implement too many measures at one time.

   Response: An implementation schedule has been added in Chapter 4. Personnel from various parts of the AQMD will be responsible for implementation of the different measures, so simultaneous implementation is feasible. Additionally, many of the measures are interconnected. Also, many of the measures require a long lead time or have a fairly lengthy development period. Staff believes the current implementation schedule optimizes staff resources and facilitates the development of a complete, comprehensive program to address community-level air quality issues.

10. **Comment:** Please include the MATES III modeled cancer risk for the interim years of 2014 and 2020 to illustrate improvements between 2005 and 2023 in Chapter 2 in addition to Figures 2-8 through 2-10.

    Response: The maps in Figures 2-8 through 2-10 demonstrate the decrease in modeled risk from 2005 through 2023. The bar graph in Figure 2-7 shows that decrease in risk in 2014 and 2020 is primarily due to the decrease in risk from diesel PM. A graphic representation of the modeled risk for the two interim years would look similar to map for 2023 in Figure 2-10 2023. Therefore, they have not been included.

11. **Comment:** The Draft CCP would benefit from a brief description of the Ports Clean Air Action Plan (CAAP) as a recent local example of industry, air agencies, and community stakeholders effectively working together on a voluntary program. Implementation of the CAAP and the forthcoming 2010 CAAP Update represent an effective and ongoing effort to achieve real reductions in air toxics and health impacts. This discussion would provide a useful template and background to CCP Working Group members and the public.

    Response: AQMD staff agrees that the CAAP and its process is an example of agency coordination and stakeholder coordination. The AQMD acknowledges that there are aspects of the CAAP that may be useful.

12. **Comment:** A number of CCP measures addressing localized effects and cumulative impacts are similar to efforts already being implemented by the Ports through the San Pedro Bay Ports Clean Air Action Plan (CAAP), Port (CEQA) projects, and other Port initiatives.

    Response: The Ports have made progress with implementation of the CAAP. Ports of Los Angeles & Long Beach should be commended on these accomplishments. The AQMD staff agrees that there are similarities.

    The CAAP is a good community exposure risk reduction plan, however, the Draft 2010 CCP will complement the CAAP and in some areas further enhance. For example, through measures such as Community-02, additional programs beyond the CAAP can be implemented to reduce exposure to toxic air contaminants. In addition, implementation of Community-03 may identify sources in and around the port where retrofitting or replacing equipment can further reduce health risks near port communities.

13. **Comment:** The plan provides little or no background on existing measures that are already in place and which are under the jurisdiction of other regulatory agencies.

    Response: The document describes the progress made so far with federal, state, and local regulations. It also discusses regulations which result in reductions in diesel PM emissions because this is such a large part of the risk in the Basin. In addition, Appendix A provides lists of some of the key regulations. Unlike previous versions of the Air Toxics Control Plan, the 2010 CCP focuses less on traditional source-specific regulatory approaches and more on addressing cumulative impacts in communities and neighborhoods.

14. **Comment:** Please provide a definition of the term "precautionary measures", found on page 3-1.

    Response: The term "precautionary measures" was used to emphasize the District's intent to proactively address and, where possible, prevent exposures to air toxics, in addition to mitigating existing exposures. For example, early participation in land-use projects to prevent siting of incompatible land uses and outreach to educators and youth sports organizations when it is unhealthful for children to play outdoors would prevent or reduce exposure.

15. **Comment:** Please clarify why GHG offsets are to be included in the CCP, since the plan is meant to address impacts that are highly localized in nature. We do not think the CCP is the appropriate vehicle for such action, and suggest that CEQA guidelines may be a better place to deal with CEQA review of GHG emission impacts.

    Response: Greenhouse gas emissions are mentioned in the introduction to Chapter 3 only in the context that impacts to GHG emissions will be analyzed as part of the CEQA analysis during rulemaking if a regulatory approach is selected as an implementation approach for any of the CCP measures.

Community Exposure Reduction Measures

16. **Comment:** Please describe the degree of granularity that is being proposed for "micro-scale" monitoring. Also, given that there is no scientific certainty regarding causal effects for many associated health outcomes, please describe how the District intends to use qualitative data appropriately and how such data will be reconciled with quantitative data. While there is evidence to support that air pollution can have adverse health effects, a survey of existing health issues in a community cannot establish causality of those health outcomes with emissions sources in the community.

    Response: Health surveys are only one of many tools that may be used to get an initial perspective on the air quality issues in a community. The details of how they will be used will be developed during implementation of the measure.

17. **Comment:** We support the District's decision to include all sources of toxics in the CERPs and hope the District will apply the principle of "fair share" to ensure that each source category is responsible for its own contribution to the cumulative emissions impacting burdened communities.

    Response: To the extent feasible, the AQMD staff will continue to use creative mechanisms to reduce emissions from sources traditionally not regulated by the AQMD, so that they are responsible for their share of emissions.

18. **Comment:** Please provide a more detailed explanation of the criteria used to choose the pilot locations for Community-01 and how they are representative of other highly impacted communities in the Basin. Please also consider adding Wilmington as a third pilot project.

    Response: Selecting the two communities was difficult, because there are other communities in the district that can benefit from development of a Community Exposure Reduction Plan. The AQMD staff used broad-based criteria in selecting the two pilot communities to develop Community Exposure Reduction Plans. The selection of these two communities was based on health risk data from MATES III, emissions data from the AQMP, demographics, particulate matter emissions, areas with high concentrations of toxic-emitting facilities or odor nuisances in close proximity to residential or sensitive receptors, history of complaints, known air pollution sources, and community-identified air quality issues. Also, the AQMD staff considered the willingness of the community to participate in the process.

    After the two pilot programs are completed, Community-02 will be developed. Community-02 will establish a template that other cities such as Wilmington can use. Any other city that is prepared to begin at that time can start developing their Community Exposure Reduction Plan.

19. **Comment:** Please clarify the zone of influence outside of community boundaries that would be affected when developing a CERP. Could this involve facilities beyond the specific boundaries of the selected community?

    Response: A CERP could involve entities beyond the boundaries of the community. The boundaries for the CERP depend on the businesses, air quality issues, and

proximity to the community. The intent is to include an area which encompasses air-related issues affecting the community, but is not so broad that the area is not manageable.

20. **Comment:** Community stakeholders should be reflective of the entire community, including committed local businesses, non-profit organizations, local government agencies, and residents. A solutions-oriented process will address air toxics issues while allowing business to continue to serve Southern California.

    Response: The stakeholder group will include representatives from all affected entities in order to provide balance throughout the process of developing a Community Exposure Reduction Plan. Community-01 has been clarified to specify that businesses will be included in the stakeholders and a new measure, Outreach-06 was added to address outreach to businesses.

21. **Comment:** The District agreed in the CCP working group meetings to incorporate a Task Force to guide the development of each CERP. The District should clearly describe and formalize the roles of the District, the Technical Advisory Group, and any known stakeholder processes for each pilot and include this information in the next Draft Plan. To avoid duplicative efforts, staff should identify concurrent or recent activities by other agencies specific to the pilot communities and summarize the reductions.

    Response: During the development of the Community Exposure Reduction Plan, the AQMD staff will work with a stakeholder group that will include community members, elected officials, other agencies, business representatives, etc. The specific representatives and their roles will be established during the development of the Community Exposure Reduction Plan.

22. **Comment:** Several comments were received asking for more detail and more specifics on the entire CERP process and suggesting potential implementation approaches for various stages of the CERP process.

    Response: The specifics of the CERP process will be developed during the pilot program. The pilot programs will allow all stakeholders to participate in formulating the process and developing the details. Clarifications have been made to the measure where appropriate.

23. **Comment:** What is the timeline and who will be responsible for the development of the immediate action items and exposure reduction plans in Community-01?

    Response: The specific implementation schedule for Community Exposure Reduction Plans will be developed through the pilot program. In addition, the implementation schedule for "immediate action" items depends on the type of immediate action items identified, if any. The implementation timeline and responsible implementation source or agency is dependent on the issues and solutions identified in the Community Exposure Reduction Plan.

24. **Comment:** We are concerned about the methods of information gathering outlined in the Community-01 measure, particularly the "neighborhood walks" and Investigation and Data Validation phase. Please clarify the

community input and neighborhood walk processes, with details regarding the logistics and intent of the processes.

Response: The "neighborhood walks" outlined in the CERP implementation approach will not be used for compliance audit purposes. The intent of the neighborhood walks is to allow AQMD staff to witness firsthand the neighborhood's air quality-related issues and better understand the issues raised during the community input stage. Some stakeholders may join AQMD staff during the neighborhood walks, however, AQMD will be sensitive to residents and local businesses to ensure that the size and composition of the group is not intimidating. Details and logistics of the neighborhood walks will be coordinated with all affected community members, community leaders, and businesses prior to implementation of this phase. For the neighborhood walks, AQMD staff will not enter a business unannounced. The neighborhood walks are not intended to create a hostile environment, but a positive partnership with the community, businesses, and agencies to work together and develop solutions.

In the next phase, Investigation and Data Validation, air quality-related issues brought forth by community members will be evaluated, sorted and prioritized for follow up, if necessary.

25. **Comment:** How will communities with high cumulative impacts be identified for Community-02? We are concerned that the CCP lacks a rigorous method to prioritize "at-risk" communities.

    Response: The concept for Community-02 is to develop guidelines to guide other communities and local governments through the process of identifying air quality issues, gathering data, working with stakeholders, and developing a community-specific Community Exposure Reduction Plan. Implementation of this measure is not limited to communities with "high cumulative impacts." This measure is applicable to any community that is interested in developing a Community Exposure Reduction Plan.

26. **Comment:** Community-02 requires a collaborative approach to address concerns from the community, business and regulators and should forge an equitable forum for all stakeholder views and limit the potential for bias. Even with SCAQMD guidance, independent actors may abandon the rigorous approach outlined in Community-01. An independent special board, created with SCAQMD input, could referee the process to ensure that all voices are heard equally and minimize the potential for stakeholder disputes.

    Response: The AQMD staff agrees that a collaborative approach is needed to address concerns from the community, business, and regulators. Through implementation of the pilot study, the AQMD will explore options to ensure that stakeholders can participate equally. The guidelines developed under Community-02 can include a section that addresses the "ground rules" of participation to ensure that the environment is non-confrontational. In addition, the communities can engage the AQMD as well as other agencies to participate to help develop elements of the Community Exposure Reduction Plan.

27. **Comment**: Further define "immediate action" and what constitutes "significant health impacts" that would trigger immediate action. Provide criteria and examples.

    Response: The AQMD staff does not have a specific definition for "immediate action" and "significant health impacts." The main idea behind this phase of the process of the pilot study is to recognize that issues may be identified that require resolution before the Community Exposure Reduction Plan is completed.

28. **Comment:** The District should not take a one size fits all approach when translating the information from the pilot projects into CERP guidelines for Community-02. This affects not just differing issues in communities, but also resources available to the community, its businesses, and local government.

    Response: Staff recognizes that each community has unique air quality issues and differing resources. Therefore, the guidelines for Community-02 will simply provide guidance and a process to follow, rather than solutions, for communities wishing to develop their own CERPs. This will allow the communities to benefit from lessons learned during the pilot program.

29. **Comment:** We support the District's approach of assisting communities that choose to engage the District in a CERP, rather than the District selection of additional communities.

    Response: Thank you for your comment.

30. **Comment:** For Community-03 we should consider initiating a process whereby community members could identify highly valued projects that may have direct or indirect impacts on air pollution but remain a priority (e.g., schools, hospitals, grocery stores, etc.). We should also consider additional permit review and mitigation measures for existing and new facilities in highly impacted communities.

    Response: If the stakeholders participating in developing the Community Exposure Reduction Plan decide to identify certain types of projects that may have indirect or direct impacts on air pollution, this can be incorporated into the Community Exposure Reduction Plan. Communities have flexibility regarding the scope of the Community Exposure Reduction Plan. These Plans can cover existing and new facilities. Land use decisions and CEQA review for land use decisions reside with the cities and counties. Regarding air quality permitting, the AQMD does have permitting authority for stationary air pollution sources. The AQMD staff will continue to evaluate tools to more directly address permitting new and modified sources to ensure adequate health protection. The AQMD staff believes that implementation of Community-03 will help to reduce emissions and exposure to air toxics from existing sources.

31. **Comment:** What would be the regulatory mechanism to assure success of the proposed implementation plans in Community-03?

    and

    What requirements will be imposed on "older" toxic emitting sources? Many "older" toxic emitting sources may be completely legal and operating in compliance with

applicable rules and regulations. This should be reflected in the Plan.

Response: Community-03 presents several implementation approaches. During the development of this measure, the AQMD staff will explore implementation approaches to ensure the success of this measure. If funding is available, sources should apply for retrofits or replacements. A regulatory approach may be used if it is determined to be necessary and appropriate. In order to achieve the greatest emission reductions, this measure seeks to focus on all existing, high emitting air toxics sources. The implementation approach of the measure has been revised to include existing permitted sources which may be in compliance with applicable regulations.

32. **Comment:** The Ports have appreciated the many opportunities they have had to partner with AQMD to fund air quality improvement projects and welcomes AQMD's funding assistance in retrofitting, repowering and replacing older, higher emitting equipment as is suggested by Community-03. Partnering and combining financial resources allows successful achievement of air quality improvement projects.

    Response: Staff agrees that partnering and combining resources is beneficial and appreciates the support of the Ports for this measure.

33. **Comment:** An overly simplified cumulative impacts approach may overstate the risks to a community if it ignores the powerful impact of distance on declining risk, inflates perceived risks and exaggerates health impacts. We caution against any approach that exaggerates risks that are already conservative and suggest that, until the methodology is fully matured, any cumulative impact assessment be paired with community level ambient monitoring as verification.

    Response: Staff agrees that quantitatively assessing cumulative impacts should be done with care to ensure that impacts are accurately assessed. The AQMD staff has not committed to any specific methodology for quantifying cumulative impacts at this point. The AQMD staff agrees that if a methodology is developed, that there are many factors that should be considered including distance, exposure duration, concentration, potency of the toxic air contaminant, etc. In addition, the AQMD staff does agree that ambient monitoring data is a useful tool to measure pollutants and can be used to verify ambient air quality in communities.

Community Participation Measures

34. **Comment:** The implementation approach under Participation-01 should explicitly include the creation of best practices guidance documents and the hosting of best practices workshops, or the training of community members to conduct best practices workshops, such as those done by the Pacoima Beautiful CARE II Team while working with auto dismantlers.

    Response: The 2010 Draft CCP includes a variety of measures to address outreach and improve communication. Through the CCP, the AQMD staff has identified several brochures for compliance and permitting for businesses and training and outreach for local governments and schools for implementation of CEQA that seem to fit the

concept of a best practices guidance document. A new measure, Business Outreach and Assistance (Outreach-06) has been added to the document and includes the best practices guidance document as one of the proposed implementation approaches.

35. **Comment:** In Participation-03 the CARE program has very limited funding and we can expect EPA to fund only one or two CARE projects within the district.

    Response: The AQMD staff understands that funding may be challenging. The AQMD staff is committed to investigate state and federal funding opportunities to help implement this measure as well as Community-03. There may be other types of programs such as Carl Moyer and the SOON program where specific funding is available and sources can qualify for.

Communication and Outreach Measures

36. **Comment**: We suggest including a risk communication element in the Clean Air Toolbox in Outreach-01.

    Response: A risk communication document has been added as one of the elements for the Clean Air Toolbox.

37. **Comment:** We respectfully suggest that the AQMD creates or improves programs that highlight the changes that businesses are implementing in order to reduce air pollutants and decrease exposures.

    Response: A new measure, Business Outreach and Assistance (Outreach-06) has been added that proposes development of a forum on the AQMD website where business owners can discuss and share solutions to compliance issues based on experience, and provide opportunities to showcase technologies or best practices that can help facilities achieve compliance and reduce air toxic emissions.

38. **Comment:** Outreach-01 should acknowledge the limitations of the ARB Land Use Guidance (e.g., it only deals with proposals to site residents near sources and not sources near residents) and try to fill the gaps (e.g., no proposal for a minimum buffer zone between refineries and communities).

    Response: CARB's Land Use document is an excellent start at highlighting incompatible land uses and recommending siting distances for specific land uses. The AQMD staff agrees that there are areas of CARB's Land Use document that can be enhanced. The 2010 Draft CCP discusses in Agency-01 the development of a new document titled "Proximity Matters" that will go beyond CARB's Land Use document to identify land uses that were not identified. In addition this measure discusses the use of "Reverse" CEQA analysis for sensitive land uses.

39. **Comment:** In Outreach-01 the implementation approach should include the conveyance of compelling and well told success stories.

    Response: The AQMD staff agrees that there is value in sharing air quality success stories. The 2010 Draft CCP has a couple of measures that will encourage communication of air quality success stories. Outreach-02 includes the "Ask AQMD" forum to address public inquiries and concerns. Through this forum, the AQMD

staff anticipates that compelling air quality success stories will develop that can be shared with the public. Partcipation-01 and -02 will encourage local agencies and schools that take the clean air pledge to share their air quality success stories also. As discussed in these measures, the AQMD staff envisions that these stories can be posted on the AQMD's website for other organizations. In addition, the AQMD staff has added a measure Outreach-06 which encourages businesses to communicate their success stories. The idea is to encourage other businesses and agencies to be pro-active on air quality issues.

Agency Coordination Measures

40. **Comment:** Agency-01 should include submitting detailed CEQA comments upon proposed incompatible land use decisions being made by other agencies.

    Response: Through the AQMD's CEQA Inter-Governmental Review (IGR) section, the AQMD staff currently provides comments to lead agencies regarding incompatible land uses. The AQMD staff references the CARB land use document as well as other studies regarding health effects of living near freeways and busy highways. The AQMD staff intends to continue commenting on CEQA projects as well as conducting outreach to local government regarding compatible land uses.

41. **Comment:** Agency-01 should conduct a formal study of agencies and schools with projects in EJ areas that do not send us their CEQA documents. We should send them formal request letters and take legal action if necessary to assure that we have timely notification and a meaningful opportunity to comment on their CEQA documents.

    Response: The AQMD staff is aware that not all lead agencies are sending their CEQA documents to the AQMD. AQMD staff estimates that the agency is not receiving 30 to 50 percent of CEQA documents for projects within the district. As discussed in Agency-01 the AQMD staff is proposing additional outreach and training to agencies and schools. The AQMD staff is considering issuing participation certificate to local cities, counties, and other government agencies to encourage participating in training and outreach activities.

42. **Comment:** Will AQMD be forming an agency stakeholder group for collaboration and input into the development of these measures? We believe that an agency stakeholder group needs to be involved now as AQMD develops the measures.

    Response: The AQMD staff has not yet defined the public process for implementing these measures. The public process may include a variety of different approaches such as a stakeholder working group, public workshop, or a more informal public process of meeting with stakeholders and interested parties.

43. **Comment:** How does AQMD define "sensitive land use? The Ports support the "reverse CEQA analysis" for school siting but would like to better understand AQMD's intention in expanding this for other "sensitive land use projects."

Response: During the development of this measure the AQMD staff will better define "sensitive land use." It is expected that "sensitive land use" would be similar to how this term is used under CEQA which includes residential and other sensitive land uses such as schools, hospitals, etc.

Monitoring and Compliance Measures

44. **Comment:** We understand that the facility "Hot List" is an informal and internal reference and suggest removing it as an implementation approach from Compliance-01.

    Response: The "Hot List" is an internal document and has been removed as an implementation approach. It is mentioned in the background of the measure only.

45. **Comment:** Please add the following items to Table 3-1 in Compliance-01:
    - Issue a study on how other agencies resolve complaints to see if we can learn from others.
    - Provide each complainant with a complaint identification number, a pamphlet with information about the SCAQMD's complaint response process and applicable rules, and an opportunity to appeal any decision to a higher level of authority within the agency.
    - Provide complainants an opportunity for feedback regarding level of satisfaction with resolution to complaints and suggestions for improvements.
    - Track complaint trends and provide regular update reports to the Stationary Source Committee and Governing Board on trends and issues.

    Response: Compliance-01 has been modified to indicate that the AQMD staff will contact other agencies that receive complaints to discuss how they track complaints and their complaint resolution process. The AQMD staff will determine if these other agencies manage complaints in a manner that can enhance our program.

    As discussed in Compliance-01, the AQMD staff will be investigating the development of an enhanced compliance and feedback system, including assigning a tracking or case number that the public can track their complaint.
    The AQMD currently has a compliance brochure that is readily distributed to the public and businesses. In addition during townhall meetings and other public outreach activities the AQMD staff generally distributes these to brochures to the public.

    The AQMD staff is always open to feedback from the public and businesses regarding suggestions to improve its compliance programs. The AQMD will periodically work with complainants to seek feedback.

    The AQMD staff currently keeps records of all complaints and tracks overall trends. In the past, when compliance issues arise surrounding a specific source or industry the AQMD staff has reported to the Stationary Source Committee. The AQMD staff will continue to produce compliance data for the Stationary Source Committee as specific issues arise. The AQMD staff will consider more frequent compliance reports, if needed and as resources permit.

46. **Comment:** Compliance-01 - AQMD staff ~~may also enter into~~ *will propose* agreements with other agencies and

organizations for enforcement, such as the California Highway Patrol and code enforcement, to optimize the resources devoted to enforcement of air regulations.

Response: Compliance-01 will be revised to state that the, "AQMD staff will propose where appropriate, agreements with other agencies and organizations for enforcement..."

47. **Comment:** Text in the Compliance-02 measure suggests that the AQMD is implementing at least a portion of the agenda of advocacy groups. This should be implemented using a public exchange where the targeted facilities have an opportunity to rebut the claims of community members.

    Response: The Compliance-02 measure does not intend to alter the District's existing complaint response protocols, policies, or compliance procedures. This measure aims to improve public awareness of air quality issues and encourage engagement in the compliance process. As allowed under existing policies and when warranted, sources targeted by complainants will be informed of the nature of any complaints against them and will be afforded the opportunity to communicate with AQMD enforcement staff during the complaint investigation process. Enforcement staff may take statements from facility representatives and complainants, document observations of facility and environmental conditions, and use factual information to determine the validity of any complaints against the facility. This measure, along with the remainder of the CCP measures, will be further refined using a public process with input from a diverse stakeholder group.

48. **Comment:** The "one-click" complaint provision should be carefully designed so as not to become a "click it and ticket" feature.

    Response: The "one-click" complaint tool is one of several potential tools that AQMD staff will evaluate for development, and would be utilized in coordination with and as a supplement to the District's existing air quality complaint reporting procedures (i.e., 1-800-CUT-SMOG hotline). Complaint response protocols will continue to ensure efficient, timely, and equitable response actions. As required by existing policies, enforcement staff must verify the validity of complaints received based on an objective evaluation of the circumstances surrounding the complaint. Any violation notices or "tickets" issued would also be dependent upon staff's objective confirmation of a violating act or condition.

Source Specific Measures

49. **Comment:** A number of aerospace and electronics manufacturers employ lead soldering as part of normal operations and the emissions are extremely low. Staff should consider this when amending Rule 1420 in order to avoid unnecessary administrative burdens on facilities that use lead but have no or *di minimis* emissions.

    Response: The purpose of amending Rule 1420 is to ensure AQMD compliance with the 2008 NAAQS for lead. Based on this goal, the AQMD staff will consider all facilities that process lead and develop appropriate requirements during rule development.

50. **Comment:** Use of hazardous materials is currently regulated by several state and federal agencies. How does the proposed CEQA review in Stationary-04 interact with existing programs and requirements? Does it apply to a specific project or the entire facility? Please provide a more detailed discussion of District authority under CEQA, especially since hazardous material use is more traditionally managed through other statutes and direct regulation.

    and

    Table 2-2 should include toxics control regulations that cover storage, handling, and risk management of hazardous materials such as federal EPA's and Cal-EMA's Risk Management Plan rules. We recommend that the District seek comments from Cal-EMA and regional Certified Unified Program Agencies (CUPAs).

    Response: The district does not intend to regulate the storage, handling, and risk management of hazardous materials. The intent of the measure is not to duplicate or conflict with the authority or programs of other agencies. References to the other agencies have been added to the measure and, if appropriate, the AQMD will work with the other agencies during the implementation of the measure. The most likely approach will be to use the CEQA review process to evaluate new and modified sources utilizing acutely hazardous materials. The goal of the evaluations will be to reduce or eliminate the exposure to an acutely hazardous material during an accidental release. This has been clarified in the measure and a commitment to work with the other agencies has been added.

51. **Comment:** An analysis of substitutions for acutely hazardous materials (Stationary-04) may be appropriate as part of CEQA analysis, however there is nothing in the California Health and Safety Code that authorizes the SCAQMD to impose a requirement on permitting to determine if less hazardous materials can be substituted into a proposed process. We do not believe that requiring process modifications during permitting is appropriate and believe there should be some objective standards specified and there should be a presumption that an existing process that has worked and not created problems at a facility should be allowed to continue.

    Response: Implementation approaches for the measures are conceptual and the AQMD's authority will be assessed if an approach is chosen for implementation. The measure has been reworded to say that staff will perform an evaluation of new uses of acutely hazardous materials to identify where less hazardous materials can be substituted. The most likely approach will be to use the CEQA process to evaluate new and modified permits that will be using acutely hazardous material and alternatives, if needed, to reduce or eliminate the exposure to an acutely hazardous material during an accidental release. The evaluations will assess new uses of acutely hazardous materials and will consider potential trade-offs and other potential adverse impacts from alternatives while ensuring that no other environmental impacts are introduced. If this implementation approach is chosen for development, public input would be part of the development process.

52. **Comment:** CCP's Risk Reduction Goals May Be Substantially Achieved with CARB's Programs (DRRP) - Stationary-05 could achieve DPM reductions beyond those

already anticipated. These mandates were developed weighing the economic and practical feasibility of early retirements, and still relied on considerable saturation with Tier IV engines by 2020. Even with delays in rule implementation because of the economy, the recession has resulted in substantial emissions reductions consistent with the 2007 AQMP.

The Sanitation Districts have already committed to extensive engine replacements at the highest tier available. In many cases the engines are used in specialized equipment like compacters, crawlers, grinders, excavators, etc. Replacement or repowering cannot take advantage of economies of scale. Hence requirements for further controls from this niche equipment will not go as far in reducing emissions as if the monies were spent on other alternatives.

Response: The AQMD staff agrees that CARB's diesel risk reduction program will reduce diesel emissions. Some diesel reduction measures require retrofits or rely on natural turnover. Depending on the useful life, the turnover rate may be up to 10 years and on the outset 30 to 40 years. The objective of this measure is to reduce exposure to diesel particulate through a variety of measures. Heavily impacted communities cannot wait 10 to 30 years for fleets or equipment to turnover.

53. **Comment:** The Sanitation Districts have committed more than $18 million since 1998 on clean fuels, engine replacements or repowering projects (including $3.8 million for a CNG/LNG station) and in one solid waste management facility under construction (Puente Hills Intermodal Facility), have:

- Committed to using low emitting or alternative fuels for equipment;
- Implemented design features to improve traffic flow to reduce traffic and idling emissions;
- Extracting a commitment from Union Pacific Railroad to use locomotives with the newest emissions control, use no more than two locomotives at a time, and other effective design measures;
- Investigated innovative technologies (with SCAQMD staff) in preparation for this and other heavy-duty uses throughout the Sanitation Districts.

Response: These types of measures that you will be implementing at the Puente Hills Facility are the types of measure that are needed from all diesel facilities. The AQMD staff agrees that measures to reduce exposure to diesel particulate should be built into the design of implementation of new projects.

54. **Comment:** Many of these commitments are above and beyond measures called for in existing state programs. Expecting further emissions reductions would be extremely burdensome and potentially infeasible for facilities already at BACT levels or are operating equipment at the latest tier. Any indirect source measure like Stationary-05 should consider investments already made, especially for essential public services that cannot reduce emissions by attrition, down-sizing or relocation.

Response: The implementation approach for this measure has not been established yet. One approach discussed in the CCP is to develop a menu of options where facilities can develop a Diesel Reduction Plan. The AQMD staff understands that there are facilities that are proactive and

they may have measures that they are currently implementing, similar to those that may go into a Diesel Reduction Plan. The concept of this measure is to provide a wide range of strategies and options that will reduce the exposure to diesel PM. Some of these measures may require capital investments, while other measures address operational changes to reduce idling, improve traffic flow, location of diesel sources away from residents and sensitive receptors, scheduling of deliveries, etc.

55. **Comment:** What is the AQMD's statutory authority for the regulatory options outlined in the Stationary-05 measure, which seeks to regulate mobile sources?

    and

    Some of the options discussed in Stationary-05 are pre-empted under federal law. For example, potential approaches such as "vehicular scheduling and operating changes," fall under the purview of the ICC Termination Act of 1995.

    Response: The AQMD staff presented a general concept for Stationary-05. The applicability, implementation approach and specific requirements have not yet been established. As this measure is developed, the AQMD will do a legal analysis regarding the agency's legal authority to implement such a measure.

56. **Comment:** What level of CEQA analysis is the AQMD proposing for the rulemaking effort outlined in Stationary-05?

    Response: If this measure is developed as a rule, the AQMD staff will prepare the appropriate CEQA document. Regardless of the implementation approach, this measure will be developed with public input.

57. **Comment:** When will a draft proposed indirect source rule and preliminary draft staff report be ready for review?

    Response: Please refer to Chapter 4 for the proposed implementation schedule for development and implementation of proposed measures.

58. **Comment:** How will the terms in Stationary-05 be defined and what is the scope of "facility" and "businesses that rely on diesel mobile sources?" Will the ultimate definition include the Ports? What is the basis of the applicability and the specific options in the "menu of options?"

    Response: The purpose of identifying measures is to present initial concepts for control approaches. Specifics of the measure such as applicability, definitions, requirements, exemptions etc. will be established during development of the control measures. The AQMD staff will seek public input from a wide variety of stakeholders, including the ports, during this public process. It is too early in the development of this measure to provide specifics about the measure and the implementation approach.

59. **Comment:** Stationary-05 - Pursuant to Health and Safety Code § 40727, where are the findings of Necessity, Authority, Clarity, Consistency, Non-Duplication, and Reference? When and how will these be developed?

Response: If this measure is developed through a regulatory approach, the AQMD staff is required to make findings pursuant to the Health and Safety Code. These findings will be included in the Draft Staff Report.

60. **Comment:** Under Stationary-05 who would conduct and pay for proposed traffic studies to improve the flow of traffic and vehicle scheduling? When would these need to be completed; what triggers the need to conduct one? Would any part of the proposed rule affect a truck's ability to leave truck routes to deliver/pick up goods?

    Response: It was not intended that this measure require formal traffic studies, but that one option may be for the operator to assess the traffic flow into, out of, and within the facility to reduce idling and queuing of trucks. The concept of this measure is to develop a menu of options that affected facilities can select. No compliance dates have been established yet, as this is too specific at this time. As this measure is developed, the applicability, specific requirements, compliance dates, etc. will be developed.

61. **Comment:** Under Stationary-05 what changes to CARB's guidelines in reference to AB 2588 is the AQMD seeking? Please clarify the process through which the District plans to work with CARB to modify AB2588 guidelines to address mobile sources. Will the public receive notice of any action in this regard?

    Response: The AQMD staff currently uses CARB's Health Risk Assessment (HRA) guidelines for estimating health risks for AB2588 (Rule 1402) facilities. It may be necessary to pursue modifications to the AB2588 HRA Guidelines to include these mobile sources that enter the facility. If CARB modifies its HRA Guidelines, it is the AQMD staff's understanding that CARB would implement those changes through a public process.

62. **Comment:** Under Stationary-05 the Draft 2010 CCP says the District will initiate development of an indirect source rule containing an applicability criteria that will account for diesel PM emissions, exposure, and proximity to residential/sensitive receptors. If, as staff has indicated verbally, this is intended for new and existing facilities, and the facility operator will be the targeted party that should be included in the next draft. If the District takes this approach, implementation options should only include things over which the operator has control. Also, since offsite emissions are to be included, geographic limits should be given for what would be attributed to the facility.

    Response: Further clarification to the measure has been made. The measure applies to new, existing, and modified facilities. As outlined in the measure, the initial concept would be a menu of options that a facility can select from to provide flexibility to the operator. Whether this means a new program, rule, or guidance document will be determined when the measure is developed and input from all stakeholders will be considered at that time. Specifics regarding the applicability, definitions, the specific options, approach, requirements, etc. will be established during development of this measure. Regardless of the approach, this measure will be developed through a public process.

63. **Comment:** In Stationary-05, please remove the reference to rail yards and the San Bernardino health risk assessment or revise the measure to reflect improvements since 2005.

Omitting the progress to date leaves the impression nothing has been done.

Response: A sentence has been added to Stationary-05 to state that, "Risks at the rail yards have decreased and are expected to decrease further over time due to adopted regulations and fleet turnover; however, the residual health risk still remains elevated."

64. **Comment:** Despite considerable investment in clean air technologies and a proven track record of innovation and success in reducing emissions and nuisance impacts, often voluntarily, many of our facilities may be unfairly impacted by components of the CCP, particularly the diesel magnet measure and odor/public nuisance provisions.

    Response: As those measures are developed and implemented the AQMD staff will work with all stakeholders to identify additional approaches to minimize potential impacts and to acknowledge facilities that have implemented measures voluntarily. Since the programs for these measures have not yet been developed, it is too early to determine what, if any, impact will occur on a those facilities that have voluntarily implemented proactive measures.

Public Nuisance Measures

65. **Comment:** Capital and resources have been devoted to odor related nuisances, often voluntarily. This proactive approach to address community concerns may not be acknowledged by the CCP. Proactive businesses should be rewarded for reaching out to communities instead of subjected to new costly requirements. Permitting analysis should recognize these efforts rather than placing onerous requirements on voluntarily installed odor control equipment.

    Response: The AQMD acknowledges and commends businesses, including the County Sanitation Districts of LA County, who have been proactive to reduce emissions and/or odors generated from their facilities.

66. **Comment:** We support the Public Nuisance Investigation Policy in Appendix C, including requirements for a minimum of six unique complaints and verification by an inspector before an NOV is issued. An unbiased approach is needed due to the episodic and subjective nature of odors which makes it difficult to trace to a confirmed source. Relaxing the standard for confirming and issuing an NOV may lead to installation of unwarranted controls. Any potential change to this policy should make the procedure less arbitrary, and seek to solidify a factual, documentable and impartial basis for complaints. Furthermore, we would not support any change to Section 41700 of the H&SC.

    Response: The AQMD staff understands your concern. As the AQMD staff further investigates options to address odor nuisances, the AQMD staff will work with stakeholders.

67. **Comment:** We are concerned with the statement in Nuisance-01 that amendments to Rule 402 or Health and Safety Code Section 41700 may be necessary.

    Response: This is one of the proposed implementation approaches for the measure. If amending Rule 402 is chosen as an implementation approach, rule development

will follow the normal process with full public participation and analysis of all impacts.

68. **Comment:** We believe source-specific odor nuisance rules proposed under Nuisance-02 will punish the many for the sins of the few and that the District's resources should be concentrated on sources causing problems. We also question the District's statutory authority for adopting rules purporting to prevent a public nuisance that would affect a facility that is not causing a public nuisance.

    Response: Developing source-specific odor nuisance rules is one of the proposed implementation approaches for this measure. If this approach is chosen, such rules may be similar to Rule 410 – Odors from Transfer Stations and Material Recovery Facilities (MRFs) which was adopted in 2006 and addresses an industry with inherent odor issues. If a regulatory approach is chosen, legal authority will be assessed at that time and rule development will follow the normal process, including conducting any necessary environmental and economic analyses.

69. **Comment:** Staff should consider how SB 1224 (Wright) might affect its nuisance rules.

    Response: SB 1224 authorizes local air pollution control districts to adopt regulations, consistent with protecting the public's health, and safety, and quality of life, that ensures district staff and resources are not used to investigate complaints determined to be repeated and unsubstantiated, alleging a nuisance odor violation. The law sunsets January 1, 2014. The AQMD staff will consider SB1224 when, and if, it begins evaluating and considering amendments to Rule 402 in early 2011.

APPENDIX E

COMMENT LETTERS

Comment Letters Received after April 2, 2010 Release of the 2010 Draft CCP

Comment Letters Received after July 16, 2008 Initial Working Group Meeting

THE CALIFORNIA RAILROAD INDUSTRY

October 8, 2010

Elaine Chang, Deputy Executive Officer
Susan Nakamura, Planning and Rules Manager
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765

Re: Revised 2010 Draft Clean Communities Plan (CCP)

Dear Dr. Chang and Ms. Nakamura:

The California Railroad Industry, the Class I railroads operating in California (the Railroads), appreciates the opportunity to comment on the South Coast Air Quality Management District's (the District) Revised Draft Clean Communities Plan (Revised Draft) distributed to the Working Group members on September 16th. We understand that the CCP is a plan, and therefore many of the measures remain at the conceptual level, and there will be additional opportunities for stakeholders to participate in the development and implementation of each measure. However, we remain concerned that some measures are moving forward more quickly, such as the Community Exposure Reduction Plans (CERPs), with an insufficient level of detail and without full transparency for stakeholder engagement.

Additionally, we would like to reiterate and expand upon two main concerns that were raised previously in an industry coalition comment letter.[1] First, we believe that District staff should further define the measures before taking the plan to the Governing Board for approval. Second, the District has not analyzed its authority to adopt the measures it outlines in the plan.

Without further definition of the measures, it will be difficult for stakeholders to understand exactly what we are being asked to support. We recognize the collaborative approach the District is taking in the CCP, and note that there are multiple measures that focus on partnering with other agencies. Given that specific measures, such as Stationary-05, duplicate efforts by CARB and EPA that are already underway, we think that details regarding the implementation approach and potential areas of overlap with other agencies should be identified before plan adoption, and reflected in the final draft of the CCP. The collaborative nature of the CCP makes it all the more important for the District to incorporate a greater level of detail before the CCP is approved, so

[1] The California Supply Chain Jobs Alliance comments on the 2010 Draft Clean Communities Plan, July 7, 2010.

that the Board can evaluate the best use of Staff resources in developing measures, given parallel activities by other agencies in the same areas. We look forward to continuing to work with the District and other stakeholders on developing plans and strategies that address community concerns while avoiding a burdensome patchwork of regulations and requirements.

Community 01- Community Exposure Reduction Plan (CERP)

Community Selection Criteria

The District should clearly describe its evaluation criteria for selecting the Pilot Communities for the CERPs, and provide further detail about why San Bernardino and "Boyle Heights and surrounding areas" were selected over other communities the District evaluated. Additionally, we note that the District selected these two communities without discussion or participation by stakeholders, and although the Board has not yet approved the CCP, the Revised Draft implementation schedule lists "Phase I: Select Two Pilot Communities" as "completed".[2] Additionally, The District has indicated in working group meetings that it is already taking action to direct resources to and to conduct further research on these communities through initiatives such as the Memorandum of Agreement (MOA) between CARB, US EPA, SJVAPCD, and SCAQMD[3], and has implied that the work under the MOA influenced the selection of the communities, but this information is not provided in the Revised Draft.

While the District lists several factors considered when selecting the Pilot Communities, many communities could qualify to be selected as a Pilot Community given the below listed criteria:

> *The selection of these two communities was based on health risk data from MATES III, emissions data from the AQMP, demographics, particulate matter (PM) emissions, areas with high concentrations of toxic-emitting facilities in close proximity to residential or sensitive receptors, history of complaints, known air pollution sources, and community-identified air quality issues.*[4]

The District should provide more detail regarding how these communities compare to the remainder of the South Coast Air Basin (SCAB), and which other specific communities the District considered. Given that a goal of the pilot projects is to test new strategies that can be considered for use in other communities, the District should also outline how these communities are representative of other highly impacted communities in the SCAB.

[2] Revised 2010 Draft Clean Communities Plan, Appendix D, p. D-3
[3] U.S. EPA, Cal/EPA, CARB, SCAQMD, SJVAPCD, *Memorandum of Agreement, for Coordination and Collaboration on Research Projects Related to New Clean Air Technologies,* July 9, 2008
[4] Revised 2010 Draft Clean Communities Plan, p. 3-9

Community Input

Information gathered by the neighborhood walks, individual conversations with the community, and other informal information gathering, should be followed up by one or more noticed CERP working group meetings before the Investigation and Data Validation stage. Neighborhood walks and websites are both good approaches to understanding a community and its issues, but they don't facilitate dialogue or increase understanding of all stakeholders. Engaging in dialogue before moving on to investigation can help close incomplete feedback loops, facilitate early troubleshooting, and clear the path to solutions.

Include potential elements and scope limitations of the CERPs

It would be helpful if the District would provide further information regarding their expectations for scope and primary components that will be in each CERP. The response to comments acknowledges that the District received several requests for more detail on the CERPs, and we continue to believe it is reasonable for the District to add more structure to the scope of the CERPs in advance of approving the CCP. We understand the specific strategies in the CERPs will be developed with the community, but there should be an underlying structure that the District has in mind given its expertise in air quality issues. For example, since these are called Exposure Reduction Plans "tailored to address air-related issues in specific communities"[5], we assume the ultimate goal is to reduce exposure within the community by some measurable amount. How will the District set the goal or goals of the plan? How will the plan's success be measured? Will the scope of potential actions be limited to those that are feasible and directly result in exposure reductions? Will proposed measures include those that only measure TACs in the community (e.g. air monitors)? Additionally, staff has verbally indicated there will be educational and economic development components to the plan (e.g. training for green jobs). The CCP needs to clearly identify the plan elements and scope before it goes to the Board for approval in order to minimize confusion, clarify expectations early in the process, and avoid misdirecting time and resources on work that is outside the scope of the primary goals of this exercise.

Investigation and Data Validation

We support the step of investigation and data validation; however, we have strong reservations regarding the use of health surveys to verify air quality issues. Although there is evidence to support that air pollution can have adverse health effects, a survey of existing health issues in a community cannot establish causality of those health outcomes with emissions sources in the community. Many diseases and health conditions have multiple causes and are not exclusively caused by environmental exposures.

[5] Revised 2010 Draft Clean Communities Plan, p. 3-8

Community-03: Greening Communities through Accelerated Toxic Emission Reduction Projects for Existing Sources

We agree that seeking incentive funds is the best means to encourage retrofitting equipment at existing facilities. Additionally, we agree with the District's conclusion that prohibiting permits in specific communities that are identified as cumulatively impacted will unnecessarily inhibit newer, cleaner facilities from replacing older facilities.

Identifying disproportionately impacted communities

Under the implementation approach for Community-03, the Revised Draft has added "Identify disproportionately-impacted communities and assess cumulative impacts."[6] We also understand that the District is following OEHHA's "Cumulative Impacts" methodology. The California Council for Economic and Environmental Balance (CCEEB) has submitted significant comments on the shortcomings of the Cumulative Impacts methodology, and shared these comments with the District. We support the comments provided by CCEEB.

Stationary-05: Indirect Sources

The California Railroad Industry commented on the CCP previously as part of a coalition, and we reiterate our statement that the measure remains conceptual and lacks sufficient detail in the key areas of implementation approach, scope, and statutory authority.

We also requested that the District provide information regarding their statutory authority to pursue the implementation approaches under indirect sources. The District replied in their response to comments:

> *The applicability, implementation approach and specific requirements have [not] yet been established. As this measure is developed, the AQMD will do a legal analysis regarding the agency's legal authority to implement such a measure.*[7]

We reiterate that the District should not wait until it begins to develop the measure or program to provide this analysis. Instead it should provide the Board and public stakeholders with this information before approving the CCP. The 2000 ATCP contained a brief section on legal authority that recognized the limitations of the District's authority over mobile sources, and after summarizing ARB and EPA mobile source programs, stated "these programs combined have

[6] Revised 2010 Draft Clean Communities Plan, p. 3-15
[7] Revised 2010 Draft Clean Communities Plan, Appendix D, p. 11

produced and will continue to produce significant toxic reductions."[8] It would be reasonable for the District to include the same basic legal analysis for the CCP, since it has effectively replaced the ATCP.

Completing the legal analysis now will provide the Working Group members, and the Governing Board Members with critical information regarding the feasibility of pursuing the approaches suggested in the measure, and avoid setting unrealistic expectations.

Broadening language to include rail traffic

The Railroads note that the District has revised Stationary-05 to broaden the scope from addressing diesel truck traffic emissions, to "diesel mobile source emissions" and in one line has been clarified to specifically mention rail traffic:

> *The purpose of this measure is to reduce exposure of diesel PM emissions from new, existing, and modified facilities with diesel mobile source ~~truck~~ emissions including, but not limited to, large warehousing facilities, distribution facilities, delivery facilities, and rail facilities. Additionally, facilities whose business is not primarily associated with ~~truck traffic~~ diesel mobile sources, such as manufacturing facilities, may be included due to increased diesel PM emissions from truck or rail traffic for deliveries of raw materials and distribution of finished products.*[9]

As the District is well aware, some of the options discussed in Stationary-05 are preempted under federal law. The Railroads have submitted comments on multiple occasions to the District, the Ports, and the ARB regarding preemption by the ICC Termination Act of 1995 (ICCTA), and note that some of the potential approaches the District considers in Stationary-05, including "vehicular scheduling and operating changes", fall under the purview of ICCTA.

Although the District has revised the CCP to clarify that they intend the Stationary-05 measure to address "new, existing, and modified facilities with diesel mobile source emissions,"[10] the list of potential implementation options should only consider actions over which the facility operator has control. Additionally, the measure currently includes offsite emissions, but does not provide any further qualifying information. This information should be included in the CCP goes to the Board.

The CCP lists several steps and potential approaches to addressing indirect sources under Stationary-05, many of which are resource intensive. For example:

[8] SCAQMD Air Toxic's Control Plan Final Draft, 2000, p.18
[9] Revised 2010 Draft Clean Communities Plan, p. 3-56
[10] Revised 2010 Draft Clean Communities Plan, p. 3-56

> *...use of accelerated fleet turnover, minimization of truck routes in or near neighborhoods, truck idling requirements, automated truck gates, and pre-scheduling of deliveries.... Strategies to reduce diesel PM emissions may include developing an indirect source rule for diesel or requiring health risk assessments similar to the ones CARB required for the rail yards. Other possible approaches would include ways to reduce idling, traffic studies to improve the flow of truck diesel vehicle traffic and vehicular scheduling and operating changes.*[11]

CARB did not require health risk assessments (HRAs) for the rail yards. The HRAs were completed as an element of the voluntary but enforceable 2005 Memorandum of Understanding (MOU) between Union Pacific Railroad, BNSF Railway, and CARB. The emission inventories and modeling were extremely resource intensive for the Railroads and the HRAs were completed by the ARB. The entire HRA process completed under the MOU took several years to complete. The District should consider how its limited resources would impact a decision to pursue this approach. Similarly, the Railroads have completed traffic evaluation studies for some of their yards to evaluate operational changes suggested by community members, such as truck gate relocation. These studies were also very expensive, but provided important information regarding cost effectiveness of emission reductions and highlighted potential operational interruptions, and other operational concerns including safety issues.

Legal Analysis

The District has not analyzed its authority to adopt the measures it outlines in the plan. The District's response to comments in the Revised Draft, indicates that staff intends to postpone analysis of authority until it begins developing each separate measure, and identifies possible implementation approaches,

> *As measures are developed staff may identify additional implementation approaches or implementation approaches identified will become more refined. If a regulatory approach is selected for implementation, the AQMD staff will analyze its authority.*[12]

We continue to believe that such an analysis should be conducted before the plan is approved, and should be included with the plan when it is circulated to the public. Our comments are submitted while awaiting the District's analysis of its authority to pursue these matters and the submittal of these comments is not concurrence as to District authority. If the District chooses to proceed without this analysis, we suggest the CCP at least be revised to include the same disclaimer that was part of the 2000 Air Toxics Control Plan:

[11] Revised 2010 Draft Clean Communities Plan, p. 3-56
[12] Revised 2010 Draft Clean Communities Plan, Appendix D, p. D-3

Staff is seeking the Board's approval of the plan as a planning document for possible future actions. As a result, the Board's action is not binding and does not commit the AQMD to a definitive course of action.[13]

We also note that the analysis of District authority set forth in the 2000 Air Toxics Control Plan should not itself be relied upon nor does the authority cited support the CCP. For example, the 2000 Air Toxics Control Plan states, at page 9, that:

...the AQMD has historically affected emissions through trip reduction programs. The AQMD has authority for certain trip reduction programs, fleet-type rules, and diesel fuel combustion rules through H&SC Sections 40447.5 and 40447.6.

These sections, however, provide extremely narrowly defined authority that does not include any power to regulate rail activity. Given the clear lack of statutory authority, and preemption under ICCTA, we believe it is even more important to examine legal authority before embarking on a program that purports to be directed at developing measures that would be unlawful.

Thank you for the opportunity to express our views. If you have any questions or concerns, please call me at 415-421-4213 x 12 or Sarah Weldon at 415-421-4213 x 34.

Sincerely,

Kirk Marckwald
Principal, California Environmental Associates
On behalf of the California Railroad Industry

[13] SCAQMD Air Toxics Control Plan, Final Draft, March 2000, p. 9.

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

STEPHEN R. MAGUIN
Chief Engineer and General Manager

October 8, 2010
File No.: 31-380.10B

Ms. Cheryl Marshall
Program Supervisor
Planning Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Dear Ms Marshall:

Comments on the 2010 Draft Clean Communities Plan

The Sanitation Districts of Los Angeles County (Sanitation Districts) appreciate this opportunity to comment on the 2010 Draft Clean Communities Plan (draft CCP). The Sanitation Districts are a consortium of 23 special districts that provide environmentally sound, cost effective management of wastewater and solid wastes for about 5.7 million people in Los Angeles County and, in the process, convert these wastes into resources such as reclaimed water, energy and recycled materials. Although, the Draft CCP is largely a collection of conceptual programs at this point, its design as an "action plan" that will "continue to build on and strengthen existing source-specific rules" such as Rule 402 and/or those in Regulation XIV is still of concern to us as explained below.

The Draft CCP Needs More Specificity

For example, despite participating and commenting in working group meetings and the public workshop, we are still concerned that the draft CCP lacks a rigorous method to prioritize "at-risk" communities. Without a strong scientific underpinning, the draft CCP has no mechanism to avoid triggering a rush for relief by regulators from alarmed communities swayed by perceived risk. *As proposed, risk reduction efforts will arguably be made in communities most capable of expressing the greatest alarm, instead of communities actually disproportionably impacted by air pollution.* If our goal is to protect communities in greatest need, the process cannot be derailed by subjective perceptions of risk.

DM # 1696023-v2

Recycled Paper

Similarly, we are concerned that the *scope* of the Community Exposure Reduction Plans (CERP) will be guided by factors not directly influencing risk (see: Community-01, and Response to Comment 21). Such an arbitrary scoping approach only addresses *perceived* risk drivers. Without a science-based approach grounded in emissions and exposures to prioritize sources, SCAQMD may have difficulty resisting pressures to act based on public perceptions. We question, for example, if the pressures to further regulate stationary sources will be lessened by the draft CCP despite the fact that 92% of the weighted risks in the Basin per MATES III are from mobile sources. We believe that a defendable scientific approach to tackle cumulative impacts must assess all sources to identify appropriate and meaningful risk reduction measures, even those under the jurisdiction of other regulatory agencies.

SB 375 Nexus

The net effect of community-specific risk or nuisance reduction measures could be a further distancing of businesses from communities and their employee base. This seems to run counter to the goals of SB 375. Compliant businesses may find it easier to shut-down, relocate or avoid certain communities altogether than to endure the increased oversight and uncertainty resulting from this program. The draft CCP measures could inadvertently disperse our manufacturing industry which would exacerbate mobile source emissions as VMT increases. The SB 375 regional VMT targets will only be achieved if businesses are in close proximity to the communities they serve and the employees they hire. The draft CCP should include a discussion of how the measures will avoid conflicting with the SB 375 VMT reduction goals.

Voluntary Acts Should Not Be Excessively Burdened

We appreciate your effort to respond to our comments from our letter of June 30, 2010. However, we feel that SCAQMD has missed the point behind our concern that, despite our considerable investment in clean technologies (acknowledged in the Response to Comments 35, 36, 47 and 48 in Appendix D), we still face considerable regulatory and permitting challenges that often frustrate our abilities to be a good neighbor. For example, SCAQMD did not address nor offer any remedy in the revised draft to burdensome permit conditions that caused us to shut down three, voluntarily-installed odor control units. We feel the draft CCP should provide a mechanism to reward such voluntary acts.

Specific Comments on the CCP

- On Page 3-1, please provide a definition of "precautionary measures."
- Table 3-1 (Page 3-3): "older" toxic emitting sources may be completely legal and in compliance with all applicable rules and regulations of all regulatory agencies. This possibility should be reflected in the Plan.
- Page 3-12, Phase 5 Development of CERP: Please clarify the legal basis behind limiting a facility's operating hours during certain times of the day if it is operating in compliance with all of its permits.
- OUTREACH-06 is helpful and constructive.
- A "hot list" (p. 3-44) is one step away from an "enemies list." Maybe this list should be posted on the SCAQMD website once the mechanics as to how to be removed from the listing are explicitly stated.
- COMPLIANCE-02: The last paragraph on page 3-45 whereby "well-informed advocates will help to identify air quality issues in the community" suggests that SCAQMD is directly implementing at least a portion of the agenda of advocacy groups. At the very least, this should be done during a public exchange where the targeted facilities have an opportunity to rebut the claims.
- COMPLIANCE-02, page 3-47: The "one-click complaint" provision should be designed so as not to become a "click it and ticket" feature.

We look forward to future revisions of this work, and we anticipate providing more comments as we track the progress of the CERPs for Boyle Heights and San Bernardino. If you have any questions regarding these comments, please do not hesitate to contact me at (562) 908-4288, extension 2113.

Very truly yours,

Stephen R. Maguin

Gregory M. Adams

Gregory M. Adams
Assistant Departmental Engineer
Air Quality Engineering
Technical Services Department

GMA:DLR:PG:bb

cc: Susan Nakamura, SCAQMD
Dr. Elaine Chang, SCAQMD

FUTUREPORTS
Elizabeth Warren
Executive Director
Berth 77, P 7-A, Ports O' Call
San Pedro, CA 90731
www.FuturePorts.org

October 6, 2010

Elaine Chang, Deputy Executive Officer
Susan Nakamura, Planning and Rules Manager
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765

RE: Comments on Revised 2010 Draft Clean Communities Plan

Dear Dr. Chang and Ms. Nakamura:

We are writing to submit our concerns to the South Coast Air Quality Management District (District) regarding the Revised 2010 Draft Clean Communities Plan (CCP).

FuturePorts is an advocacy organization representing the entire goods movement supply chain, and tens of thousands of workers in California. The organization was founded on the principle of balance between our economy and our environment. Our efforts are focused on finding solutions to challenges facing the maritime industry, and to ensure the continued economic contribution to the Southern California region, and to the nation made by the goods movement industry.

We hope that our comments can help support successful design and implementation of the objectives in the CCP, and provide the District Staff (Staf) further insight into industry's concerns with this program. We look forward to continued engagement in the CCP and its measures they are implemented.

We understand that the CCP represents Staff's initial concepts and therefore much of the detail typically covered in a rulemaking or incentive program is absent. We further understand that there will be additional opportunities for stakeholder engagement as each measure is developed and implemented. However, we remain concerned that some measures are moving forward more quickly, without the full transparency of stakeholder engagement, and without sufficient detail.

We look forward to continuing to work with the District and other stakeholders on developing plans and strategies that address air quality issues within a community while avoiding a fragmented patchwork of requirements and regulations. To help facilitate this process, the Staff should further define measures to address the issues outlined below before taking the plan to the Board for approval.

Community 01- Community Exposure Reduction Plans

Selected Pilot Communities

We remain concerned that the District has not clearly communicated its evaluation criteria for selecting the Pilot communities for the CERPs.

The CCP lists several categories the District evaluated when considering Pilot selection, without providing any detail about how the District compared the selected Pilot communities – the city of San Bernardino and the broadly defined "Boyle Heights and surrounding areas" – to other communities that could face similar circumstances. The District should provide more detail on their selection of these communities, how they compared to the remainder of the South Coast and which other locations the District considered. Given that the one of the goals of the pilot projects is to test new strategies that can be used for other community plans, we ask staff for more details on how these communities are representative of other impacted communities in the region.

Community Input

Neighborhood walks and informational websites are helpful tools that can foster increased communication between the community and air quality regulators, but on their own they are insufficient to facilitate dialogue to share understanding between all stakeholders. Information gathered in the neighborhood walks, individual conversations with the community, and other informal gatherings should be followed up by one or more notified meetings of a CERP Working Group before the Investigation and Data Validation stage. Engaging in dialogue before moving onto the investigation stage can help close incomplete feedback loops, facilitate early troubleshooting, and expedite a pathway to solutions.

Investigation and Data Validation

> *Efforts will be focused on identifying and quantifying specific air contaminants affecting the community, and where necessary, health surveys or risk assessments may be conducted to evaluate risks to public health.*[1]

We support the step of investigation and data validation, and we appreciate that quantitative data is not always available; however, we have reservations regarding the use of health surveys verify air quality issues. Many diseases and health conditions have multiple causes and cannot be exclusively attributed to environmental exposure. While there is evidence to support that air pollution can have adverse health effects, a survey of existing health issues in a community cannot establish causality of those health outcomes with emissions sources in the community

Overall approach in measures Community 01-03

We support the District's general approach of using voluntary incentive programs to identify and pursue the cost effective emission reductions from existing facilities. New equipment and facilities are more efficient and emit fewer pollutants, and existing sources hold the greatest potential for maximizing additional emissions reductions in a cost-effective manner.

Stationary-05: Indirect Sources

Implementation Approach

Before the CCP is approved by the District Board, it should be revised to include a clearer outline of potential options and clarify which options will be concurrently pursued.

[1] *Revised Clean Communities Plan, September 2010, p. 3-11*

Identifying multiple options will provide greater clarity on the intent of this measure and will enable the working group to discuss it more effectively. FuturePorts commented on the CCP previously as part of an industry coalition, and requested the District provide information regarding their statutory authority to pursue the implementation approaches under the indirect sources. The District responded in appendix D of the CCP,

> *The applicability, implementation approach and specific requirements have yet been established. As this measure is developed, the AQMD will do a legal analysis regarding the agency's legal authority to implement such a measure.*[2]

The District should identify potential implementation options and provide legal analysis for each implementation option before taking the CCP to the Board for approval. Completing the legal analysis now will provide the Working Group members, and the District's Board Members with valuable information regarding the feasibility of pursuing the approaches suggested in the measure, and avoids setting unrealistic expectations.

Applicability Criteria

Given that the District has revised the CCP to clarify that they intend the Stationary-05 measure to address "new, existing, and modified facilities with diesel mobile source emissions,"[3] the list of potential implementation options should only consider actions over which the facility operator controls. Additionally, the measure currently includes offsite emissions, but does not provide any indications of the geographic limits of the offsite emissions that could be attributed to a facility. This information should be included in the next Draft Plan.

Approaches that Support a Healthy Economy

Part of maintaining a healthy community is sustaining a strong economy. Therefore, community stakeholders should be reflective of the entire community, including committed local businesses, non-profit organizations, local government agencies, and residents. A solutions-oriented process will address the identified air toxics related issues through actions while allowing business to continue to serve Southern California.

We look forward to participating in the working group, and any task force created to work on the CERPs, to further develop and implement the Clean Communities Plan. Should you have any questions, please do not hesitate to contact me at ewarren@futureports.org or 310.982.1323, or Sarah Weldon at sarah@ceaconsulting.com or 415.421.4213 x 34.

Sincerely,

Elizabeth Warren
Executive Director
FuturePorts

[2] *Revised Clean Communities Plan, September 2010* Appendix D, p. 11
[3] *Revised Clean Communities Plan, September 2010* Page 3-56

CALIFORNIA CLEANERS ASSOCIATION

of Dry Cleaners & Launderers

Ms. Susan Nakamura
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Comments on the Draft 2010 Clean Communities Plan

Dear Ms. Nakamura:

The California Cleaners Association (CCA) is the leading statewide association for dry cleaners and industry professionals. CCA is also affiliated with the national association, DryCleaning and Laundry Institute (DLI). Together we represent more than 4,000 dry cleaning professionals.

CCA is also a member of the Small Business Alliance. CCA and the Small Business Alliance share similar concerns about the Community Exposure Reduction Plan (CCP). We have strong concerns about the CCP plan. Specifically we are concerned about the method of Investigation and also Neighborhood Walks.

Unwarranted and unnecessary harassment of small businesses that are operating within the limits and conditions of their valid permits will not serve to improve relations in any community. Dry cleaners in California reported horrible July sales figures, with an average 3.3% decline from 2009. The recession and increased regulation of the industry is causing many dry cleaners to close their doors.

We would respectfully suggest that AQMD creates or improves programs that highlight the changes that small businesses are doing to decrease exposures.

Thank you for considering our request. We are available to answer any questions or provide additional information if desired.

Bobby Patel, CCA President

2520 Venture Oaks Way, Suite 150 • Sacramento, CA 95833
(916) 239-4070 • Fax (916) 924-7323
www.calcleaners.com E-Mail: cca@camgmi.com

CALIFORNIA Small Business Alliance

Dedicated to Environmental Progress and Economic Growth

California Autobody Association
California Cleaners Association
California Film Extruders & Converters Association
California Furniture Manufacturers Association
California Independent Petroleum Association
Construction Industry Air Quality Coalition
Korean Drycleaners-Laundry Association of Southern California
Metal Finishing Association of Southern California
Printing Industries of California
Screenprinting & Graphic Imaging Association International
Southern California Rock Products Association

October 8, 2010

Ms. Susan Nakamura
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Comments on the Draft 2010 Clean Communities Plan

Dear Ms. Nakamura:

The California Small Business Alliance appreciates the opportunity to provide comments on the draft Clean Communities Plan (CCP).

As you may be aware, the Alliance is a coalition of California trade associations committed to protecting small business interests. Alliance members play an active part on relevant committees, task forces, policy forums and working groups advising agencies about the processes, costs, and compliance challenges that small businesses face and assist them in identifying cost-effective and least economically debilitating measures to regulate this vital segment of our state's economy.

We were pleased to be invited to participate in the South Coast Air Quality Management District's (District) CCP Working Group. Over the past two years we listened attentively to the discussion and points made by the Staff and other stakeholders. We also shared our recommendations and reservations to the other working group members.

We share the District's concern about the harm that toxic air contaminants can pose for all people who reside in the South Coast Air Basin. Further, we support the District's hypothesis that public awareness and education can play a vital role in helping to reduce exposure to toxic air contaminants. Yet, while we believe that certain elements of the draft CCP do have merit and would serve this purpose, we have grave concerns about other elements of the CCP that, if left unchanged, could have a devastating impact on many small businesses.

273 North Spruce Drive • Anaheim, CA 92805-3447
Telephone: (714) 778-0763 • Fax: (714) 778-0763
Website: *http://www.calsmallbusinessalliance.org*

Ms. Susan Nakamura, Planning and Rules Manager October 8, 2010
South Coast Air Quality Management District / Comments on Draft 2010 Clean Communities Plan

Community-01: Community Exposure Reduction Plan (Multiple TACs, other pollutants)

Background

We generally agree with Staff's statement that: *"Toxic emissions throughout the District have been reduced through implementation of AQMD's air toxics regulatory program for source and industry categories such as chrome plating, dry cleaning, and gasoline dispensing, as well as more stringent state and federal fuel and tail pipe emission standards to reduce air toxic emissions from on- and off-road mobile sources." Reducing toxic air contaminants from these individual source categories has benefits to all communities. Some communities, however, may have a disproportionate number of toxic sources that are clustered together resulting in a higher concentration of toxic emissions. The combined effect or cumulative effect of toxic emissions on these communities can result in an elevated exposure to toxic air contaminants. Data from the AQMD's MATES III shows that in some communities the toxic emissions are more concentrated."* These data were compiled, analyzed, reviewed and validated over time employing a number of accepted scientific protocols. The implementation approach that is described in the draft CCP, however, is a striking and deeply disturbing departure from the rigid discipline used in earlier studies (i.e., *MATES II and III, Cumulative Impacts Reduction Strategy, AQMP, accumulation of air monitoring data, etc.)* in that it appears from a reading of the CCP that any criticism or accusation made by a member of the public against a small business - substantiated or not - will rise to the level of an "air-related issue," and be put on the agenda for a "Neighborhood Walk."

One would think - even expect - that the District's years of success in presenting Town Hall meetings in conjunction with its Complaint Response Program, Air Quality Complaint Line, Clean Air Connections Program, regular inspections, and being able to boast of having the most open and inclusive system for rule development of any air quality management agency in the nation would have yielded a bounty of grievances from every community in its jurisdiction, and an impressive number of follow-up opportunities by the Staff. In these very difficult economic times when agencies in all levels of government are under extreme pressure from voters to cut spending and balance their budgets, and small businesses are struggling just to keep their doors open, it seems uncaring and unnecessary to add another program to accomplish the same purpose. Moreover, when we read that the implementation of the CCP "will (not 'may') be more resource-intensive" than these other programs this only adds to our frustration.

Neighborhood Walks

A reading of this section of the CCP raised considerably more questions than it answered. It also caused the greatest amount of concern among our small business members.

Much like the paragraph in the CCP, entitled *Community Input*, this section suggests that Staff will convene some number of meetings within the targeted communities for the purpose of eliciting complaints from people attending these meetings, including elected officials.

Once this has been done, it appears that this group or crowd of indeterminate size, including some number of District staff, will then walk through the community to whatever businesses have been singled out by the complainants at the community meeting. Upon arriving at a targeted business our reading of this section of the CCP suggests that the members of this group or crowd

Ms. Susan Nakamura, Planning and Rules Manager October 8, 2010
South Coast Air Quality Management District / Comments on Draft 2010 Clean Communities Plan

will stop at a point near a targeted business and again listen to individual issues about air quality. It is not at all clear exactly where this group or crowd will assemble in proximity to a targeted business, only that it will be "near." We observed when reading Chapter 3: Agency - 01, "Promoting Better Land Use Decisions," that Staff recognizes the significance of "proximity" when it pertains to land use decisions, as referenced in the draft CCP under the heading of *"Proximity Matters - Advisory to Planner."* Clearly, the same degree of awareness and sensitivity does not extend to the feelings and concerns of small business owners who are dreading the thought of having groups of dissidents descending on their businesses or in close proximity thereto.

A number of additional questions were raised when Alliance members discussed this particular point. For example: "Does the term "near" mean the group or crowd might assemble in front of the loading dock of the business? In front of the main entrance? Will the size of the group or crowd impede customer ingress and egress? Since the CCP calls for elected officials to be a part of the group or crowd, it is likely - even preferred by some- to have the media present? How long will these assemblies remain near a targeted business? What is the expected size of a typical group or crowd?

It is also unclear if someone in the group or crowd will invite or require the business owner to come outside and talk to the assembly. A small drycleaner with only one employee may not have the time to engage in conversation with visitors. The same might be said of the owners of a body shop or gasoline dispensing station who may have the same difficulty. This also raises concerns about the expectations of the group or crowd. Will they expect to be able to enter the premises and look around? To what extent will a small business owner's operations be disrupted or has this even been considered?

In this section of the CCP, the Staff has written: *"This hands-on approach will allow the AQMD staff to gather valuable information about the community's air quality issues while providing an opportunity for local residents and businesses to voice their concerns directly to the AQMD in a more familiar and informal setting."* We have no other choice but to conclude from this statement that absolutely no consideration has been given to the needs and concerns of the small business owner.

Investigation and Data Validation

In the last meeting of the CCP Working Group, the Staff was unambiguously clear that the intended use for the CCP was to be a guidance document for future rule making, and that it would not have the force of a rule and would not be used for compliance audit purposes. A reading of Phase 3: *Investigation and Data Validation*, and Phase 4: *Implementation of Immediate Actions*, however, only succeeded in adding to our confusion and concern in that it is clear that whatever "air quality-related issues" are discovered during these Neighborhood Walks they will all be sorted and prioritized for immediate or non-immediate attention. What is less obvious to us is what the word "attention" means and how these issues will be remedied and what punishment, if any, will befall a business owner who was not expecting to be inspected.

OCT-08-2010 03:43 PM Bill La Marr 714 778 0763 P.05

Ms. Susan Nakamura, Planning and Rules Manager October 8, 2010
South Coast Air Quality Management District / Comments on Draft 2010 Clean Communities Plan

In summary, we believe that the current draft CCP is dangerously deficient in the way it describes certain key elements of the plan. In these distressful times small businesses have little more than their reputation and good will to sustain them. Unwarranted and unnecessary harassment of small businesses that are operating within the limits and conditions of their valid permits will not serve to improve relations in any community.

We appreciate your consideration of our comments on the Draft CCP, and look forward to working with the Staff to develop a plan that furthers air quality goals. We also ask that when the final CCP is written and released it does not disregard the dire financial condition of this state nor unnecessarily complicate the formidable task that our elected officials have asked of small business owners; that being to help grow our economy back to prosperity.

Sincerely,

Bill La Marr
Executive Director

4

John E. DeWitt, Jr.
1903 North Durfee Avenue
South El Monte, CA 91733

RECEIVED
OCT 12 2010
By 16-5-2010

Ms. Susan Nakamura
Planning & Rules Manager
S. C. A. Q. M. D.

Subject: Clean Communities Act
Comments - Questions
Section "Neighborhood Hero Awards"

Dear Ms Nakamura,

This year we reduced our employees from 92 to 70. As a direct consequence of current regulations. They are terrific people.

Do you believe untrained vigilantes spying on the businesses still operating in the District, will improve the situation?

October 6, 2010

SENT VIA E-MAIL

Ms.Cheryl Marshall
Program Supervisor
South Coast Air Quality
Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on Revised Draft Clean Communities Plan

Dear Ms. Marshall:

On behalf of the Southern California Air Quality Alliance (SCAQA) I hereby submit comments on the above referenced matter. SCAQA is a non-profit corporation with members whose operations in the South Coast Air Quality Management District will likely be affected by the SCAQMD's implementation of the Clean Communities Plan (CCP).

In general, we support the approach taken by District staff in looking at all potential sources of adverse impacts on communities and developing a holistic approach to addressing impacts in cooperation with other government agencies, community representatives (both elected and non-elected) and local businesses. We especially appreciate the District's recognition that there are limits on its authority that require it to defer to other levels of government with authority to act, and in those circumstances to provide expertise and advice regarding air quality impacts and potential mitigation measures.

Having said that, we also have significant concerns regarding several specific provisions of the revised draft CCP, most notably the measures identified as Stationary-04, Nuisance-01 and Nuisance-02. These proposed measures have the potential for the District to assert authority which it has not been granted pursuant to either federal or state law, or to "rewrite" the public nuisance law (Health and Safety Code Section 41700) to make it easier for the District to prosecute alleged nuisances.

Stationary-04

Stationary-04 as described in the draft CCP calls for an alternatives analysis to be done to determine if "less hazardous materials" can be substituted into a proposed process. I would like to note that there is nothing in the California Health and Safety Code that authorizes the SCAQMD to impose such a requirement in the permit process. Arguably this can be done as part of a CEQA analysis, where alternatives must be analyzed if a significant impact is identified. However, I have been advised that some of our members have already experienced situations where permitting engineers, in the absence of a specific rule requirement or CEQA analysis, are refusing to issue a permit unless the

6601 Center Drive West
Suite 500
Los Angeles, CA 90045
Attn: Curtis L. Coleman
(310) 348-8186 Ph
(310) 861-1484 Fax

permit applicant agrees to process modifications. We do not believe that such an *ad hoc* and potentially arbitrary process is appropriate. We believe that there should be some objective standards specified and that there should be a presumption that an existing process that has worked and has not created problems at a facility should be allowed to continue.

Nuisance-01

With respect to Nuisance-01 we are concerned with the statement in the draft CCP that amendments to Rule 402 or Health and Safety Code Section 41700 may be necessary. These provisions have been in place for many years and there is no evidence that I can see that they are inadequate. We do agree that it makes sense to conduct a full review of the SCAQMD's process of investigating and enforcing alleged odor nuisance, and that there may be merit in reviewing orders for abatement involving odor nuisances to see if there are common requirements that have resulted in resolution of the alleged problems. We will be watching this measure closely as it is developed further, and will provide additional comments as the need arises.

Nuisance-02

In our view, Nuisance-02 will punish the many for the sins of the few. We believe that the District's resources are best concentrated on sources that are causing problems, rather than heaping additional regulatory requirements on sources that are not causing problems. We are also concerned about the lack of statutory authority for adopting these types of regulations. The District has authority to adopt regulations to achieve ambient air quality standards and to limit emissions of air toxics. I can find no statutory provision authorizing the District to adopt rules purporting to prevent a public nuisance that would affect a facility that is NOT causing a public nuisance. The closest provision would appear to be Health and Safety Code Section 42310.7, which provides limited authority to prevent a release of a toxic air contaminant from a facility located within 1,000 feet of a school, but this again deals with an imminent threat and provides for a response on a case-by-case basis.

Thank you for the opportunity to comment on the revised draft CCP, and feel free to contact the undersigned if you have questions regarding these comments.

Very truly yours

Curtis L. Coleman, Esq.
Executive Director
Southern California Air Quality Alliance

California Council for Environmental and Economic Balance
100 Spear Street, Suite 805, San Francisco, California 94105
415-512-7890 phone, 415-512-7897 fax, www.cceeb.org

October 8, 2010

Elaine Chang, Ph.D., Deputy Executive Officer
Susan Nakamura, Planning and Rules Manager
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765

RE: Comments on Draft Clean Communities Plan (September 2010 revised draft)

Dear Dr. Chang and Ms. Nakamura,

The California Council for Environmental and Economic Balance (CCEEB) is a coalition of business, labor, and public leaders that advances strategies for a strong economy and a healthy environment. Thank you for allowing us another opportunity to comment on the draft Clean Communities Plan (CCP or "the Plan").

CCEEB supports the Plan in concept, and appreciates the hard work and dedication of staff at the South Coast Air Quality Management District (SCAQMD) in putting this draft forward. However, we continue to have questions regarding how the Plan will be implemented, as described in our letter to the SCAQMD on July 2, 2010. (Attached) This letter was omitted from Appendix E in the September 2010 revised draft Plan, and many of our questions were left unanswered in staff responses to comments in Appendix D.

CCEEB also has concerns regarding the way that the draft Plan portrays the current air toxics situation in the South Coast Air Basin. First, the draft Plan lacks adequate discussion of the uncertainties associated with the cancer risk estimation technique. SCAQMD staff may be familiar with risk estimates and the uncertainties associated with them, but many members of the public who read this document may not be. We do not believe it is sufficient to merely reference the uncertainties section of the MATES III document (as has been done on page 2-6). This information is important enough to be presented in this document, and should be presented up front before risk estimates and their interpretation are presented. At a minimum, qualifying language from the MATES III Final Report should be repeated on pages 2-6 and 2-7 of the draft Plan in the section on *Limitations of Data Results*, and readers should be referred to this material in the executive summary of the report. For example, the MATES III final report explains that:

> *"The estimates of health risks are based on the state of current knowledge, and the process has undergone extensive scientific and public review. However, there is uncertainty associated with the processes of risk assessment. This uncertainty stems from the lack of data in many areas necessitating the use of assumptions. The assumptions are consistent with current scientific knowledge, but are often designed to be conservative and on the side of health protection in order to avoid underestimation of public health risks.*
>
> *"As noted in the OEHHA risk assessment guidelines, sources of uncertainty, which may either overestimate or underestimate risk, include: (1) extrapolation of toxicity data in animals to humans, (2) uncertainty in the estimation of emissions, (3) uncertainty in the air dispersion models, and (4) uncertainty in the exposure estimates. Uncertainty may be defined as what is not known and may be reduced with further scientific studies. In addition to uncertainty, there is a natural range or variability in the human population in such properties as height, weight, and susceptibility to chemical toxicants.*
>
> *"Thus, the risk estimates should not be interpreted as actual rates of disease in the exposed population, but rather as estimates of potential risk, based on current knowledge and a number of assumptions. However, a consistent approach to risk assessment is useful to compare different sources and different substances to prioritize public health concerns."*[1]

When referring to risk reduction, the Plan should be clear in stating that reductions are in estimated cancer risk from ***air toxics***. For example, on page ES-2, the draft should state: "…overall regional *estimated* risk *from air toxics* is expected to be reduced by 75 percent by 2023. Regionally, the 2023 population weighted *estimated* cancer risk *from air toxics* is expected to be approximately 210-in-a-million." [Added language shown in italics] CCEEB also suggests describing the regional background or total cancer risk to put the contribution from air toxics into context. The MATES III final report includes a useful section on *Perspectives of Risk* that is worth repeating in the draft Plan.[2]

Second, the Plan provides little to no background on existing measures that are already in place and which are under the jurisdiction of other regulatory agencies. The Plan does not sufficiently recognize these in-place measures and regulations, the concomitant benefits that have accrued as a result of these measures, and the reductions already achieved by many companies and public agencies. This information is essential to provide an accurate picture of the current situation.

In light of the above, CCEEB reiterates and amplifies comments made at the September 21, 2010 CCP Working Group meeting by CCEEB and several of its members. Specifically:

- **Stationary-02 and -04, authority**: Please explain in greater detail the basis for the SCAQMD's authority to implement these measures given that the SCAQMD does not have delegated authority to enforce environmental standards for lead paint or the storage and use of hazardous materials, nor to mandate the assessment of alternatives and subsequent changes in use of process chemicals. The SCAQMD should review current rules and regulatory programs

[1] SCAQMD, *Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES III, Final Report*, September 2008, page ES-6 and ES-7.
[2] ibid., pages 1-3 and 1-4.

to determine whether a gap exists before identifying a need for these control measures. For example, the background provided for Stationary-04 on page 3-53 should clearly identify why current Process Hazard Analysis and Risk Management Plans are insufficient. We note that the 2000 SCAQMD Air Toxics Control Plan included a brief section on SCAQMD's legal authority and the complementary authorities of other agencies. CCEEB suggests that a similar discussion be included in the current draft Plan, particularly for new control strategies under consideration.

- **Stationary-04, Table 2-2**: The table on page 2-4 should include toxics control regulations that cover the storage, handling, and risk management of hazardous materials, such as federal EPA's and Cal-EMA's Risk Management Plan rules.

- **Stationary-04, outreach to CUPAs**: CCEEB recommends that the SCAQMD seek comments from Cal-EMA and regional Certified Unified Program Agencies (CUPAs) on Stationary-04 before finalizing the Plan. While CCEEB agrees with the SCAQMD that it is important to coordinate with the CUPAs on implementation, it is equally important to have the CUPAs engaged in the design and development of this measure to minimize agency overlap and to prevent inconsistencies that might arise between programs. For example, rather than including a separate measure for SCAQMD implementation in the CCP, it might be more efficient and effective to develop a coordinated approach with Cal-EMA.

- **Community-01, business outreach**: Please include a section on outreach to local businesses under *Phase 2: Community Input.* Partnering with the local business community early in the process helps to foster cooperation and to ensure that measures are tailored to the specific needs of each community.

- **Community-03, Table 4-1, assessing cumulative impacts**: it is unclear by what method or process the SCAQMD plans to (1) identify disproportionately impacted communities and (2) assess cumulative impacts in prioritized communities. Please expand on this section. CCEEB notes that quantitative assessments are time and resource intensive, whereas qualitative assessments can result in uncertain and potentially biased findings. We also caution that the screening methodology proposed by Cal/EPA and the Office of Environmental Health Hazard Assessment is in the very early stages of development, and guidance on how to apply this method will probably not be finalized by mid-2011, the time when the SCAQMD hopes to implement this work.

- **Table 4-1, Measures Implementation Schedule**: It is not clear how the dates for implementation were identified and many measures are shown as being implemented simultaneously. CCEEB recommends that SCAQMD consider phasing the implementation with a focus on the highest priorities, rather than trying to implement too many measures at the same time.

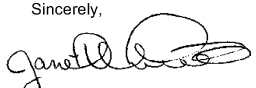
We thank the SCAQMD and its staff for their leadership in exploring innovative new strategies that reflect the active participation of a diverse range of public stakeholders. CCEEB believes that such collaborative approaches are necessary to address the full range of factors that contribute to cumulative and disproportionate

impacts from exposure to toxic air contaminants. We hope that our comments support the successful adoption and implementation of the Plan.

Sincerely,

Bill Quinn
CCEEB Chief Operating Officer

Sincerely,



Janet Whittick
CCEEB Policy Director

cc: Barry Wallerstein, Executive Officer, SCAQMD

California Council for Environmental and Economic Balance
100 Spear Street, Suite 805, San Francisco, California 94105
415-512-7890 phone, 415-512-7897 fax, www.cceeb.org

July 2, 2010

Elaine Chang, Deputy Executive Officer
Susan Nakamura, Planning and Rules Manager
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765

RE: Comments on Draft Clean Communities Plan

Dear Elaine and Susan,

The California Council for Environmental and Economic Balance (CCEEB) is a coalition of business, labor and public leaders, which advances strategies for a strong economy and a healthy environment. Our members operate numerous permitted facilities in the South Coast Air Basin. We thank you for allowing us to comment on the draft Clean Communities Plan ("CCP") and for the ongoing opportunity to participate in the CCP Working Group.

CCEEB commends the South Coast Air Quality Management District ("District") and its staff for work on the draft Plan and the attention given to effectively reducing emissions of air toxics and cumulative impacts in already burdened communities. We hope that our comments can help support successful design and implementation of its objectives.

The holistic approach embodied in the Plan is of great interest, since it might be able to capture the wide range of emission sources and source categories—and the several agencies that regulate these—that collectively contribute to cumulative emissions. The Plan also incorporates land use decision-making in a meaningful way. Because so many proposed measures are still conceptual, and because the Plan relies a great deal on collaborative solutions, CCEEB asks staff to develop a more detailed timeline or workplan for further development and implementation of the measures and a schedule for the advisory and working group(s) so that stakeholders can plan their participation based on which issues are agendized for each meeting.

Given that the sole focus of the Plan is on localized exposure to air toxic emissions (with the exception of odor nuisances), CCEEB was surprised to learn of the language contained in the errata sheet that the Governing Board approved as part of the Resolution adopting Regulation XXVII (Climate Change).

> *"BE IT FURTHER RESOLVED, that the AQMD Board directs staff when developing the Clean Communities Plan, to add a component to help ensure that Board-approved greenhouse gas offset policies are implemented properly in CEQA review, so that potential impacts of foregone criteria pollutant or toxic air contaminant emissions are minimized."*

CCEEB asks the District to explain why GHG offsets are to be included in the CCP, since the Plan is meant to address impacts that are highly localized in nature. We do not think the Plan is the appropriate vehicle for such action, and suggest that CEQA guidelines may be a better place to deal with CEQA review of GHG emission impacts. As we come to understand the background and implications of the Resolution language, we hope to provide further comments.

What follows are more detailed comments on the draft CCP, organized around the main sections.

Community Plans and Accelerated Toxics Reductions (C-01, C-02 and C-03)

Based on the draft Plan and discussion at the CCP Working Group[1], it is our understanding that the two pilot projects in the City of San Bernardino and the community of Boyle Heights are meant to test new strategies to reduce exposure to air toxics. Lessons learned from the pilots will then be used to develop a guidebook for other communities and local governments so that they, too, may develop tailored Community Exposure Reduction Plans (CERPs). Finally, lessons learned from the pilots will influence Community-03, in which the District will implement voluntary and incentive-based strategies to achieve additional reductions of air toxic emissions in key communities, after first identifying and prioritizing communities based on the level of cumulative impacts.

Selecting and Prioritizing Communities and Geographic Boundaries

Given that the goal of the pilot projects is to test new strategies that can be applied to other communities, CCEEB asks staff for more details on the criteria used to select San Bernardino and Boyle Heights, and how these communities are representative of highly impacted communities in the air basin. We also ask the District to establish clear and transparent criteria and a methodology for identifying and prioritizing communities (Communities-03), including a definition of what is considered "highly impacted", and recommend that this work be reviewed by the CCP Working Group or other stakeholder advisory before finalizing any results.

In terms of Community-01 and the pilot projects, we are still unclear whether the selection of San Bernardino and Boyle Heights has been finalized, and what actions have been taken so far to develop CERPs for these communities. It would be good to provide these details to the CCP Working group along with the selection criteria.

With respect to the actual geographic boundaries of the CERPs, CCEEB asks staff to clarify whether there is a zone of influence outside of community boundaries that would be affected. For example, would sources outside of the communities ever be included in CERP measures? What if these sources are in another jurisdiction? This information is important to ensure that the right

[1] April 15, 2010 meeting

stakeholders and jurisdictions are involved in development of the CERPs from the very beginning.

Public Participation
CCEEB thanks the District for considering our recommendation that it convene a stakeholder technical advisory group to help guide the design and development of the pilot projects and the guidebook. We hope that CCEEB and its members may be able to assist with this effort.

When establishing the advisory group, we suggest that the District lay out ground rules for dialogue to help stakeholders representing diverse interests more readily collaborate on effective solutions and reach consensus to the maximum extent possible. Such ground rules could also describe how District staff will resolve conflict among stakeholders. These rules should also apply to any working group working on development of each CERP.

Investigation and Data Verification
CCEEB appreciates steps to prioritize community air quality issues and to sort issues based on agency responsibility. We particularly support efforts to engage and coordinate with other agencies to support multi-agency solutions.

In terms of additional data collection and "micro-scale monitoring", we ask staff to describe the degree of granularity that is being proposed. We also ask staff to consider adding a risk communication element to this phase so that all stakeholders can come to a shared understanding of the analytic results. This, in turn, would support collaboration during the CERP development stage to follow.

CCEEB appreciates that quantitative data is not always available, and that qualitative data could be used to fill in gaps in the quantitative analysis. Given that there is no scientific certainty regarding causal effects for many associated health outcomes, we ask staff to describe how the District intends to use qualitative data appropriately, and how such data will be reconciled with quantitative data. For example, a community health survey cannot draw conclusions regarding air toxic exposures, although it can show correlations. This may be an area where the technical advisory group could provide guidance.

Sources Covered and Control Strategies
CCEEB supports the District's decision to include all sources of air toxics in the CERPs as well as the focus on replacement and retrofit of existing sources. This strategy recognizes the fact that new equipment and facilities are more efficient and emit fewer pollutants, and that existing sources hold the greatest potential for maximizing additional emissions reductions in a cost-effective manner.

We hope that the District will also apply the principle of "fair share" to ensure that each source category is responsible for its own contribution to the cumulative emissions impacting burdened communities.

In terms of Phase 4 of the pilots, we ask staff to clarify what constitutes "significant health impacts" that would trigger "immediate action" by the District. It would be useful to include the criteria used for making such a determination, and to provide examples of the type of "immediate actions" that might result.

Finally, with respect to C-01, C-02 and C-03, we suggest that the CCP and any CERP acknowledge programs and efforts at other agencies that affect air toxics in impacted communities. For example, the ARB manages a Diesel Risk Reduction Program that aims to reduce on-road and off-road mobile source emissions of air toxics by 85% by 2020. These future-year reductions should be included in the plans.

Outreach-01: Clean Air Toolbox

CCEEB appreciates staff's willingness to convene a stakeholder technical advisory group to assist with development and review of materials for the Clean Air Toolbox. We further suggest that this measure include a risk communication element to improve the public's understanding of air quality issues and ways to reduce exposure to air toxics.

To the extent possible, we encourage staff to leverage work being conducted by other agencies. For example, the Department of Toxic Substances Control, as part of its Green Chemistry Initiative, is working to launch a public outreach campaign to educate consumers about toxic chemicals in household products. Similarly, EPA has an extensive education program on indoor air quality.

Compliance-01: Enhancements to Compliance Program

CCEEB understands that the facility "Hot List" was an informal reference used internally by enforcement staff. If the list is to remain an informal and internal reference, then we recommend removing it from the draft Plan. If, on the other hand, the District decides to formalize the "Hot List" as part of the CCP, then we ask that staff make explicit what this list is, how it can be used, and the process by which facilities are added or removed.

Stationary-01: Lead Emissions

CCEEB notes that a number of aerospace and electronic manufacturers employ lead soldering as part of normal operations, and that this soldering has no or extremely low emissions because the low temperatures fail to result in volatilization. We ask staff to consider this distinction and to avoid unnecessary administrative burden on facilities that use lead, but have no or di minimis emissions. As rulemaking proceeds, we hope to be actively engaged in any amendments to Rule 1420.

Stationary-02: Lead Paint, pre-1978 buildings

CCEEB understands that the California Department of Public Health and county public health agencies have delegated authority to enforce the new EPA standard. We ask staff to clarify the breadth of this proposed measure, and how implementation of public outreach and/or rulemaking will complement work begin done by the health agencies.

Stationary-04: Alternative Assessment for Use of Acutely Hazardous Materials

Use of hazardous materials is currently regulated by several state and federal agencies, including but not limited to Cal-OSHA, Cal-EMA and Certified Unified Program Agencies, DTSC, the Department of Transportation, and EPA. As part of compliance, facilities must complete Process Hazard Analyses and Risk Management Plans.

CCEEB is unclear how the proposed CEQA review interacts with existing programs and requirements, and whether review is meant to apply to a specific project or the entire facility. We would appreciate a more detailed discussion in the CCP of District authority under CEQA, especially since hazardous material use is more traditionally managed through other statutes and direct regulation.

In general, CCEEB believes that management of hazardous materials should remain in those agencies with clear authority and direct expertise. We suggest that strategies targeting hazardous materials be moved to Agency-02 to enable multi-agency coordination and to avoid duplicative and overlapping efforts.

Stationary-05: Indirect Sources

CCEEB understands that this measure is meant to complement existing diesel emissions reduction programs at the ARB and EPA. It would be useful if staff could include a more detailed discussion of how the different programs interact in order to show consistency and avoid duplication of efforts. This is particularly important in terms of ARB's Diesel Risk Reduction Program; although this program is mentioned, it is not clear how the indirect source measure might work in concert with it.

Somewhat similarly, the draft Plan mentions the 2006 health risk assessments (HRAs) conducted by the ARB at major rail yards, but fails to describe the significant progress made over the interim. For example, the San Bernardino rail yard has cut diesel PM emissions by roughly 45 percent since 2005. Reductions of this magnitude are significant and should be incorporated into the measure; that, or reference to the rail yard HRAs should be removed as it seems out of context.

Finally, we would appreciate clarification on how "applicability criteria" will be established, especially since the District has indicated that the criteria would be developed mid-2010. As the District moves forward, CCEEB hopes to be actively engaged in any Indirect Source Review rulemaking.

Nuisance Rules (N-01 and N-02)

CCEEB appreciates the District's work to improve the science and practice of odor detection and to enhance Rule 402, and recognizes that odor issues account for the majority of complaints filed with the District. We encourage staff to work closely with both communities and facilities as it develops new approaches.

During the CCP Working Group discussion[2], the term "toxic odors" was used. We are unfamiliar with this term; if staff decides to include this concept as part of the nuisance rules, then we ask the District to establish a precise definition (e.g., concentration level, length of exposure, etc.), as well as explanation of how a toxic odor differs from emissions of air toxics.

Finally, we note that SB 1224 (Wright) is moving through the Legislature with no opposition. Staff should consider how this bill might affect its nuisance rules.

[2] May 20, 2010.

Chapter 2, Figures 2-8 through 2-10

On pages 2-9 and 2-10 of the Draft, the District includes figures for the MATES III model estimated district cancer risk for 1998, 2005, and 2023. Please also include the MATES III modeled cancer risk for the interim years of 2014 and 2020. This data is already in the appendixes, but would be helpful to include here to illustrate the significant improvements expected between 2005 and 2023.

Thank you again for considering our comments. We look forward to working with the District and its staff on the further development and implementation of the Clean Communities Plan. Should you have any questions, please do not hesitate to contact me (billq@cceeb.org or ext. 15) or Janet Whittick (janetw@cceeb.org or ext. 11).

Sincerely,

Bill Quinn
CCEEB Chief Operating Officer

The California Supply Chain Jobs Alliance

July 7, 2010

Elaine Chang, Deputy Executive Officer
Cheryl Marshall, Program Supervisor
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765

RE: Comments on Draft Clean Communities Plan

Dear Elaine and Cheryl:

Thank you for taking the time to meet with representatives of our coalition to explain the 2010 Draft Clean Communities Plan (Draft Plan). The California Supply Chain Jobs Alliance (CSCJA), a coalition of Southern California supply chain businesses and trade associations, appreciates the opportunity to comment on the Draft Plan. We hope that our comments can help support successful design of the final plan objectives and provide the staff further insight into industry's concerns with this program. We look forward to continued involvement in any subsequent drafts and stakeholder group meetings and the implementation of the plan measures.

There are two major concerns that CSCJA has with the plan. First, the South Coast Air Quality Management District (District) has not analyzed its authority to adopt the measures and conduct the studies it outlines in the plan. Such an analysis must be conducted before the plan is finalized. Our comments are submitted pending the District analysis of its authority to pursue these matters and the submittal of comments is not concurrence as to District authority. Second, the measures are conceptual and leave many potential approaches for reducing toxic air contaminants (TACs) on the table. We believe that District staff should further define the measures before taking the plan to the District Board for approval. Without further definition of the measures, it will be difficult for all the stakeholders to understand exactly what we are being asked to support. We look forward to continuing to work with the District and other stakeholders on developing plans and strategies that address community concerns while avoiding a burdensome patchwork of regulations and requirements.

Additionally, CSCJA would like to continue to participate in a clear and transparent process. We would appreciate staff developing a timeline or work plan for further development of the plan, and in particular of the individual measures as they begin to be implemented. This will be particularly important in the development of the Community Exposure Reduction Plans (CERPs).

Community-01: Community Exposure Reduction Plans

Community Selection Criteria. In order to fully understand this measure, we would appreciate District staff providing an explanation of the criteria used to choose the pilot locations. Given the goal of the pilot projects is to test new strategies that can be applied to other communities, we

ask staff for more details how these communities are representative of other highly impacted communities in the air basin.

Additionally, the District agreed in the Clean Communities Plan (CCP) working group meetings to incorporate a Technical Advisory Group or Task Force to guide the development of each CERP. The District should clearly describe and formalize the roles of the District, the Technical Advisory Group, and any other known stakeholder processes for each pilot and include this information in the next Draft Plan. Additionally, to avoid duplicate efforts, the staff should identify any concurrent or recent activities by other agencies specific to the pilot communities and summarize the estimated emission reductions.

Please include potential elements and scope limitations of the CERPs. Please provide further information regarding the CERP scope and content. For example, since these are called Exposure Reduction Plans, we assume the ultimate goal is to reduce exposure within the pilot community by some measurable amount. Will the scope of potential actions be limited to those that directly result in exposure reductions? Will proposed measures include those that only measure TACs in the community (e.g. air monitors)? If the District plans to include educational and economic development components, that information should be in the next Draft Plan. How will the District staff develop the geographic boundaries? Without clear guidance as to what the community plan will include, it will be difficult to ensure the right stakeholders are at the table. Clarifying these issues now will help avoid misdirecting time and resources on work that is outside the scope of the primary goals of this exercise.

Investigation and Data Verification. Please provide more detail regarding scope and examples of potential data and analysis. For example, there has been some discussion of including health surveys in the data and analysis. The parameters of the health surveys have not been discussed; however, a community health survey cannot draw conclusions regarding air toxics exposure or derived causes of any health issues. We do not agree with including data collection that lacks a direct nexus to emissions sources.

The Draft Plan also indicates the CERPs will be more qualitative and based on community input, neighborhood walks, and town hall meetings. It also indicates there will be quantitative research such as "go[ing] beyond MATES III findings [to] take a closer look at toxic exposure at the community level." How is the District planning to reconcile the qualitative with the quantitative research in each CERP? Qualitative insights should be informed and supported by quantitative research. The District should clarify to what degree of granularity it can feasibly take the quantitative data at the community level.

It is necessary to further define "immediate action." In Phase 4 of the pilots, we ask staff to clarify what constitutes "significant health impacts" that would trigger "immediate action" by the District. The District should include the criteria used for making such a determination and to provide examples of possible resultant "immediate actions."

How will disagreements be resolved? The District has stated its intent for the development of CERPs to be "a collaborative process among all stakeholders to seek effective solutions."[1]

[1] Page 3-11, April 2010 Draft Clean Communities Plan

Given the variety of interested stakeholders with diverse views, the District should outline a clear protocol for resolving points of conflict in the CERP work plan and include how minority opinions will be included in the final product.

Community-02: Community Guidance for Reducing Air Toxic Exposure

When translating the information learned in the CERPs into guidelines, the District should be careful not to take a one size fits all approach, not just due to differing issues in the community, but also the resources available to the community, its businesses, and local government. We support the District's approach of assisting communities that chose to engage the District in a CERP, rather than the District selecting additional communities with which to implement CERPs.

Stationary-05: Indirect Sources

We understand this is a conceptual measure, but the vague wording makes it difficult to provide constructive and informative comment. For example, the District's "Implementation approach" compiles a menu of options to reduce exposure that could involve 1) modifying AB 2588 guidelines, 2) requiring health risk assessments for all indirect sources, 3) developing an indirect source rule for diesel, 4) various specific operational measures, or 5) developing incentives to voluntarily turnover fleets. The next Draft Plan should include a clearer outline of potential options and clarify which options will be concurrently pursued. Identifying multiple options will provide greater clarity on the intent of this measure and will enable the working group to discuss it more effectively. Also, please provide the statutory authority for each regulatory option the District is considering, including authority and process through which the District plans to work with the California Air Resources Board (ARB) to modify the AB 2588 guidelines to address mobile sources.

Applicability Criteria. The Draft Plan also states the District will "initiate development of an indirect source rule containing an applicability criteria that will account for diesel PM emissions, exposure to diesel PM, and the proximity to residential and sensitive receptors."[2] Staff has verbally indicated this is intended for existing and new facilities, and in most cases the facility operator, which is often the tenant, is the targeted party. If this is the case, this information should be included in the next Draft Plan. If the District takes this approach, the list of potential implementation options should only include actions over which the facility operator controls. Lastly, the measure currently includes offsite emissions, but does not provide any indications of the geographic limits of the offsite emissions that could be attributed to a facility. This should be included in the next Draft Plan.

Update to reflect current rail yard emission reductions. Please either remove the reference to the rail yards and to the San Bernardino rail yard health risk assessment, or revise Stationary-05 to reflect improvements since 2005. BNSF Railway and Union Pacific have made significant improvements at Southern California yards, and particularly at Commerce and San Bernardino rail yards, since 2005. Omitting this progress to date leaves the reader with the incorrect notion that nothing has been done to reduce emissions.

[2] Page 3-53, April 2010 Draft Clean Communities Plan

CSCJA letter to SCAQMD regarding Draft Clean Communities Plan July 7, 2010

Approaches that Support a Healthy Economy

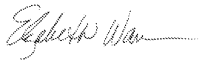
Part of maintaining a healthy community is sustaining a strong economy. Therefore, community stakeholders should be reflective of the entire community, including committed local businesses, non-profit organizations, local government agencies, and residents. A solutions-oriented process will address the identified air toxics related issues through actions while allowing business to continue to serve Southern California.

Figures 2-8 through 2-10 in Chapter 2

On pages 2-9 and 2-10 of the Draft Plan, the District includes figures for the MATES III model estimated District cancer risk for 1998, 2005, and 2023. Please also include the MATES III modeled cancer risk for the interim years of 2014 and 2020 to illustrate the improvements between 2005 and 2023.

We look forward to participating in the working group, and any task force that is created to work on the CERPs, to further develop and implement the Clean Communities Plan. Should you have any questions, please do not hesitate to contact me at ewarren@futureports.org or 310.982.1323, or Sarah Weldon at sarah@ceaconsulting.com or 415.421.4213 x 34.

Sincerely,



Elizabeth Warren
CSCJA Member and
Executive Director
FuturePorts

Cc: Susan Nakamura, Planning and Rules Manager

San Pedro Bay Ports Clean Air Action Plan

June 30, 2010

Ms. Cheryl Marshall
Program Supervisor
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: 2010 Draft Clean Communities Plan

Dear Ms. Marshall:

The Port of Los Angeles and the Port of Long Beach (Ports) appreciate the opportunity to provide comments on the draft 2010 Clean Communities Plan (CCP). The Ports are pleased to see that a number of the CCP measures address localized effects and cumulative impacts to air quality and health risk in communities and neighborhoods, which are similar to efforts already being implemented by the Ports through the San Pedro Bay Ports Clean Air Action Plan (CAAP), our California Environmental Quality Act (CEQA) projects, and other Port initiatives. For example:

- One of the CAAP's foundations is the commitment "to expeditiously and constantly reduce the public health risk associated with port-related mobile sources, and implement programs in the near-term that will achieve this goal."

- The Ports have developed an aggressive risk reduction target for diesel particulate matter (DPM)-related residential cancer risk of 85% by 2020. This DPM risk reduction target is consistent with the Air Resources Board (ARB) statewide 85% risk reduction goal for goods movement.

- The Ports also developed a Draft San Pedro Bay-wide Emission Reduction Standard which is (1) by 2014, reduce emissions of nitrogen oxides (NOx) by 22%, sulfur oxides (SOx) by 93%, and DPM by 72% to support attainment of the federal fine particulate matter (PM) standard in the air basin; and (2) by 2023, reduce emissions of NOx by 59% to support attainment of the federal 8-hour ozone standard in the air basin, with additional reduction targets of 92% for SOx and 77% for DPM.

- These are more than just theoretical goals – the Ports have effected real-life success in actual emissions reductions. The recently-released Ports' 2009 Emissions Inventories show combined emission reductions of 52% diesel particulate matter (DPM), 34%

Port of Los Angeles • Environmental Management
425 S. Palos Verdes Street • San Pedro • CA 90731 • 310-732-3675
Port of Long Beach • Environmental Planning
925 Harbor Plaza • Long Beach • CA 90802 • 562-590-4160

The San Pedro Bay Ports Clean Air Action Plan was developed with the participation and cooperation of the staff of the US Environmental Protection Agency, California Air Resources Board and the South Coast Air Quality Management District.

nitrogen oxides (NOx) and 50% sulfur oxides (SOx) since the 2005 baseline year. At current pace, the Ports have exceeded their interim emission reduction milestones and are on track to meet the Draft CAAP Emission Reduction Standards.

- Through the 2006 CAAP and 2010 CAAP Update, the CEQA process for Port projects and otherwise, the Ports are actively engaged with our neighboring communities, environmental groups, business stakeholders and federal, state and local agencies in a collaborative process. These collaborations result in balancing and addressing issues of human health impact reduction, neighborhood livability, personal livelihood, education, air quality, water quality, social networks, and social equity.

Comments on AQMD'S 2010 Draft Clean Communities Plan (CCP)

We look forward to having the opportunity to continue to comment through the process of further development of and finalizing the CCP. The following represent our initial comments based upon the preliminary information provided in the draft CCP.

CCP Measures Agency-01, Agency-02, Compliance-01 and Compliance-02

As noted in the CAAP Update, the Ports feel it is essential that local municipalities make informed land-use planning decisions in the areas surrounding the ports in order to avoid aggravating potential health risk impacts. Thus, in concept, the Ports support measures such as Agency-01, which promotes better land use decisions. The Ports have had a long history, through the CAAP and otherwise, of cooperative effort with the AQMD, ARB, the United States Environmental Protection Agency (EPA) and other agencies. The Ports strongly believe that such collaboration has aided in the success of the CAAP and the emissions reductions that have been achieved. Thus, in concept, the Ports support measures such as Agency-02, which seeks Multi-Agency Coordinated Response to solve complex environmental issues.

After such a successful strategy of collaboration among agencies, the Ports' first general comment on the CCP is that any CCP measure that intends to regulate or affect other agencies such as the Ports, should use the same collaborative approach and include such agencies in development of such measures. The CCP measures Agency-01, Agency-02, Compliance-01, Compliance-02, and perhaps additional CCP measures (since it is difficult to determine from the draft CCP), appear to intend to involve other governmental agencies in a coordinated effort; however, the description of both the development and implementation of such measures is vague and it is difficult for other agencies to understand exactly the AQMD's intended role and expectations of the agencies. Therefore, at this time, we have the following questions related to CCP Measures Agency-01, Agency-02, Compliance-01 and Compliance-02:

1. Will AQMD be forming an agency stakeholder group for collaboration and input into the development of these measures? While there is mention of establishing an "Interagency Task Force" in the implementation stage of Agency-02 after the CCP

Plan is adopted, we believe that an agency stakeholder group needs to be involved in consultation and input now, as AQMD develops the measures, and not only after adoption.

2. The Ports support the "reverse CEQA analysis" for school siting but would like to better understand AQMD's intention in Agency-01 to expand this requirement for other "sensitive land use projects." How does AQMD define "sensitive land use projects"?

CCP Measure Community-03

The Ports have appreciated the many opportunities they have had to partner with AQMD to fund air quality improvement projects such as the Proposition 1B Alternative Fuel Truck Grant program, the Wilmington/San Pedro school air filtration project and the PHL Tier 2 Modernization. We therefore welcome the AQMD's funding assistance in retrofitting, repowering and replacing older, higher emitting equipment as is suggested by CCP Measure Community-03. We have found that partnering and combining our respective financial resources allows successful achievement of air quality improvement projects to a greater extent than as individual agencies.

CCP Measure Stationary-05

The Ports have concerns, however, with CCP Measure Stationary-05, which develops approaches for reducing DPM exposure by targeting "indirect sources" of air pollution. By attempting to regulate mobile sources, Stationary-05 appears to tread into regulatory areas that are under the authority of ARB or EPA. This measure may also duplicate efforts already underway by such agencies and the Ports, such as our aggressive CAAP measures. We believe that it would be counter-productive and unnecessary to develop potentially contradictory regulatory approaches for the Ports and other agencies that are already successfully implementing collaborative programs to decrease DPM emissions.

The indirect source rule discussed in the CCP has potentially wide reaching effects. However, as the CCP does not contain any draft language of the proposed indirect source rule, it is not possible to comment specifically about it and we reserve the right to do so at a future point in time in response to actual draft rule language. The CCP's discussion of the proposed rule is vague enough that it is possible, but unclear, that it would apply to the Ports, their tenants, and other associated businesses. The Ports are concerned about this potential and would like clarity as to AQMD's intentions and direction. Therefore, the Ports have a series of preliminary questions designed to gain a better understanding of the AQMD's intended rulemaking process for this proposed indirect source rule and the regulatory direction of the CCP:

1. Stationary-05 seeks to regulate mobile sources of air pollution. Upon what authority are you relying in the creation of Stationary-05 and related rules?

2. What level of CEQA analysis is the AQMD proposing for this rulemaking?

3. When will a draft of the proposed indirect source rule and preliminary draft staff report be ready for review?

4. The Ports want to understand how the terms found in Stationary-05 are going to be defined and their intended scope:
   a. How is "facility" to be defined?
   b. What are "businesses that rely on diesel mobile sources"?
   c. Do you intend the ultimate definition to include the Ports? Either as a "facility" or "business that rel[ies] on diesel mobile sources?
   d. Upon what is the applicability criterion going to be based?

5. Pursuant to Health and Safety Code § 40727: Where are the findings of Necessity, Authority, Clarity, Consistency, Non-Duplication, and Reference? When and how will these be developed?

6. Pursuant to Health and Safety Code § 40703:
   a. Have you identified the affected businesses? If so, who are they?
   b. Have you made efforts to determine the direct cost to the affected businesses? If so, what are they?

7. Proposed traffic studies to improve the flow of traffic and vehicle scheduling:
   a. Who would conduct and pay for these?
   b. When would these need to be completed; what triggers the need to conduct one?
   c. Would any part of the proposed rule affect a truck's ability to leave truck routes to deliver/pick up goods?

8. What changes to CARB's guidelines in reference to AB 2588 is the AQMD seeking? Will the public receive notice of any action in this regard?

9. Pursuant to Health and Safety Code § 40922:
   a. Have you analyzed any of the measures for cost effectiveness and ranked the proposed measures?
   b. If so, what method was used for the analysis and where are the results?
   c. If not, when will that analysis take place?

10. Have the socioeconomic impacts of the proposed indirect source rule been addressed?
    a. If so, where are the results?
    b. If not, when will that analysis take place?

Other General Comments on the CCP

Additionally, we would like to ask the District to revise its statement (page 2-5 of the Draft 2010 CCP) that the Mates III Study shows the highest cancer risks from air toxics in the vicinity of the port areas, with the highest grid cell risk of about 3,700 in a million. The cited risk levels are misleading, as they refer to risk estimates that are either over water or on Port

property. It is not appropriate to use or otherwise communicate these values as being representative of residential risks.

We also believe the Draft CCP would benefit from a brief description of the Ports CAAP as it is a recent local example of industry, air agencies, and community stakeholders effectively working together on a voluntary program. Implementation of the CAAP and the forthcoming 2010 CAAP Update represent an effective and ongoing effort to achieve real reductions in air toxics and health impacts. Discussion of the CAAP in the CCP would provide a useful template and background to both CCP Working Group members and the public as the CCP is finalized.

Thank you for this opportunity to provide comments. If you would like to discuss any of the above comments or need further information from us, please contact Heather Tomley, Port of Long Beach, at (562) 590-4160 or Kevin Maggay, Port of Los Angeles, at (310) 732-3975.

Very truly yours,

Richard D. Cameron
Director, Environmental Planning
Port of Long Beach

Christopher L. Patton
Acting Director, Environmental Management
Port of Los Angeles

cc: Richard Steinke, Executive Director, POLB
Geraldine Knatz, Executive Director, POLA
Robert Kanter, Managing Director, POLB
Michael Christensen, Deputy Executive Director, POLA
Dominic Holzhaus, Principal Deputy City Attorney, POLB
Joy Crose, Assistant General Counsel, POLA

WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

STEPHEN R. MAGUIN
Chief Engineer and General Manager

June 30, 2010

File No. 31-380.10B

Ms. Susan Nakamura
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Dear Ms. Nakamura:

Comments on the Draft 2010 Clean Communities Plan

The Sanitation Districts of Los Angeles County (Sanitation Districts) appreciates this opportunity to comment on the Draft 2010 Clean Communities Plan (CCP). As you may be aware, the Sanitation Districts are a consortium of 24 public agencies that provides environmentally sound, cost effective management of wastewater and solid wastes for about 5.7 million people in Los Angeles County and, in the process, convert these wastes into resources such as reclaimed water, energy and recycled materials. The Sanitation Districts' solid waste management system serves a large portion of Los Angeles County, including active sanitary landfills, recycle centers, transfer/materials recovery facilities, refuse-to-energy facilities, and gas-to-energy facilities. Additionally, the Sanitation Districts operate an extensive network of wastewater treatment and reclamation facilities that reduce the dependence of this area on increasingly diminishing allocations of imported water.

Our principal interest in this plan lies in the fact that despite both a considerable investment in clean air technologies and a proven track record of innovation and success in reducing emissions and nuisance impacts, often through voluntary efforts, many of our facilities may nevertheless be unfairly impacted by components of the CCP once implemented. The proposed Diesel magnet measure and additional odor/public nuisance provisions are troublesome to us.

The CCP's Risk Reduction Goals May Be Substantially Achieved Given CARB's Already Aggressive Commitment to Reduce Toxics

The most likely way that the proposed indirect source measure, STATIONARY – 05 can achieve reductions beyond those already anticipated to occur is through an extremely aggressive early retirement program of nearly all Diesel equipment. As shown in the CCP Figures 2-3 through 2-10, the existing slate of state programs, most notably the ARB's Diesel Risk Reduction Plan, will significantly and rapidly reduce emissions and exposure to toxics throughout the Basin. These new mandates were developed weighing the economic and practical feasibility of early retirements, and yet still relied on considerable saturation with Tier IV engines by 2020. Even with delays in rule implementation being contemplated by CARB as a result of the severe economic downturn, the recession has indeed resulted in substantial overall emissions reductions consistent with the 2007 AQMP (with some help from improved modeling assumptions).

Given the considerations the state weighed in forging its plan, there's very little leeway to accomplish much else without causing severe economic and operational disruption. The Sanitation Districts for example, have already committed to extensive engine replacements at the highest tier available. In many cases, these engines are used in specialized equipment like compacters, crawlers, grinders, excavators, etc., and not for mass produced vehicles or equipment like a typical 18 wheeler. Replacement or repowering of this specialized equipment cannot take advantage of economies of scale. Hence requirements to exact further controls from this niche equipment will not go as far in reducing emissions as if those same monies were spent on other alternatives.

The Sanitation Districts have committed over $18 million since 1998 on clean fuels, engine replacements or repowering projects for this kind of equipment (including $3.8 million for a CNG/LNG station). Moreover, in one solid waste management facility currently under construction (the Puente Hills Intermodal Facility), the Sanitation Districts have:

- Committed to using low emitting or alternative fuels for its equipment including its forklifts, yard holsters and a switch locomotive;
- Implemented numerous design features at that facility such as an access road under a major thoroughfare generally improving local traffic flow (thereby reducing traffic and idling emissions created in the project area), extracting a commitment from Union Pacific Railroad to use locomotives with the newest emissions control technology commercially available, and receiving commitments to use no more than two locomotives at one time at the facility, in addition to other effective design measures;

- Investigated innovative technologies in conjunction with SCAQMD staff such as retrofit DPFs with SCR and alternative fuel off-road vehicles in preparation for this and other heavy-duty uses throughout the Sanitation Districts.

Please note that many of these commitments are above and beyond measures called for in the existing state programs. To expect further emissions reductions would be extremely burdensome and potentially infeasible for facilities that have already installed BACT throughout or are operating equipment at the latest tier level. We suggest that any indirect source measure like STATIONARY – 05 consider the clean air investments already made when crafting specific measures from the CCP, especially for financially challenged essential public services that cannot reduce emissions by attrition, down-sizing or relocation.

The Existing Mechanism to Control Odors Is Very Effective

Similar to the extensive commitment that Sanitation Districts has invested in trimming its Diesel emissions, far greater capital and resources have been devoted to combating odor related nuisances. At our largest wastewater treatment facility, the Joint Water Pollution Control Plant (JWPCP) in Carson, the Sanitation Districts have expended $71.5 million on voluntary projects largely designed to address odor concerns in the community since 2000. The extensive scope of this commitment includes:

- Several areas within Primary Treatment, namely the inlet works forebays, grit chambers, interconnecting channels, sedimentation tank batteries, and raw sludge and skimmings wet wells, have been retrofitted with airtight, flat, gasketed, aluminum covers at a cost of approximately $6.5 million to contain odors. Air trapped underneath these covers, excluding the sedimentation tank batteries, is directed to a $10 million state-of-the-art, two-stage treatment process featuring biotrickling scrubbers followed by activated carbon scrubbers.
- Air trapped under the sedimentation tank covers, skimmings trough covers and primary effluent channel covers is directed to another two-stage biotrickling/activated carbon system. Three independent systems, installed at a cost of $32 million, mitigate odors from each of the primary treatment sedimentation tank batteries.
- A $23 million project to control odors from the Solids Processing biosolids storage silos, biosolids conveyors, and truck loading stations

provides for the collection of the foul air and its transport to two independent biofilter treatment systems.

- The Sanitation Districts continues to conduct award-winning odor control research at the JWPCP including the development of the aforementioned biotrickling filter, now an industry standard. A team of consulting engineers, design engineers, operations engineers, research engineers, operators, maintenance workers, electrical and instrumentation technicians, and chemists are continually engaged in the effort to operate, maintain, and upgrade the JWPCP's odor control systems.

- Several facilities have extensive community outreach programs such as the JWPCP's Citizens Advisory Committee, chaired by a member of the community, and a dedicated hotline for residents to call and report potential nuisance occurrences.

Accordingly, we are concerned that our proactive approach to address community concerns may not be acknowledged by the CCP. As discussed during the April 22, 2010 CCP Working Group meeting, stakeholders believe that proactive businesses should be rewarded for reaching-out to communities instead of subjected to new and potentially costly requirements.

We continue to support the Public Nuisance Investigation Policy in Appendix C of the CCP, including the requirements that a minimum of six unique complaints in concert with on-site verification by an SCAQMD inspector be necessary before an NOV is issued. This mechanism to handle these complaints has proven its effectiveness for decades. As the CCP notes, the episodic nature of odors makes it difficult to trace the problems to a confirmed source. Hence, it is imperative that an unbiased process is the foundation for any SCAQMD action. Please note that because of the subjective nature of smell, whether an odor is assigned to a source may be strongly influenced by that person's opinion of that facility, warranted or not. Our experience continues to show that the few odor complaints currently investigated by JWPCP staff, for example, often are attributable to other sources. To relax the standard for confirming the source and issuing an NOV would invite numerous false positives which may require the installation of unwarranted controls. Any potential change to this policy should make the procedure less arbitrary, and seek to solidify a factual, documentable and impartial basis for complaints. Furthermore, we would find it very difficult to support any change to Section 41700 of the H&SC.

Recognition of Voluntary Permit Units Will Advance the Goals of the CCP

We wish to point out that despite our commitment to abating odors, occasionally, through over-regulation, the SCAQMD makes it difficult for us to follow through on that commitment. For example, last year, the Sanitation Districts decommissioned three *voluntarily installed* odor control units and handed back to the SCAQMD the associated permits because of restrictive permit conditions. Specifically, these odor control units were voluntarily installed as a precautionary measure to further reduce the likelihood of an odor complaint, but permit conditions unrelated to odor control effectively required media replacement on a weekly instead of quarterly basis and other monitoring provisions. The economic and operational burden to regularly and rapidly change out the media exceeded the capabilities of our odor control staff, and the units were reluctantly taken off-line.

We respectfully request that SCAQMD recognize and reward such voluntary measures to control potential odors through a permitting process that recognizes voluntary actions. As illustrated above, burdensome requirements will negatively incentivize enterprise and discourage obvious cost-effective solutions.

A Cumulative Impacts Approach May Overstate the Risks

Several of the COMMUNITY proposals require an assessment of the cumulative risks to the community. Although the methodology to perform this analysis has yet to be defined, we caution against using a simplified approach like the one recently adopted by the BAAQMD in their revised CEQA Guidelines. That approach simply and conservatively adds up the MICRs from each of the facilities and other sources such as freeways within a 1000 foot radius of a new source or receptor. This overly simplified approach ignores the powerful impact of distance on declining risk as exemplified by Fig. 3-2 in the CCP.

Such an additive approach would greatly inflate the perceived risks and alarmingly exaggerate the health impacts to the community. In considering methodologies to determine cumulative impacts, we caution against any approach designed from the outset to exaggerate risks that are already conservative. We suggest instead that, until the methodology for assessing cumulative risks is fully matured, any cumulative impact assessment be paired with community level ambient monitoring as a verification tool.

COMMUNITY - 02 Should Foster A Collaborative Approach

As discussed during the CCP Working Group meetings, a collaborative approach is needed to address concerns from the community, business and regulators. If the

CCP is to succeed, no party should act independently. COMMUNITY – 02 should be structured to forge an equitable forum for all stakeholder views and limit the potential for a biased approach.

Independent actors, even with SCAQMD guidance, may abandon the rigorous approach outlined in COMMUNITY – 01. Without a neutral party to resolve disputes and ensure that all stakeholder views are weighed dispassionately, the proposed process may not be successful. To minimize the potential for disputes, perhaps an independent special board created with SCAQMD input could referee the process and ensure that all voices are heard equally.

We appreciate your consideration of our comments on the Draft CCP, and look forward to working with staff to develop a plan that furthers air quality goals. If you have any questions regarding these comments, please do not hesitate to contact me at (562) 908-4288, extension 2113.

Very truly yours,

Stephen R. Maguin

Gregory M. Adams

Gregory M. Adams
Assistant Departmental Engineer
Air Quality Engineering
Technical Services Department

PG:bb

cc: Dr. Elaine Chang - SCAQMD
Cheryl Marshall - SCAQMD

WSPA
Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Michael D. Wang
Senior Advisor, Southern California, Legal Issues, Budget Planning and Analysis

August 5, 2008

Via Email

Dr. Elaine Chang
Ms. Susan Nakamura
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

RE: Clean Communities Plan

Dear Dr. Chang and Ms. Nakamura:

Thank you for the invitation to attend the 2008 Clean Communities Plan Working Group (CCPWG) meeting on July 16. As you know, the Western States Petroleum Association (WSPA) has been an active participant on working groups and projects such as these since the mid-1980's. We, along with the South Coast Air Quality Management District (SCAQMD), the California Air Resources Board (CARB), and the US Environmental Protection Agency (USEPA), have been involved in numerous legislative and regulatory projects to document exposure, reduce risk, and improve overall communication with the community.

Specifically, in addition to the 18 rules the District cited as part of their air toxics program, WSPA and agencies have worked on and actively participated in:

- AB377 (California Chemical Risk Management)
- AB2588 (Toxic Hot Spots)
- USEPA TRI requirements
- USEPA and OES release requirements
- SCAQMD and CARB Community outreach efforts
- CARB Gasoline and diesel reformulation
- CARB Barrio Logan Project
- CARB Harbor Communities Monitoring Project
- CARB CHAPIS (emissions mapping)
- RWQCB GIS mapping
- Certified Unified Program Agency (CUPA)

These activities have resulted in reduced emissions, reduced exposure, and documented reductions in risk. While we understand and accept the need to be vigilant in finding new ways to reduce our footprint on the environment, risks from petroleum facilities are well within regulatory criteria/limits.

Thus, we were pleased to be invited to attend the Clean Communities Plan Working Group because of the many efforts described above. We listened attentively to the discussion and the points made by Staff and the other participants. In response to your request, attached are our thoughts.

Programmatic Design

Perhaps our foremost concern is that the CCPWG efforts must take place within the current regulatory context. As indicated above, the State of California has a rigorous and robust program to regulate emissions to manage and control risks. Any effort proposed by CCPWG must take place within this regulatory framework.

Also, the SCAQMD should embark on this project with an understanding that the State of California has designed its regulatory strategy to reduce risks to residents. In other words, rather than concentrating on emissions – which may or may not have an impact on health risk to human receptors, the State has rightly concentrated on reducing risks associated with air pollutants. This approach has been successful and any program developed by the SCAQMD should be consistent with and incorporate risk-based elements.

Hazard Identification

Also we noted that in your presentation at the CCPWG, you mentioned possible activities with regard to hazards from accidental releases. It appeared you were contemplating material substitution programs for chlorine, ammonia and perhaps other materials. As was noted at the meeting, there are several programs already in place to deal with these possible hazards. Any proposed actions for material substitutions need to consider all impacts (e.g. energy and resource use) before recommendations are made on the most appropriate technology.

Fact-Based Objectives

We notes that the Objectives of the CCPWG were to reduce exposure, address cumulative exposure from multiple sources, increase agency communication, improve communication to the public and emphasize community-based solutions. These goals need to be accomplished within the current regulatory framework and under the aegis of good science and fact-based initiatives. Specifically, the CCPWG should concentrate on reducing exposure where such reductions result in reductions in risk. Absent that linkage, the benefit of any emission reduction would be undefined and un-definable. The need for fact-based objectives will also ensure that consensus reached by the group will result in real and quantifiable improvements in the environment.

Exposure Reduction Programs

As stated earlier, exposure reduction programs certainly would be beneficial if those reductions resulted in reduced risk. Potential Emission Reduction Programs should be viewed in light of current risk reduction requirements of the State and the SCAQMD. We recognize there may be unique opportunities that occur at facilities from time to time where a facility could voluntarily reduce emissions due to changes in equipment or processes. However, the unique situations where such reductions are possible should not be construed as the norm or as the basis for further regulation. Rather, any such examples should be recognized as the efforts of a company going beyond what is required, as a demonstration of their commitment to the environment.

We urge the SCAQMD to be very careful when defining specific compounds or facilities as needing special focus. While all need to be vigilant to ensure that facilities are indeed permitted and operating under the correct emission limits. WSPA would be concerned if the CCPWG somehow highlighted a specific facility or groups of facilities for focused review or enforcement. No area or facility or groups of facilities should be identified as needing enhanced regulatory attention without specific and fact-based criteria. Public sentiment is not a basis for enhanced regulatory action.

Program Priorities

At the meeting, the District noted that some regions or areas would be highlighted for additional study such as those conducted for Mira Loma. Bearing in mind the comments noted above, any highlighting of a region for study should be based on accurate and reliable indicators of risk. While we certainly appreciate recent efforts to document the current environment, for example the MATES3 study, we would reiterate the need for ground-truthing to establish a firm and consistent baseline that facilitates a reliable risk assessment and risk management. Areas for study in this Working Group should not be defined simply by anecdotal or one-off measurements. The Wilmington HCM study has been a good example of how difficult it is to consistently measure localized exposure, convert exposure to risk, and identify risk reduction measures. Even more difficult is deciding whether any specific receptor site might be actually affected by air pollutants or which source might have actually released the emission.

Once again, we look forward to participating on this project and to continuing dialogue.

Sincerely,

970 W. 190th Street, Suite 770, Torrance, California 90502
(310) 808-2149 • Fax: (310) 324-9063 • Cell: (626) 590-4905 • mike@wspa.org • www.wspa.org

Los Angeles County Sanitation Districts
August 6, 2008

Dear Susan/Cheryl:

We appreciate your letting us submit these comments after your deadline.

1. We do not understand how a "new source review" approach to odors would work.

a) Establish an odor compound list: What would this accomplish? Any compound or collection of compounds, depending upon its concentration, can eventually become obnoxious to the perceiver. Potentially this would be a long list as every industry would have its own, possibly unique, inventory of compounds.

b) Rule 410-type OMPs and performance requirements don't seem compatible with NSR-type rules.

2. Accidental exposures has been a highly regulated area ever since Bhopal and Section 112 (r) of the 1990 federal CAA Amendments. For years we have had to comply with Cal OSHA PSM (Process Safety Management) requirements and RMPPs (Risk Management and Prevention Plans) and finally the Cal ARP (California Accidental Release Program). CalARP contains three different program levels with varying requirements depending upon past history of accidental releases, the type of industry or specific determinations made by the AA (Administrative Agency). Program 3 constitutes the most restrictive program. Additional requirements are being considered at the national level.This year Congressional committees have debated the merits of H.R. 5577 (principal issue is that Department of Homeland Security has jurisdiction over chemical plant security) versus H.R. 5533 (EPA has jurisdiction). It is our guess that one of these will probably work its way through the 111th Congress.

Potential federal legislation aside, our principal concern with switching from chlorine gas to sodium hypochlorite is the additional salt concentration that would result in the tertiary water we discharge and the impact of that salt on our groundwater recharge operations. The recharge basins are marginal in their ability to accept any more salts. Someone within LACSD much more erudite than me can explain this to you in much greater detail if you would like.

Please conside that the wastewater industry's safety record as a whole with gaseous chlorine has been outstanding. We also have a very great need for the $$$ otherwise spent on switching for the sake of switching to improve other parts of our infrastructure (like crumbling sewers).

The efficacy of gaseous chlorine versus 12% hypochlorite solution would cause delivery truck traffic to increase between three and four times what it is now. Also, instead of truck deliveries from production facitilites in Santa Fe Springs across the 605 Fwy from here, hypochlorite would have to come over from Sparks, Nevada.

Gregory M. Adams

Eastern Municipal Water District
August 7, 2008

Susan/Cheryl,

Unfortunately, I did not know about the July 16 meeting where the 2008 Clean Communities Plan concepts were presented, but I have obtained a copy of the presentation (thank you Cheryl) and have the following comments:

1. Based upon my review of the first couple of slides that discuss the approach and principal objectives, it appears that the plan is focused on continuing the efforts of the past air toxics control plans in furthering reductions of toxics, reducing the public's exposure to toxics and also to introduce mitigation or strategies to address the cumulative risk from toxics exposure. In fact, the first two thirds of the presentation are focused on toxics, better intergovernmental coordination and a better community presence/coordination. Hence, I am a little perplexed as to why issues such as odors (e.g. public nuisance) have been brought into this plan. Especially since issues such as odors were not brought up in earlier meetings/discussions of the toxics working gorup that had been meeting in late 2007 and early 2008 (that has subsequently been subsumed by this new workging group). First, you can never eliminate all complaints or perceived public nuisance issues. Second, the District already has programs in place to address public nuisance issues (Rule 402 & SCAQMD internal policies and practices, NSR for Toxics - Rules 1401, 1402). Maybe before we include strategies like developing an odor new source review program, we should evaluate SCAQMD internal program policies and practices to see if there are areas that might be improved or modified that could provide more benefit in reducing odor complaints and public nuisance cases that a new regulatory program. It also seems like the list of potential compounds could be endless. Also, what is an odor to one person could be an aroma to another and all odors are not harmful to a person's health. Anyway, it seems that there needs to be a lot more discussion of this issue.

2. Under the slide titled "Accidental Exposures" the concept of requiring the wastewater treatment industry to replace chlorine gas as a disinfectant with a "safer alternative" seems to be overreaching. Our industry is already heavily regulated by CAL-OHSA (e.g. safety), CAL-ARP and EPA regulations. And switching from chlorine gas to sodium hypochlorite would require an immense investment in captial infrastructure and costs, including higher O&M costs. Many sewage plants may not have the available space to store the equivalent amount of solution as can currently be stored in liquid chlorine storage vessels. As our industry has an incredible safety record regarding the use of chlorine gas, and since I have not heard of any public concerns regarding this use, I am again caught off-guard as to how this became an issue. Hazardous material regulations heavily regulate the transport of chlorine and other hazardous material regulations along with EPA/State of California RMP and PSM regulations regulate our use of the chlorine. This proposal (to replace with an alternative) would be adding more, unnecessary regulation upon what already exists.

Thank you for the opportunity to provide comment on this. I look forward to working with you on this plan.

Daniel McGivney

Metropolitan Water District of Southern California
August 8, 2008

Hello Cheryl and Susan,

First, thank you for the opportunity to comment and to participate in this working group. I would like to offer a few comments that reiterate some of the issues discussed at the first meeting on July 16th.

1. **Nuisance Program** – It is unclear why this element would be included in the Clean Communities Plan, which is mostly geared towards air toxics. I understand that SCAQMD already implements various internal policies and procedures that address public nuisance odors. I am not aware of gaps in these existing programs that would need to be addressed with a new program. In trying to make the plan more comprehensive to include odors, the air toxics focus of the plan may be somewhat diluted. Additionally, the science of investigating odors is quite different from air toxics; e.g. people have different odor perceptions and although some odor thresholds may be low, it doesn't necessarily mean that a chemical may be present at levels hazardous to health. As somewhat of a coincidence, on July 24th, I attended an Odor Awareness Workshop (presented by GEI Consultants) that our Water Quality group sponsored. The workshop included some discussion of this last point, as well as discussion of odors of importance, investigating odors, and odor intensity, among other topics.
2. **Accidental Exposures** – Another proposed element of the Clean Communities Plan looks to reduce and prevent exposures to toxics from accidental releases from such chemicals, as ammonia and chlorine. Employee safety, public safety, and accidental releases of these chemicals and many others are already heavily regulated under existing federal and state regulations, such as Cal-OSHA "Process Safety Management", Cal-ARP "Risk Management Plans and "Accidental Release Program", DOT for transportation, and EPA for water sector vulnerability assessments. There are also Federal legislative proposals pending that propose to capture water and wastewater chemicals under DHS chemical facility security regulations. It would be beneficial to review these existing and upcoming regulatory requirements before incorporating this element into the plan with potentially new (and overlapping) sets of regulations. The Process Hazard Analysis (PHA) component and other elements of these current regulations should already meet the objective of reducing and preventing accidental releases/exposures that is in the Clean Communities plan.
3. **Alignment with OEHHA Efforts** – As we discussed at the July meeting, OEHHA recently formed a cumulative impacts group which is slated to come up with recommendations (risk-based) in Summer 2009. It is important that the Clean Communities Plan is aligned with these OEHHA efforts and recommendations, so they can be integrated into the plan, as applicable. I understand that SCAQMD is represented on this OEHHA group.

Please call me if you have any questions. I look forward to the next meeting on August 26th.

Janet

Communities For a Better Environment/
East Yard Communities for Environmental Justice
August 12, 2008

Dear Elaine:

We are writing these comments in response to the staff presentation and discussion on July 16th during the stakeholder meeting for the *2008 Clean Communities Plan (CCP)*. We appreciate the opportunity to share with staff the expectation of our community members who are increasingly vulnerable to cumulative impact of pollution in their neighborhoods. We recognize that AQMD has come a long way in acknowledging the severity of the problems in disproportionately impacted communities throughout the Basin since we first started this dialogue about cumulative impact about 10 years ago. In July of 1998 Communities for a Better Environment published its report, *Holding Our Breath,* assessing the cumulative impact issues in the Southeast Los Angeles communities and making recommendations, many of which apply even to this day. We hope that the *2008 CCP* will offer effective regulatory solutions to addressing the issues that environmental justice groups have identified over the past decade.

Based on the staff presentation, it appears that the CCP process lacks a much needed focus on cumulative impact, and we believe that a specific cumulative impact sub-category needs to be added to the items forming the umbrella of CCP. We believe there are four broad areas to consider in addressing cumulative impact in environmental justice communities: Promoting meaningful public participation, engagement and access; significantly ratcheting up enforcement practices; improving the permitting process by including cumulative impact analysis in the criteria for the new and existing facilities; revising appropriate source specific rules and umbrella rules as well as designing new ones.

AQMD staff have correctly underlined the issue of public participation, community outreach, and enhanced community engagement as one of the central issues to addressing any environmental justice and cumulative impact problems. We strongly support the staff recommendation to increase AQMD¢s efforts in enhancing the capacity of communities to participate in air quality decisions that impact their quality of life. We believe investing in community dialogue based on respect for the community (experience), who has the first hand knowledge of impacts, will greatly benefit the residents, AQMD and the business community. We will provide staff with a list of best practices on this topic in our future comments. We also believe that AQMD can learn from evaluating its past experiences of interacting with community and draw important lessons when it has fallen short.

Another area that AQMD staff emphasized in its presentation is enforcement. We have seen many improvements in this area over the past years, and we appreciate the effort of AQMD enforcement staff in responding to community complaints and following up with appropriate disciplinary actions as warranted. However, AQMD has not been proactive in its enforcement, and we believe there are many additional measures that AQMD could adopt in enhancing its enforcement regime in disproportionately impacted communities. Allocation of necessary resources, enhanced monitoring, building the capacity of community to interact with enforcement staff, offering appropriate trainings to community members, increasing the understanding/sensitivity of enforcement staff of environmental justice issues, and a number of other measures would greatly benefit our communities. Again, we will provide AQMD with a list of necessary changes in this area in our future comments and discussions.

The next and one of the most significant policy areas that AQMD needs to reexamine pertains to its source specific rules, umbrella rules and permitting practices. Improving permitting practices for new facilities and affecting the behavior of existing facilities based on revising current rules are central to any serious attempts to address cumulative impact. As it currently stands, the regulatory model of AQMD regulates facilities without much consideration to other facilities in a neighborhood. If a new polluting facility applies for a new permit (or permit to expand), AQMD permitting staff look at the existing rules and the final permitting decision offers no consideration to the cumulative level of pollution in the neighborhood. Whether there are five other highly pollution sources in the neighborhood or none does not have any bearing on the District¢s decision to issue the permit. In other words, cumulative impact currently is not a consideration for issuing permits, and we strongly believe it should be.

This issue is closely related to the way source specific rules and umbrella rule such as 1401 and 1402 are designed. The rules currently fail to account for cumulative impact criteria. At the heart of addressing cumulative impact is fixing this great regulatory flaw. Source specific rules and umbrella rules should be revised to take into account the whole picture. The health protective approach requires placing the community at the center and looking at the impacts from the perspective of the impacted community.

We also would strongly support AQMD in expanding its effort to reach out to planners and educating them about the air quality impacts of their decisions. AQMD expertise can provide much needed guidance for cities in designing better plans, assessing impacts of different projects as well developing criteria to account for cumulative impact throughout the CEQA process. We also believe that AQMD, as a responsible agency, should assume a more aggressive posture in commenting on proposed projects in disproportionately impacted communities.

We understand that all this is a great undertaking, and it will influence many operational aspects of AQMD in rule-making, permitting, enforcement and other areas. However, we believe the negative health impacts borne by vulnerable communities throughout the years warrants commitment to action on this issue, and it is in fact long overdue. We are interested in engaging with AQMD staff and other interested stakeholders to suggest practical and effective approaches to arrive at a health protective regulatory structures with a focus on addressing cumulative impacts.

Sincerely,

Bahram Fazeli
Research & Policy Analyst
Communities for a Better Environment

Angelo Logan
Executive Director
East Yard Communities for Environmental Justice

California Council for Environmental and Economic Balance

100 Spear Street, Suite 805, San Francisco, CA 94105 • (415) 512-7890 • FAX (415) 512-7897

November 10, 2008

Susan Nakamura
Cheryl Marshall
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

RE: SCAQMD Clean Communities Plan

Dear Ms. Nakamura and Ms. Marshall,

CCEEB commends the South Coast Air Quality Management District ("the District") for its commitment to issues of environmental justice. The proposed 2008 Clean Communities Plan ("the Plan") is an ambitious undertaking and, as far as we are aware, one of the first attempts to directly address cumulative impacts by an environmental regulatory agency in California. We understand that this document and framework are proposed in lieu of the air toxics control plan update anticipated based on the MATES II results. We trust that the District's effort will be informed by other contemporary work efforts, such as the Cumulative Impacts and Precautionary Approaches project at Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA).

At this time CCEEB wishes to bring to your attention two overarching concerns along with additional specifics.

In general, CCEEB notes that the Plan goes well beyond control of air toxics, which has been the subject of past air toxics control plans. For example, the Plan includes sections on nuisance and hazardous material bans. On the other hand, the Plan fails to adequately address mobile sources, which account for 94% of the risk from air toxics in the basin based on the MATES III study. Staff should consider the scope and focus to ensure that proposed measures are within the District's purview and result in quantifiable and measureable reduction in risk to public health.

The Plan, as currently proposed, sets up a program that results in "redlining," that is, the limitation or prohibition of stationary sources solely based on location and regardless of actual emissions, on-site control technologies, or relative contribution to the risk measured and/or modeled by MATES III. CCEEB has long opposed redlining in any form, but particularly in cases where mobile sources play such a significant role. Besides the inequity problem, misdirected focus diverts resources while failing to address real public health problems.

CCEEB very much thanks the District for the opportunity to comment and to participate in the work group. We look forward to discussing our viewpoints with staff and other stakeholders. Our more specific observations on the plan are organized below, according to the organization of the Plan.

Future Year Modeled Estimated Risk

We want to confirm the District's commitment to prepare, as part of both the draft and final plans, an emission inventory of toxic air contaminants for future years - including the years 2010, 2015, and 2020. CCEEB believes that the inventory should be based on all measures that have been approved by the ARB and the SCAQMD, as well as measures that are proposed in the AQMP and the SIP. The inventories should also be based on the best available source emission inventories, and not limited to the inventories prepared as part of the AQMP. In conjunction with the future year toxic air contaminant inventories, CCEEB believes that the District should also prepare maps showing basin-wide modeled estimated risk (similar to MATES III Figure ES-4), as well as charts which illustrate the change in air toxic risks (similar to MATES III Figure ES-5).

Community-Based Solutions

Community Exposure Study (COMMUNITY-01)

Phase 1: Community Screenings

Currently, there is no commonly accepted methodology to "screen" communities of concern. The District should carefully consider its work in this area, as it will set precedent. We encourage staff to coordinate with the state's effort (Office of Environmental Health Hazard Assessment) in this regard.

Regarding the proposed criteria, the relative weighting of each screening criterion should be transparent and clearly articulated in advance. As much as possible, prioritization should be based on fact-based risk assessment, not simply the perception of risk. First, this directs resources to the most at-risk communities, so that even in its pilot stage, the Plan will deliver real and near-term results where they are needed most. Second, this guarantees the protection of all communities, even those in which civic engagement may be low. The District might consider adding a capacity-building element to the Plan to ensure that all communities have the resources and education they need to engage in the process.

The screening process should be open for periodic review and adjustment. In some cases, the District may wish to correct program design flaws based on lessons learned during the implementation phase. In other cases, actual emissions and/or risk levels may change over time, whether for good or bad. Given the scientific and political uncertainty, it makes sense to allow for later course corrections.

Phase 2: Community Input

Environmental policy issues are frequently scientifically-complex and contentious. Because of the complexity of the issues, before a dialogue can begin in earnest, all stakeholders must be in agreement on what the issues, assumptions and facts—what is known as a "shared understanding" of a problem. In the absence of clearly identified

issues, assumptions and facts up front, it becomes difficult to engage in productive and meaningful dialogue, let alone reach consensus. Mutually agreed-to clarification can only save time and reduce conflict later in process.

Because of the diversity of interests and various levels of trust among stakeholders, an objective third-party facilitator can play an important role in maintaining the credibility of the process. A neutral facilitator can assist with probing questions when the dialogue is stalled, help explore differences, and help to ensure that areas of agreement become the principle guide posts for moving the dialogue forward.

Other agencies, local government, planners, and other experts must be brought into the process as appropriate. For example, if a community identifies problems associated with the impact of new development, land use planners and decision-makers should be at the table. Transportation planners, public health officials, and education groups are other examples.

Phase 3: Community-Based Solutions

The process for developing an exposure reduction plan should be closely tied to the actual emissions burden faced by a community. Thus, the common understanding of the issues, assumptions and facts, held by all stakeholders, is a critical outcome of phase two above.

In the third phase, the District might consider organizing the community plans around general categories based on the nature and type of impact, even where these overlap (for example, mobile sources, existing permitted sources, new sources, land use planning and siting issues, communities subject to intensive goods movement activities, and cross media). First, this helps establish a close problem-cause connection to proposed solutions. Second, classification helps the study and translation of lessons learned to other areas facing similar issues.

If permitted facilities are likely to be affected, bring business and industry representatives into the process at the earliest point possible. Too often stakeholders meet late in the process when interests are already vested and positions entrenched. Moreover, stakeholders often have divergent understandings of the project or proposal being addressed; eliminating misconceptions early on facilitates collaborative solutions.

Likewise, if the focus of concern falls partially or largely outside of the District's jurisdiction, ensure that the appropriate agency, authority, or decision-maker is part of the process at the earliest point possible. Whenever possible, the District should attempt to leverage existing programs and funding sources.

All parties should work together to develop consensus criteria by which proposed measures will be evaluated. District staff should provide detailed analysis of each measure, generally based on these criteria, and not wait until rulemaking proceedings.

Useful analysis might include, but is certainly not limited, to:

- Net benefit, expressed primarily in terms of reduced risk
- Ancillary or "co-benefits"

- Direct costs, both in terms of compliance costs and program costs
- Indirect or external costs, e.g., grid reliability, energy affordability, economic activity
- Funding mechanisms, including potential funding sources (e.g., existing funding sources or new?) and funding responsibility (e.g., emission sources or the general public)
- Role of other agencies and entities; coordination with other efforts
- Impact of anticipated benefits from regulations and legislation, including AB 32, AB 118, and ARB on-road and off-road diesel rules

Options to Address Cumulative Impacts

> *"Cumulative impacts means the exposures, public health or environmental effects from the combined emissions and discharges in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socio-economic factors, where applicable and to the extent data are available."*
>
> *–Cal/EPA working definition*

CCEEB agrees that the importance of cumulative impacts warrants special consideration and CCEEB supports a comprehensive approach to assessing the causes and solutions of cumulative impacts. However, CCEEB is concerned that the approach proposed by staff is unnecessarily narrow. Focusing on one piece of the puzzle—in this case, only permitted sources—fails to address the "cumulative" part of cumulative impacts. Instead, this narrow focus risks the prospect of penalizing those permitted that have already contributed their fair share of emission reductions for the benefit of air quality in the basin. As the District knows, permitted sources account for 2%-6% of the risk from air toxics, so even eliminating all stationary sources would achieve only a marginal benefit to public health.

The underlying challenge is how to address problems like cumulative impacts within the confines of our existing regulatory system—that is, fixing gaps in decision-making processes. While it is tempting to simply make current and new rules more stringent, this ignores the broader systemic failures that got us here in the first place, and may not even result in improved public health outcomes.

At the very least, all air emission source categories must be considered: stationary, mobile, and indirect. To the fullest extent possible, each source category should be responsible for its "fair share" of emission reductions, based on sound scientific analysis. For sources that lie outside of the District's jurisdiction, responsible agencies should be brought into the process and made partners in this work. Land-use planning and transportation planners must be part of the discussion, too, for surely they play a role in addressing cumulative impacts.

Differential Toxic Fees

If additional funding or a new funding source is needed, the District should evaluate all funding mechanisms including existing fee and tax revenues. Any funding mechanism that is predicated on the "polluter pays" principle should ensure that each source category pays its fair share and that no source category is expected to subsidize reductions in another. Since mobile sources are 94% of the risk from air toxics, we are troubled that staff only proposes fees for permitted sources (2%-6% of risk). Notwithstanding the extraordinary demands on existing mobile source revenues, the existence of these revenue mechanisms should not be overlooked when discussing solutions to cumulative impacts, the principle cause of which are mobile sources.

With regard for any potential stationary source fee mechanism, the District should not invent another fee system. Rather, the District should utilize its existing fee structure, directing fees as needed to the most cost-effective measures for reducing cumulative impacts. This results in greater uniformity across the entire basin. As new communities are added to the program, fees will not need to be restructured block-by-block or facility-by-facility, resulting in a confusing patchwork of tiered fees.

The District should evaluate how a cumulative-impact-based toxic fee interacts with CEQA mitigation fees and local government authority. For example, the District could inadvertently discourage development in areas in which local government is trying to encourage economic growth. Coordination between the District and local land use authorities may also be necessary to ensure that permitted sources are not assessed duplicate fees used ostensibly for the same purpose.

Differential Requirements through Source-Specific Alternative Assessments

(See comments under Source-Specific Programs)

Monitoring and Enforcement

Enhanced Enforcement Program (ENFORCEMENT-01)

CCEEB supports this section as we currently understand it, but note a lack of detail. Improving district communication with and response to communities is an important foundation to the Plan, without which, other measures will surely fail.

Enhanced Community Response (ENFORCEMENT-02)

Accurately verifying and responding to community complaints is of utmost importance. For the greatest effectiveness, the geographic area for each hot list area should be finely drawn in order to maximize limited resources. For example, if a "hot" spot covered multiple point sources or multiple source categories, then resources become diffused and enhanced enforcement may not be effective. Likewise, CCEEB would be concerned if facilities would arbitrarily fall under enhanced enforcement because of their type of operations rather than their complaint record or actual emissions history.

We are concerned with the proposal to recognize clean facilities. Past efforts to do this have failed to devise commonly acceptable criteria by which to define what is "clean". Criteria must recognize differences in size and complexity from site-to-site. CCEEB opposes any criteria based on overall emissions.

Source-Specific Programs

Facilities Using Acutely Hazardous Materials (STATIONARY-04)

Several other stakeholders have commented regarding their specific concerns to this section. CCEEB supports the argument that other programs and agencies already regulate the use of hazardous materials and that new oversight by the District seems duplicative. The District should first identify what regulatory gaps it is trying to fill and then coordinate with responsible agencies, should a need arise.

More generally, CCEEB believes that regulations should be based on risk management and not outright chemical bans. Chemicals are not inherently risky. Rather, risks result from a combination of several factors including a chemical's potential hazard, potential routes of exposure, and dose-response relationships.

If the District does move in favor of chemical-by-chemical bans, then CCEEB strongly encourages staff to employ full life-cycle analysis that takes into account the concepts of "sustainable chemistry". Sustainable chemistry focuses on the end application or service delivered, comparing all of the potential options (materials and processes) across the full life-cycle. However, we believe that this full scope of evaluation falls well outside of the District's primary mission; the objectives of this section can better be met through enhancing inter-agency coordination and partnership.

Agency Coordination

In general, CCEEB strongly supports measures that improve district coordination with local government and other agencies. Whenever possible, the District should attempt to leverage existing programs and funding sources by building partnerships with other authorities.

Staff could include greater specificity as to which local government entities (e.g., MTA, planning commissions, etc.) and which agencies (e.g., Air Resources Board, Department of Toxic Substances Control, Office of Environmental Health Hazard Assessment, etc.) might be included and at which point in its processes.

Nuisance

CCEEB recognizes that odors contribute to the "cumulative impact" borne by a community and, as such, should be a consideration. We are interested to learn more about what direction staff might take, especially given the highly subjective nature of nuisance complaints and the potential for abuse. We note that nuisance is defined in California Civil Code § 3479 and regulated under Health and Safety Code § 41700 and expect that any district rule will be consistent with State law.

CCEEB is interested to learn more about how the District might copy the nuisance rule employed by the Bay Area air district and what changes this would make to existing practices. An important aspect of the Bay Area approach is that inspectors attempt to verify odors immediately following complaints. Sufficient safeguards should be built into any nuisance rule so that it cannot be abused.

We would disagree, however, with rules that presume a problem exists based on a given category of sources or facilities, especially if this results in increased stringency even in circumstances where no nuisance has been reported.

Education and Outreach

Whenever practical, the District should partner with outside organizations or programs dedicated to environmental and public health information and education. Partnerships greatly increase both the quality and reach of public education and outreach. Community groups and associations are another good conduit for information to the public and can certainly play a significant advisory role.

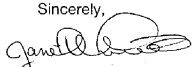
Review Procedure

CCEEB believes it is important that there continue to be open discussion and ample opportunity for review and comment. The District's process for the development of the CCP should ensure that the following principles are adhered to:

- Continued monthly meetings with the CCP Working Group.
- District to release the draft CCP.
- District to hold a public CCP Working Group meeting no earlier than seven days after releasing the draft plan.
- District to provide 21-day comment period starting the day after the public meeting of the CCP Working Group.
- The District will place all comments on the CCP website.
- The final staff report should contain a "response to comments" section.

We look forward to ongoing discussions with the District, its staff, and other interested stakeholders as the Plan is developed. We hope these comments are productive and constructive. Thank you.

Sincerely,



Janet Whittick
CCEEB

cc: Dr. Elaine Chang, SCAQMD

APPENDIX F

GLOSSARY

2010 Clean Communities Plan
Glossary

Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) is an Assembly Bill which was enacted in 1987, and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

California Environmental Quality Act (CEQA) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA was adopted in 1970 and intended to: inform governmental decision-makers and the public about potential environmental effects of a project; identify ways to reduce adverse impacts; offer alternatives to the project; and disclose to the public why a project was approved.

Cancer Risk is the increased probability that an individual exposed to an average air concentration of a chemical will develop cancer when exposed over 70 years. Cancer risks are often expressed on a per-million basis for comparative purposes. As an example, a cancer risk of 100 in a million at a location means that the individuals staying at that location for 70 years have a 100 in a million chance of contracting cancer. (Multiple Air Toxics Exposure Study [MATES-II], Final Report, SCAQMD, March 2000)

Cumulative Air Pollution Impact is an adverse health effect, risk or nuisance from exposure to pollutants released into the air from multiple air pollution sources. (White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, SCAQMD, August 2003)

Environmental Justice means the equitable environmental policymaking and enforcement to protect the health of all persons who live or work in the AQMD, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution. (White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, SCAQMD, August 2003)

Health Risk Assessment means a detailed comprehensive analysis prepared to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population wide health risks associated with those levels of exposure. (Air Toxics "Hot Spots" Information and Assessment Act of 1987, CA Health and Safety Code, Part 6, Division 26, Section 44306)

Multiple Air Toxics Exposure Study (MATES) is a series of three studies conducted to quantify the magnitude of

population exposure risk from existing sources of selected toxic air contaminants in the South Coast Air Quality Management District.

Sensitive Receptor locations include schools, hospitals, convalescent homes, day-care centers, and other locations where children, chronically ill individuals, or other sensitive persons could be exposed. (Risk Assessment Procedures for Rules 1401 and 212, Version 7.0, SCAQMD, July 2005)

Toxic Air Contaminant (TAC, or "Air Toxic") is an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. (Rule 1401 – New Source Review of Toxic Air Contaminants, SCAQMD, September 2010)