FINAL 2007 AQMP
APPENDIX III

BASE AND FUTURE YEAR EMISSION INVENTORIES

JUNE 2007

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EXECUTIVE OFFICER
BARRY R. WALLERSTEIN, D.Env

CONTRIBUTORS

South Coast Air Quality Management District

Barry R. Wallerstein, D.Env.
Executive Officer

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

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

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

Authors

SCAQMD - Planning, Rule Development, & Area Sources

Ed Eckerle, Program Supervisor
Ali Ghasemi, Program Supervisor
Kathy Hsiao, Program Supervisor
Susan Yan, Air Quality Specialist

Contributors

SCAQMD – Planning, Rule Development, & Area Sources

Brian Choe, Air Quality Engineer
Tracy Goss, P.E., Program Supervisor
Kenard Ellis, Air Quality Specialist
Sherri Fairbanks, Air Quality Specialist
Jim Fakoury, Air Quality Engineer
Shalini George, Air Quality Specialist
Michael Laybourn, Air Quality Specialist
Cesar Rosas, Air Quality Engineer
Mervat Said, Air Quality Specialist
Efren Sunico, Air Quality Engineer
Hoshik Yoo, Air Quality Engineer
Xinqiu Zhang, Ph.D., Air Quality Specialist

SCAQMD - Science & Technology Advancement

Zorik Pirveysian, Environmental Technology Assessment

CARB

Andrew Alexis, Air Pollution Specialist
David Chou, Manager, Off-Road Modeling and Assessment
Jeff Long, Manager, Analysis Section
Sylvia Oey, Manager, Southern California Liaison Section
Ravi Ramalingam, Manager, Transportation Strategies Section
Todd Sax, Manager, Regulatory Support Section
Doug Thompson, Manager, Motor Vehicle Assessment Section
Lucille Van Ommering, Staff Air Pollution Specialist

Reviewed By

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

Production

Ann Scagliola, Secretary
Lisa Wong, Office Assistant

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LIST OF ACRONYMS

AQMP	Air Quality Management Plan
CARB	California Air Resources Board
CALTRANS	California Department of Transportation
CAA	Federal Clean Air Act
CAT	Catalytic Converters
CCAA	California Clean Air Act
CEC	California Energy Commission
CO	Carbon Monoxide
DTIM	Direct Travel Impact Model
EDS	Emission Data System
EIS	Emissions Inventory System
U.S.EPA	U.S. Environmental Protection Agency
ERC	Emission Reduction Credits
HD	Heavy-Duty
LDV	Light-Duty Vehicles
MDV	Medium-Duty Vehicles
NCAT	Non-Catalytic Converters
NO_2	Nitrogen Dioxide
NOx	Oxides of Nitrogen
NSR	New Source Review
PM	Particulate Matter

LIST OF ACRONYMS (continued)

PM10	Particulate Matter Less Than 10 Microns In Diameter
RECLAIM	Regional Clean Air Incentives Market
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCC	Source Classification Code
SIC	Standard Industrial Code
SOx	Oxides of Sulfur
TOG	Total Organic Gases
UTM	Universal Transverse Mercator
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds

CHAPTER 1
INVENTORY DEVELOPMENT

BACKGROUND

To protect the public health and welfare, federal and state standards limit concentration levels of air contaminants in ambient air. An emission inventory of air pollutants and their sources is essential to identify the major contributors of air contaminants and the measures required to reduce air pollution. 2002 is the base year used to project future year emissions for the Final 2007 Air Quality Management Plan (AQMP). The 2002 base year emissions inventory reflects adopted AQMD air regulations that are implemented as of June 30, 2006 and most CARB rules adopted by June 2005. Future baseline emissions inventories incorporate adopted rules with post-June 30, 2006 compliance dates and projected growth factors. A list of AQMD rules and regulations and their emission reductions is presented in Table 1-1. Table 1-2 lists California Air Resources Board (CARB) adopted rules and regulations and their associated emission reductions. Both the federal and state Clean Air Acts specify 1990 as the base year to measure emission reduction progress. In these inventories, only anthropogenic sources (i.e., those associated with human activity) are considered.

This appendix includes six attachments: Attachment A – Average Annual Emissions Summary by Major Source Category; Attachment B – Summer Emissions Summary by Major Source Category; Attachment C – Winter Emissions Summary by Major Source Category; Attachment D – Top 300 SCAB VOC and NOx Producers in 2002; Attachment E – On-Road Emissions by Category; and Attachment F – Emissions from Diesel Fuel Combustion by Major Source Category. The years 2002, 2005, 2008, 2010, 2011, 2014, 2017, 2020, 2023, and 2030 are provided in Attachments A, B and C. Attachment E has 2002, 2005, 2010, 2014, 2020, 2023, and 2030 data. Attachment F includes 2002, 2010, 2014, 2020, and 2023.

Information necessary to produce an emission inventory for the Basin is obtained from the AQMD and other governmental agencies, including CARB, California Department of Transportation (Caltrans), and Southern California Association of Governments (SCAG).

Each of these agencies is responsible for collecting data (e.g., industry growth factors, socio-economic projections, travel activity levels, emission factors, emission speciation profile, emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. Entire statewide emissions inventories are compiled and maintained by CARB in its emission related information databases named California Emission Inventory Development and Reporting System (CEIDARS), and California Emission Forecasting and Planning Inventory System (CEFIS). CARB is the agency responsible for developing the emissions inventory for all the mobile sources. CARB provided on-road and off-road inventories from their EMFAC2007 V2.3 and Off-Road Models in the Final 2007 SCAG and is the primary agency for projecting the growth. Caltrans provides SCAG with information regarding highway projects. SCAG incorporates these data into their Travel

Demand Model for estimating/projecting vehicle miles traveled (VMT) and speed. CARB's on-road inventory also relies on SCAG's VMT estimates.

Uncertainty in the Inventory

An effective AQMP relies on an adequate emission inventory. Over the years, significant improvements have been made to quantify emission sources upon which control measures are developed. Increased use of continuous monitoring and source tests has contributed to the improvement in point source inventories. Technical assistance to facilities and auditing of reported emissions by the District also have improved the accuracy of the emissions inventory. Area source inventories that rely on average emission factors and regional activities have inherent uncertainty. Industry-specific surveys or source-specific studies during rule development have provided much-needed refinement to the emissions estimates.

Mobile source inventories remain the greatest challenge due to the high number and types of equipment and engines involved, in-use performance vehicles, and complex emission characteristics. Every AQMP revision provides an opportunity to further improve the current knowledge of mobile source inventories; there is no exception to the Final 2007 AQMP. Other uncertainties include that ethanol permeation is not accounted for in the stationary source inventory for gasoline-powered equipment or gas stations, how best to reflect heavy heavy-duty truck in-use emissions with limited test data, and appropriate spatial and temporal distribution of recreational boats. These issues need to be examined further and the best available science should be followed to support the AQMP development.

Relative to future growth, there are many challenges with making accurate projections. For example, where vehicle trips will occur, the distribution between various modes of transportation (such as vehicle trucks and trains), as well as estimates for population growth and changes to the number and type of jobs – although they are forecast with the best information available; nevertheless, they contribute to the overall uncertainty in emission projections.

TABLE 1-1
Rules and Regulations Adopted by District Since Adoption of 2003 AQMP
(October 2002 through June 2006[a])

Control Measure (Rule)	Title	SIP Commitment (tons/day)	Emission Reductions Achieved Through Rule Implementation (tons/day)	Adoption Date
FUG-05(I) (Rule 1173)	Fugitive Emission Sources at Petroleum Facilities and Chemical Plants (VOC)	0.6	0.6	2002
WST-02 (Rule 1133.2)	Co-Composting Operations (VOC)	1.2	1.2	2003
CTS-07 [f] (Rule 1171)	Architectural Coatings; Solvent Cleaning Operations (VOC)	8.5	8.5	2003
CTS-10 (I) (Rule 1113)	Architectural Coatings (VOC)	1.0	4.5 0.9	2003/ 2006
FUG-05 (II) (Rule 1148.1)	Oil and Gas Production Wells (VOC)	1.4	1.3	2004
WST-01 (Rule 1127)	Livestock Waste (VOC)	4.8	6.0	2004
CTS-10 (II) (Rule 1145)	Plastic, Rubber, and Glass Coatings (VOC)	1.0	0.9	2004
PRC-7 (I)	Industrial Process Operations (VOC)	1.0	[b]	[b]
PRC-07 (II) (Rule 1151)	Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations (VOC)	1.0	4.2	2005
CTS-10 (III) (Rule 1107)	Metal Parts and Products Coatings (VOC)	1	1.1	2005
	Total VOC	**21.5**	**29.2**[c]	

TABLE 1-1
(Continued)
Rules and Regulations Adopted by District Since Adoption of 2003 AQMP
(October 2002 through June 2006[a])

Control Measure (Rule)	Title	SIP Commitment (tons/day)	Emission Reductions Achieved Through Rule Implementation (tons/day)	Adoption Date
CMB-09[f] (Rule 1105.1)	Fluid Catalytic Cracking Units (PM10)	0.5	0.5	2003
BCM-07[f] (Rule 403 /Rule 1186)	Fugitive Dust/PM10 Emissions From Paved and Unpaved Roads, and Livestock Operations (PM10)	--	1.0	2004
PRC-03)	Restaurant Operations (PM10)	1.0	[d]	[d]
BCM-08 (Rule 1156/ Rule 1157)	Cement Manufacturing and Aggregate and Related Operations (PM10)	0.7	0.9	2005
	Total PM10	**2.2**	**2.4**	
CMB-10[f, g] (RECLAIM)	Regional Clean Air Incentives Market (NOx)	3.0	7.1	2005
MSC-05	Truck Stop Electrification	(2.1[e])	--	2005
	Total NOx	**3**	**7.1**	
CMB-07 (Rule 1118)	Refinery Flares (SOx)	2.1	3.8	2005
	Total SOx	**2.1**	**3.8**	

[a] AQMD summer planning emission in 2010 (rounded to the nearest whole number), based on 2003 SIP inventory.
[b] SIP commitment for this measure was achieved from Rule 1113 reductions of 4.5 tpd which was in excess of one tpd commitment under CTS-10(I).
[c] The excess reductions will be counted toward 182(e)(5) reduction commitment.
[d] Due to the infeasibility of available control technologies, this measure is carried over to the Final 2007 AQMP and the reduction commitment is fulfilled through BCM-07.
[e] AQMD's commitment of 2.1 tpd of NOx was achieved through CARB's truck idling regulation with a total reduction of 23.7 tpd. Not counted toward AQMD's commitment.
[f] Rules which have been approved by U.S. EPA.
[g] Total reductions are 7.7 tpd to be achieved by 2011.

TABLE 1-2
State Measures Adopted Since 2003 AQMP

Strategy	Name	Adopted Date	VOC Commitment (tpd) [1]	VOC Achieved By 2010 (tpd)	NOx Commitment (tpd) [1]	NOx Achieved By 2010 (tpd)
NEAR-TERM CONTROL MEASURES						
LT/MED-DUTY-1 (CARB)	Replace or Upgrade Emission Control Systems on Existing Passenger Vehicles	In Progress	0-20	TBD	0-20	TBD
LT/MED-DUTY-2 (BAR)	Improve Smog Check to Reduce Emissions from Existing Passenger and Cargo Vehicles [2]	2003	5.6-5.8	5.6	8.0-8.4	10
ON-RD HVY-DUTY-1 (CARB)	Augment Truck and Bus Highway Inspections with Community-Based Inspections	In Progress	0-0.1	TBD	0	0
ON-RD HVY-DUTY-2 (CARB)	Capture and Control Vapors from Gasoline Cargo Tankers	In Progress	4-5	TBD	0	0
ON-RD HVY-DUTY-3 (CARB)	Pursue Approaches to Clean Up the Existing and New Truck/Bus Fleet [3]	2003-2006 (In Progress)	1.4-4.5	2.8-2.9	16-21	13-16
OFF-RD CI-1 (CARB)	Pursue Approaches to Clean Up the Existing Heavy-Duty Off-Road Equipment Fleet (Compression Ignition Engines) – Retrofit Controls	In Progress	2.3-7.8	TBD	8-10	TBD
OFF-RD CI-2 (CARB)	Implement Registration and Inspection Program for Existing Heavy-Duty Off-Road Equipment to Detect Excess Emissions (Compression Ignition Engines)	In Progress	NQ	TBD	NQ	TBD
OFF-RD LSI-1 (CARB)	Set Lower Emission Standards for New Off-Road Gas Engines (Spark Ignited Engines 25 hp and Greater) [4]	Combined with OFF-RD LSI-2	0	0	0.8	---
OFF-RD LSI-2 (CARB)	Clean Up Off-Road Gas Equipment Through Retrofit Controls and New Emission Standards (Spark-Ignition Engines 25 hp and Greater) [4]	2006	0.8-2.0	2.6	2-4	2.6

TABLE 1-2
(Continued)
State Measures Adopted Since 2003 AQMP

Strategy	Name	Adopted Date	VOC Commitment (tpd) [1]	VOC Achieved By 2010 (tpd)	NOx Commitment (tpd) [1]	NOx Achieved By 2010 (tpd)
SMALL OFF-RD-1 (CARB)	Set Lower Emission Standards for New Handheld Small Engines and Equipment (Spark Ignited Engines Under 25 hp such as Weed Trimmers, Leaf Blowers, and Chainsaws) [5]	Combined with SMALL-OFF-RD-2	1.9	---	0.2	---
SMALL OFF-RD-2 (CARB)	Set Lower Emission Standards for New Non-Handheld Small Engines and Equipment (Spark Ignited Engines Under 25 hp such as Lawnmowers) [6]	2003	6.3-7.4	7.7	0.6-1.9	1.3
MARINE-1 (CARB)	Pursue Approaches to Clean Up the Existing CARB or Craft Fleet – Cleaner Engines and Fuels [6]	In Progress	0.1	TBD	2.7	0.4
MARINE-2 (CARB)	Pursue Approaches to Reduce Land-Based Port Emissions – Alternative Fuels, Cleaner Engines, Retrofit Controls, Electrification, Education Programs, Operational Controls [7]	In Progress	0.1	TBD	0.1	2.8
FUEL-1 (CARB)	Set Additives Standards for Diesel Fuel to Control Engine Deposits		NQ	TBD	NQ	TBD
FUEL-2 (CARB)	Set Low-Sulfur Standards for Diesel Fuel for Trucks/Buses, Off-Road Equipment, and Stationary Engines	2003	Enabling	Enabling	Enabling	Enabling
CONS-1 (CARB)	Set New Consumer Products Limits for 2006	2004	2.3	2	0	0
CONS-2 (CARB)	Set New Consumer Products Limits for 2008-2010	In Progress	8.5-15	TBD	0	0
FVR-1 (CARB)	Increase Recovery of Fuel Vapors from Aboveground Storage Tanks	In Progress	0-0.1	TBD	0	0
FVR-2 (CARB)	Recover Fuel Vapors from Gasoline Dispensing at Marinas	In Progress	0-0.1	TBD	0	0
FVR-3 (CARB)	Reduce Fuel Permeation Through Gasoline Dispenser Hoses	In Progress	0-0.7	TBD	0	TBD
PEST-1 (DPR)	Implement Existing Pesticide Strategy	---	Baseline	Baseline	NA	NA
Total for Near-Term Control Measures			**33.3-72.9**	**20.7-20.8**	**38.4-69.1**	**30.1-33.1**

TABLE 1-2
(Continued)
State Measures Adopted Since 2003 AQMP

Strategy	Name	Adopted Date	VOC Commitment (tpd) [1]	VOC Achieved By 2010 (tpd)	NOx Commitment (tpd) [1]	NOx Achieved By 2010 (tpd)
ADDITIONAL NEAR-TERM MEASURES						
(CARB)	Achieve Further Emission Reductions from On-Road and Off-Road Mobile Sources and Consumer Products	2005-2008	97 [8]		---	

1. Based on CARB's summer planning emission inventory for the 2003 South Coast SIP.
2. Includes benefits from test only direction and truck loaded mode testing only.
3. Includes benefits from solid waste collection vehicles, chip reflash, engine manufacturer diagnostics (EMD), idling limits, heavy-duty on-board diagnostics (OBD), new truck idling, in-use testing, and on-road public fleets.
4. OFF-RD LSI-1/LSI-2 adopted in one board action and achieved reductions are combined and shown under OFF-RD LSI-2. The amount of emission reductions shown under VOC achieved is reflective of a combined 2.6 tpd VOC + NOx.
5. SMALL OFF-RD-1/OFF-RD-2 adopted in one board action and achieved reductions are combined and shown under OFF-RD-2.
6. Reductions shown reflect implementation of CARB's low sulfur diesel fuel rule for harbor craft adopted in 2004.
7. Reductions shown reflect implementation of CARB's statewide cargo handling equipment rule adopted in 2005.
8. Shown as combined VOC and NOx.

AIR CONTAMINANTS

Currently, air quality standards exist for the following criteria air contaminants: ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), carbon monoxide (CO), fine suspended particulate less than 10 microns (PM10), fine particulate less than 2.5 microns (PM2.5), lead, and sulfate. This appendix presents emission levels in the Basin for the criteria air contaminants and their precursors. Specifically, data are included for emissions of total organic gases (TOG), volatile organic compounds (VOC), oxides of nitrogen (NOx), oxides of sulfur (SOx), CO, particulate matter (PM), PM10 and fine suspended particulate less than 2.5 microns (PM2.5).

Ozone is formed from photochemical reactions involving other air contaminants so it is not inventoried. Although air quality standards for NOx and SOx are based on NO_2 and SO_2, respectively, emissions of NOx and SOx are in the emissions inventory because multiple species of NOx and SOx contribute to the formation of particulate, and NOx and VOC react in the presence of sunlight to produce ozone.

TOG incorporates all gaseous compounds containing the element carbon with the exception of the inorganic compounds, CO, carbon dioxide (CO_2), carbonic acid, carbonates, and metallic carbides. VOC, a subset of TOG, includes all organic gases in

TOG except acetone, ethane, methane, methylene chloride, methylchloroform, perchloroethylene, methyl acetate, parachlorobenzotrifluoride, and a number of Freon-type gases. It should be noted that this definition of VOC is different from the one used by the CARB, which includes some compounds not considered as VOCs according to U.S. EPA. Table 1-3 lists the compounds that are exempt in U.S. EPA's VOC list, but are included in CARB's VOC list. Certain CFCs are still included in CARB's VOC list. According to CARB, the total emission inventory difference between U.S. EPA VOC and CARB's VOC is very small.

PM represents all airborne particulate matter. Important subsets of PM are PM10 and PM2.5. In the Final 2007 AQMP, the amount of VOC in TOG and the amount of PM10 and PM2.5 in PM are calculated for each process primarily using species and size fraction profiles provided by CARB. Besides average annual day emissions that are reported for all criteria pollutants, summer planning inventories (VOC and NOx) are reported for ozone purposes and winter planning inventories (CO and NO_2) are reported for CO and NO_2.

TABLE 1-3
List of Compounds Exempt in U.S. EPA's Definition of VOC;
Included in CARB's Definition of VOC

Compound	**CAS ***
3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca);	[422-56-0]
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);	[507-55-1]
1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee);	[138495-42-8]
difluoromethane (HFC-32);	[75-10-5]
ethylfluoride (HFC-161);	[353-36-6]
1,1,1,3,3,3-hexafluoropropane (HFC-236fa);	[690-39-1]
1,1,2,2,3-pentafluoropropane (HFC-245ca);	[679-86-7]
1,1,2,3,3-pentafluoropropane (HFC-245ea);	[24270-66-4]
1,1,1,2,3-pentafluoropropane (HFC-245eb);	[431-31-2]
1,1,1,3,3-pentafluoropropane (HFC-245fa);	[460-73-1]
1,1,1,2,3,3-hexafluoropropane (HFC-236ea);	[431-63-0]
1,1,1,3,3-pentafluorobutane (HFC-365mfc);	[406-58-6]
chlorofluoromethane (HCFC-31);	[593-70-4]
1-chloro-1-fluoroethane (HCFC-151a);	[1615-75-4]
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);	[354-23-4]
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$);	[163702-07-6]
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$);	[163702-08-7]
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$);	[163702-05-4]
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$);	[163702-06-5]
1, 1, 1, 2, 2, 3, 3-heptafluoro-3-methoxy-propane (n-$C_3F_7OCH_3$) or HFE-7000	[375-03-1]
3-ethoxy-1, 1, 1, 2, 3, 4, 4, 5, 5, 6, 6, 6 – dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500)	[297730-93-9]
1, 1, 1, 2, 3, 3, 3-heptafluoropropane (HFC 227ea)	[431-89-0]
Methyl formate ($HCOOCH_3$)	[107-31-3]
Tert butyl acetate (TBAC)	[540-88-5]

* Chemical Abstract Service (CAS) identification numbers have been included in brackets [ ] for convenience.

INVENTORY SOURCE CATEGORIES

Stationary Sources

Stationary sources of emissions are grouped into two categories - point sources and area sources. Point source emissions are from facilities having one or more pieces of equipment registered and permitted with AQMD. Therefore, AQMD is able to collect facility emission-related information from the larger of these facilities. Area source emissions are from numerous small facilities or pieces of equipment, such as gasoline-dispensing facilities, residential water heaters, consumer products and architectural coatings, for which locations may not be specifically identified. For modeling purposes, area source emissions are spatially allocated to grid cells using demographic data (e.g., population, housing, and land use).

Point Sources

The 2002 point source emission inventory is based on the emissions data reported by point source facilities in the 2002/2003 Annual Emissions Reporting (AER) Program. This program applies to facilities emitting 4 tons or more of VOC, NOx, SOx, or PM or emitting more than 100 tons of CO per year, as specified in Rule 301(e). Facilities subject to the AER Program calculate and report their emissions primarily based on their throughput data (e.g., fuel usage, material usage), appropriate emission factors or source tests, and control efficiency (if applicable). Under the 2002/2003 AER Program, approximately, 3,200 facilities reported their annual emissions to AQMD. Emissions from smaller industrial facilities not subject to the AER program, which represent a small fraction of the overall inventory, are included as part of the area source inventory.

In order to prepare the point source inventory, emissions data for each facility were categorized based on EPA's Source Classification Codes (SCCs) for each emission source category. Since the AER program collects emissions data on an aggregate basis (i.e., equipment and processes with same emission factor are grouped and reported together), facility's equipment permit data were used in conjunction with the reported data to assign the appropriate SCC codes and develop the inventory at the SCC level. For modeling purposes, facility location is specified in Universal Transverse Mercator (UTM) coordinates. Business operation activity profile is also recorded. For growth purposes, facility business type is designated by Standard Industrial Classification (SIC) Code. It should be noted that the socioeconomic impact of the AQMP is based on the North American Industrial Classification System (NAICS). A NAICS code is assigned to each facility according to its primary activity. The impact of the AQMP on the local economy is presented by industry (NAICS).

Area Sources

AQMD and CARB shared the responsibility for developing the 2002 area source emissions inventory for approximately 350 area source categories. Specifically, AQMD developed the area source inventory for about 93 categories whereas CARB developed the remaining area source categories (of which 239 categories were associated with consumer products, architectural coatings, and degreasing). For each area source category, a specific methodology is used for estimating emissions. In the 2002 area source inventory, a number of existing methodologies were used with updated activity data such as fuel data or sales data (e.g., fuel combustion categories, landfills, oil/gas production). Three new categories (i.e., unspecified paved and unpaved road dust, open storage piles, and industrial lubricant) were added to the inventory, other existing methodologies were refined based on more recent studies (e.g., consumer products, architectural coatings), and some of the area sources were expanded (i.e., consumer products).

Comparison of 1997 and 2003 AQMP Inventories

Figures 1-1 and 1-2 provide a comparison of the 1997 baseline in the 2003 AQMP and the 2002 point and area source inventories for all pollutants for the Final 2007 AQMP.

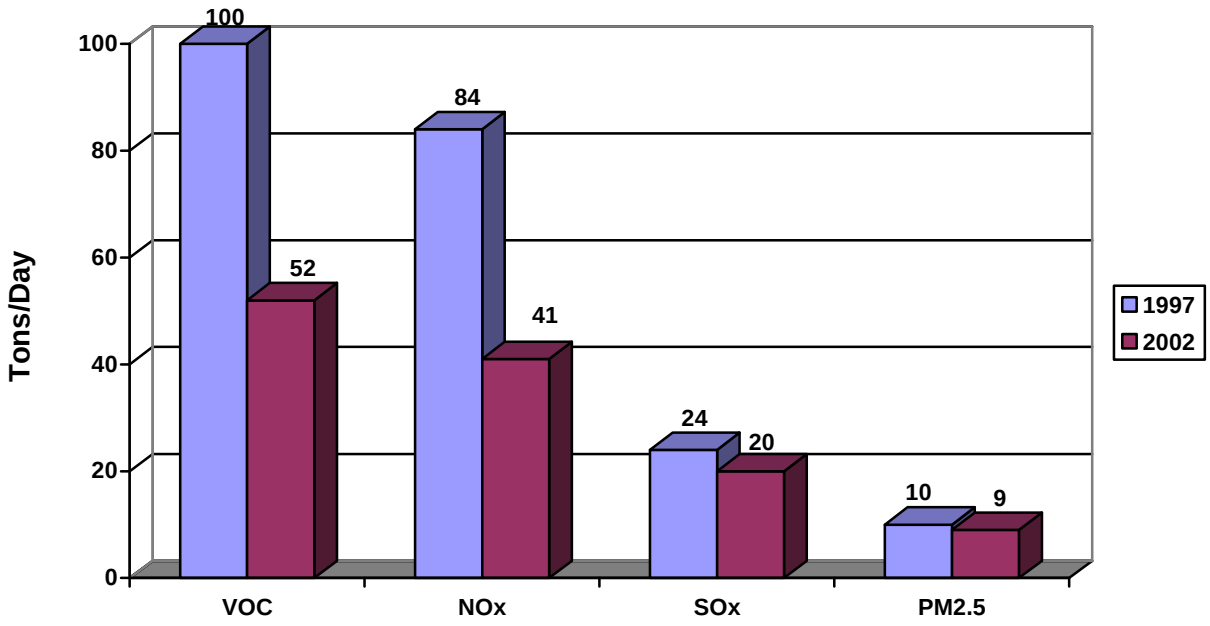

FIGURE 1-1
Total Point Source Emissions
(VOC & NOx – Summer Planning; SOx & PM2.5 – Annual Average Inventory)

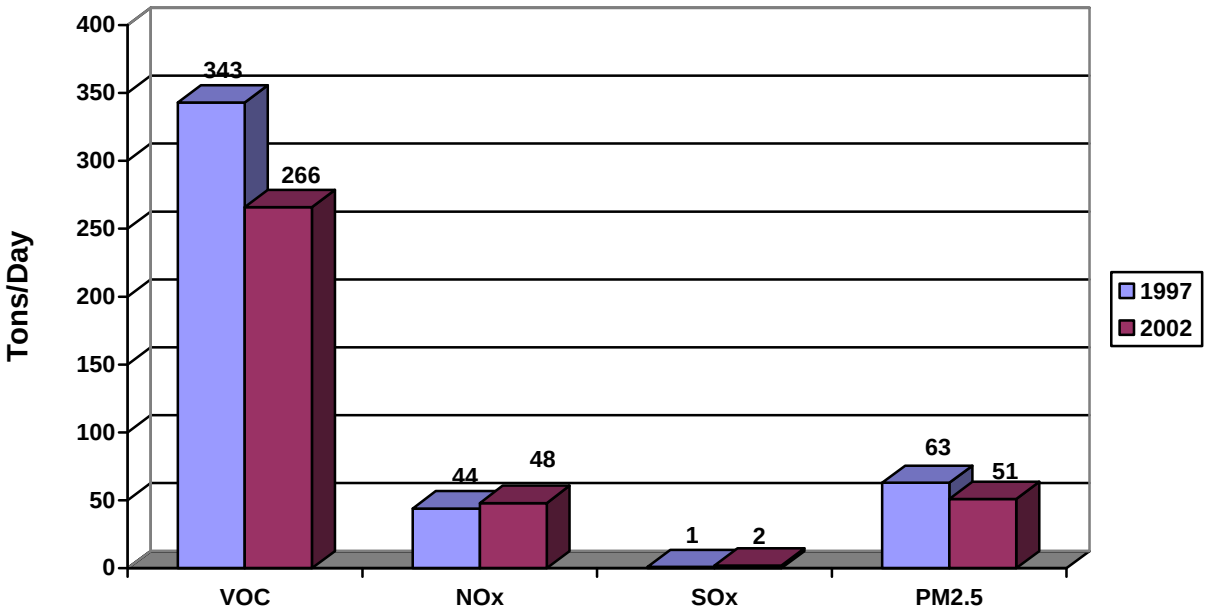

FIGURE 1-2
Total Area Source Emissions
(VOC & NOx – Summer Planning; SOx & PM2.5 – Annual Average Inventory)

Changes in Point Sources

The point source inventory (except SOx) continued its downward trend primarily due to the implementation of existing stationary source regulations. As indicated in Figure 1-1, the 2002 VOC and NOx emissions decreased from 100 and 84 tons per day to 52 and 41 tons per day. In addition to the effect of existing regulations, another major reason for the decreased VOC emissions was the use of EPA's correlation equations for calculating fugitive emissions (i.e., component leaks) by the petroleum industry, which significantly reduced the calculated fugitive emissions.

EPA's classification of acetone as a non-VOC in FY 95-96, with acetone mostly used by the fiberglass facilities at the time, more frequent application of water based coatings, more project-specific VOC emission factors rather than default VOC emission factors, and AQMD's solvent cleaning rule (i.e., Rule 1171) could have been some of the factors in reduction in VOC emissions. For NOx emissions, the majority of the emission decrease in 2002 (compared to 1997) is attributed to reductions achieved through the RECLAIM program. The increase in SOx emissions was primarily due to changes in the methodology for estimating emissions from refinery flares. The decrease in PM2.5 was primarily due to implementation of several BACM rules (e.g., Rule 403 and Rule 1186).

Changes in Area Sources

The area source inventory also decreased between 1997 and 2002 for all criteria pollutants, except NOx & SOx, due to the effect of rules adopted by AQMD and CARB as well as due to the improved or updated area source methodologies used for estimating emissions, which are briefly discussed below.

Rule Implementation

The 2001 Architectural and Industrial Maintenance Coatings Survey conducted by CARB indicated an increase in the use of water-based coatings compared to oil-based coatings between 1996 and 2000 (13.6 percent to 7.8 percent), primarily due to AQMD Rule 1113 – Architectural Coatings. As a result, even though the total sales volume in gallons increased 12.5 percent, the total annual average VOC emissions only increased by 9.6 percent in 2000 compared to 1996.

In addition, a number of other rules which had implementation dates between 1997 and 2002 contributed to some of the emission reductions between these years. Emission source categories most affected by rules included: architectural coatings (Rule 1113), adhesive applications (Rule 1168), commercial bakery ovens (Rule 1153), solvent cleaning operations (Rule 1171), marine tank vessel operations (Rule 1142), sumps and wastewater separators (Rule 1176), stationary internal combustion engines (Rule 1110.2), sulfur content of gaseous fuels (Rule 431.1), and consumer products regulated by CARB.

Improved/Updated Methodologies

Gasoline Dispensing - Emissions from gasoline dispensing were adjusted to account for compliance levels identified in various audits conducted by AQMD since 1997. The audits revealed that the overall vapor recovery effectiveness at gasoline dispensing facilities was significantly reduced as a result of many defects found in the systems. The adjustment caused an increase of the emissions for this category from 12 tons per day in 1997 to 18 tons per day in 2002.

Consumer Products - This category was updated to incorporate new activity data. The 1997 consumer products survey data that is used for much of the activity in this category was revised to reflect data submitted under California Clean Air Act Fee Regulation, resulting in reduced sales and emissions estimates for 13 consumer products categories. The more recent 2001 consumer products survey, which addressed a narrower scope of products than the 1997 survey, is also reflected in the inventory changes. Some were expanded, and others were added to better delineate product varieties using the 2001 survey data. The CARB's analysis of the 2001 survey resulted in an overall emissions decrease in the categories examined.

Architectural Coatings – This category was updated with new activity data. The update reflects revised 2001 sales survey data (calendar year 2000) submitted under CARB's California Clean Air Act Fee Regulation. Because the revised data were not specific to the EIC categories, the total changes in sales volume and emissions were applied uniformly across all EIC categories. These adjustments result in a decrease in emissions. In addition, the district has updated the estimates for thinning & cleanup solvents using CARB's revised methodology in the 2005 Architectural Coatings Survey Draft Report dated September 2006.

Composting - As part of the overall ammonia emissions inventory update, emissions from composting operations were quantified for the first time in the 2003 AQMP. VOC emissions from composting were estimated at 6.8 tons/day in 1997. The Final 2007 AQMP includes a control measure (MSC-06) for a cooperative effort between the AQMD and the California Integrated Waste Management Board (CIWMB) to develop Best Management Practices (BMPs) for the reduction of VOC and ammonia emissions by 50 percent.

Metrolink – This Metrolink commuter train emissions inventory was updated to reflect 2005 Metrolink operating data provided by the Southern California Regional Rail Authority.

Pesticides – This category was updated with emissions data provided by the California Department of Pesticide Regulation (DPR). Updated emissions are calculated using information from the annual Pesticide Use Report (PUR) database and pesticide product emission potential (EP) data maintained by DPR. Beginning with the 2004 PUR (for the 2002 reporting year), the EPs that are assigned to the products are either measured by thermogravimetric analysis (TGA), calculated by DPR chemists, or assigned a default value equal to the median TGA-based EP in each formulation category. Prior to the 2004 PUR,

DPR had assigned EP values to products with no measured values as the maximum TGA in that category. The use of median rather than maximum TGA default values has resulted in a lowering of VOC emissions for all years (1990 to the present).

Waste Burning – The inventory for this category includes estimates of emissions from the burning of agricultural residues including field crops and pruning and weed abatement. The inventory was updated with new activity data and emission factors. Although this is a district-reported category, CARB developed updated default 2002 emission estimates to reflect more recent burning activity as reported by the district. Emission factors and fuel loading values have also been expanded to include more specific crop types.

Wineries – This category was updated with new activity data, using U.S. Alcohol and Tobacco Tax and Trade Bureau (TTB) estimates of the amounts and locations of wine fermented in the state, by month, for 2002.

Biogenic Volatile Organic Compounds – Emissions of biogenic volatile organic compounds (BVOCs) were updated to reflect the temperature, relative humidity, and solar radiation inputs used in the ozone and PM2.5 air quality modeling. BVOC emissions were modeled for specified ozone episodes, and for "average days," by month, for particulate matter. The AQMD staff provided gridded hourly temperature and solar radiation fields, while CARB used its Geographic Information System-based model for estimating the biogenics emissions inventory (BEIGIS).

Fugitive Dust - Subsequent to the approval of the 2003 AQMP, CARB released updated emission factors for several fugitive dust sources. The Final 2007 AQMP also incorporates those updated emission factors and/or 2002 activity data for source categories such as entrained paved and unpaved road dust, construction, windblown dust, and farming operations. One of the more significant changes is that the factors used to quantify the PM2.5 fraction of PM10 have been updated based on recent studies by the Dust Emissions Joint Forum of the Western Regional Air Partnership (WRAP). These fractions represent the latest technical information for deriving the PM course fraction (PM10-2.5) of crustal fugitive dust from various sources, including paved and unpaved roads, agriculture, aggregate handling and store piles, construction/demolition, and wind erosion. The fractions are currently proposed by EPA for updating the AP-42 guidance for fugitive dust sources (EPA, 2005). The inventory for the Final 2007 AQMP also includes updates to reflect emissions inventories developed relative to AQMD adopted Rules 1156 (cement manufacturing) and 1157 (aggregate and related operations). Specifically, fugitive dust emissions from internal paved and unpaved roads, and updated emissions from aggregate processing and storage have been added. These two rules were amended based on 2003 AQMP measure BCM-08 – Further Emission Reductions from Aggregate and Cement Manufacturing Operations and, due to facility-specific data obtained during regulatory development, the emissions inventory developed at the time of rule adoption reflects a significant increase of baseline PM above that indicated in the control measure. Overall

emission estimates were lower for the Final 2007 AQMP. Table 1-4 indicates the changes in PM10 (tons/day) to the fugitive dust inventories.

TABLE 1-4
Comparison of 1997 and 2002 PM10 Emissions (Tons/Day)

Source Category	**2003 AQMP 1997 Inventory**	**Final 2007 AQMP 2002 Inventory**
Paved Road Dust	134.3	125.4
Unpaved Road Dust	13.0	13.6
Construction	29.6	39.9
Windblown	19.2	2.8
Farming Operations	2.7	0.8
Total	**198.8**	**182.5**

Special Studies

Aircraft – In 2005, the AQMD contracted with Eastern Research Group (ERG) to develop the 2002 baseline year and future year aircraft emissions inventories for 2010, 2020, and 2030. A total of 48 airports were identified as having reportable operations within the District boundaries. All aircraft activity at these airports including commercial, general aviation, and military operations were included in this assessment. FAA statistics (e.g., Bureau of Transportation Statistics, and Terminal Area Forecast) were the main source of activity data, and in the case of commercial aircraft, included operations by aircraft type (i.e., aircraft make and model). FAA's Emissions and Dispersion Modeling System (EDMS) were used to calculate the emissions from commercial aircraft. The EDMS estimates emissions using aircraft make and model, engine type, number of engines, time-in-mode, emission factors, airport mixing height, and the number of landings and take-off cycles. For General aviation, military, and some air taxi operations, aircraft specific data was not readily available and the EDMS could not be used. In those cases, weighted generic emission factors along with landing and takeoff activity data were used to calculate the emissions. For most airports, future year inventories (2010, 2020, and 2030) were estimated using the latest SCAG projections in million air passengers (MAP) for each airport. Interpolation between the milestone years was used to estimate the emissions inventories for the intermediate years.

Ocean-Going Marine Vessels - CARB updated the marine vessel emissions inventory in 2005 based upon 2004 activity data of port calls by ocean-going vessels. A survey of ocean-going vessels was conducted to determine the average power, load factors, and hotelling times of different vessel types. Emissions were calculated based on the activity (number of

port calls); time in specific modes e.g., ships running their engines while docked in port (hotelling), maneuvering and transit; power requirements for each mode; type of engine (main or auxiliary); and the available emission factors for different engine types and different fuels. Growth rates were extrapolated from 1997-2003 installed power, by vessel type and port. Growth rates were set at the average of the geometric (non-linear) and the arithmetic (linear) growth rates.

Commercial Harborcraft - The commercial harborcraft emission inventory was updated in 2004 using vessel population data from the U.S. Coast Guard and the California Department of Fish and Game. CARB conducted a survey to gather information about engine power, number of engines, time spent at various distances off the coast and the load factors of various types of harborcraft. CARB developed emission rates by engine type by adjusting emission factors from CARB's OFFROAD model for the type of engine cycles seen in harborcraft. Emission rates were multiplied by the vessel population and number of engines per vessel to get the total emissions. Growth rates for harborcraft vary by air district and have been defined by those districts where the activity occurs. Tug boats are expected to stay at the current level for the foreseeable future. The resulting inventory indicates that baseline emissions from harborcraft are declining in the South Coast Air Basin and throughout the southern California modeling domain.

Ammonia Sources – The 2003 AQMP included a comprehensive revision to the ammonia inventory which was performed by AVES, an affiliate of ATC Associates Inc., as part of the Technical Enhancement Program 2000 (TEP2000) program. In conjunction with the Final 2007 AQMP and ongoing efforts by CARB to develop a state-wide inventory, AQMD and CARB staff have worked extensively to develop a new and comprehensive ammonia inventory for all are wide sources (in addition to on-road and natural sources) for the Basin, as well as the Salton Sea and Mojave Desert portions (e.g., Coachella Valley) of the local jurisdiction. The ammonia emission factor for on-road mobile sources was updated in 2006 by CARB based on a 2000 study conducted at the Caldecott Tunnel in the Bay Area. The fleet average ammonia emission factor from the tunnel study was then adjusted to reflect fleet turnover based upon recent chassis dynamometer studies. The total on-road ammonia emissions inventory was estimated using the updated emission factor and the latest vehicle miles traveled (VMT) estimates from mobile source emission inventory model EMFAC2007 V2.3. On-road mobile sources are currently one of the major ammonia emission sources in urbanized portions of the South Coast but are expected to be less significant in future years due to fleet turnover. In addition, activity levels (e.g. population) and emission factors for ammonia sources have been updated to derive a 2002 emissions inventory. This updated data will be used for modeling purposes for the Final 2007 AQMP and are the basis for control measures to seek further ammonia emission reductions. The revised inventory reflects a decrease of nearly 59 tons per day from the prior inventory from the 2003 AQMP, but these emissions continue to be spread out spatially.

Table 1-5 summarizes the changes to the ammonia inventory.

TABLE 1-5
Comparison of 1997 and 2002 Ammonia Emissions (Tons/Day)

Source Category	**2003 AQMP**	**Proposed Modifications to the Draft 2007 AQMP**
	1997 Inventory	**2002 Inventory**
Soil / Fertilizer	41.9	1.4
Domestic	25.9	25.0
Point / Other	13.2	13.2
Cattle	32.4	17.0
Poultry	22.6	1.3
Other Livestock	5.4	7.5
Composting / Related Operations	8.7	0.2
Mobile Source	7.0	33.0
Total	**157.1**	**98.5**

Mobile Sources

On-Road Mobile Sources

The AQMP's emission estimates for on-road motor vehicles come from the CARB EMFAC2007 V2.3 mobile source emissions model. The California Department of Transportation (Caltrans), the Department of Motor Vehicles (DMV), and the Southern California Association of Governments (SCAG) supply CARB with data necessary to develop the on-road mobile source emissions inventory. DMV maintains a count of registered vehicles and Caltrans provides highway network, traffic counts and road capacity data. SCAG maintains the regional transportation model containing the temporal and spatial distribution of motor vehicle activity (travel time, travel speed, and volume of traffic for morning-peak, afternoon-peak, mid-day and night hours). In addition, SCAG periodically conducts origin and destination surveys to validate the regional transportation model. SCAG also updates a demographic database for population, housing, employment and patterns of land use within AQMD jurisdiction.

CARB uses these data along with emissions rate data to estimate on-road motor vehicle emissions with its EMFAC2007 V2.3 mobile source emissions model. Emission rate data are collected from various sources, such as individual vehicles in a laboratory setting, tunnel studies and certification data, etc. Vehicle activity data are obtained from regional planning agencies, such as SCAG. The EMFAC2007 V2.3 model calculates exhaust and evaporative emission rates by vehicle type for different vehicle speeds and

environmental conditions (temperature and relative humidity). Temperature and humidity profiles are used to produce month specific, annual average, and episodic inventories.

Parameters accounted for by the EMFAC2007 V2.3 include the following: type of emissions control technology, fuel type, distribution of operating speeds, speed and temperature correction factors, and the reduction in emissions resulting from the state's motor vehicle regulatory programs.

The EMFAC2007 V2.3 includes the following mobile source breakdowns:

(1) thirteen vehicle classes (light-duty passenger, light-duty trucks under 3,750 pounds, light- duty trucks between 3,750 pounds and 5,750 pounds, medium-duty trucks, light-heavy-duty trucks between 8,501 pounds and 10,000 pounds, light-heavy-duty trucks between 10,000 pounds and 14,000 pounds, medium-heavy-duty trucks, heavy-heavy-duty-trucks, urban buses, motorcycles, school buses, other buses, and motor homes);

(2) two vehicle fuel types (gas and diesel);

(3) three mobile source control technology groups (catalyst, non-catalyst, and diesel);

(4) sixty calendar years (1980-2040);

(5) two vehicle exhaust processes (starts and running);

(6) four evaporative processes (diurnal, hot soak, running loss, and resting loss);

(7) seven pollutants (HC, CO, CO2, NOx, PM, SOx, lead); and

(8) fuel consumption.

To develop the detailed emission inputs needed by air quality dispersion models such as the Urban Airshed Model (UAM), emissions from on-road motor vehicles are estimated at the grid level using Caltrans' Direct Travel Impact Model (DTIM). DTIM calculates emissions based on detailed information regarding each link (roadway segment) in an area for each hour of the day. The required inputs of DTIM include traffic volume, traffic speed, vehicle fleet characteristics, and ambient temperature.

The characteristics of DTIM include:

(1) emissions calculations based on specific information, such as link speed, link volume, and temperature;

(2) spatial and temporal distribution of emissions to provide hourly gridded emissions; and,

(3) emission impacts of various types of transportation and regional planning alternatives (e.g., changes in roadway network configuration, or public transportation services).

DTIM reformats and sorts emission rates for all vehicle classes produced by the EMFAC2007 V2.3. It then produces average emission rates for specific vehicle classes identified by the user. Finally, it produces regional mobile source emissions and hourly gridded mobile emissions. DTIM does this by combining emission rates with vehicle activity estimates derived from a transportation demand model and supplemental information on temperatures and temporal patterns.

The EMFAC2007 V2.3 was the basis for on-road planning inventories, emission budgets, and rate-of-progress calculations. Major improvements in the EMFAC2007 V2.3 include: updated DMV motor vehicle fleet populations and age for years 2000 through 2005; updated basic and idle emission rates for heavy-heavy duty diesel truck (HHDDT); updated speed control factors for HHDDT; and an adjustment for ethanol permeation from changes in the fuel mix. A detailed description of the EMFAC2007 V2.3 changes is available at CARB's website (http://www.arb.ca.gov/msei/msei.htm).

Travel activity has also been updated SCAG provided estimates of vehicle miles of travel and travel speeds in May 2006 that were used for preliminary emissions analysis. SCAG provided revised estimates in September 2006 that will be incorporated into EMFAC2007 prior to its release.

CARB's EMFAC2002 model was used in the 2003 AQMP. The EMFAC2007 V2.3 is used in the Final 2007 AQMP. Several additional adjustments were made to EMFAC2007 V2.3 to make additional technical corrections to the inventory. The most significant adjustment was the reduction by 22% to the year 2005 heavy heavy-duty diesel truck emissions to correct assumptions on vehicle population.

In the on-road emission inventories external adjustments were made to reflect CARB regulations for chip reflash, idling, low sulfur fuel for auxiliary ship engines, off-road equipment, as well as AB1493 (Pavley, reductions of Green House Gases for vehicles) and to a lesser extent, the Carl Moyer program. Reductions assumed by CARB for the Carl Moyer program are in addition to reductions listed in Table 2-9.

Changes in VOC are decreases of 0.6 tpd in 2014 and 1.45 tpd in 2023 due to AB1493. For NOx, decreases of 13.4 tpd in 2014 and 10.5 tpd in 2023 are primarily the result of adjustments for CARB's idling regulation. PM2.5 decreased by 0.3 tpd in 2014 and 0.4 tpd in 2023 due to Carl Moyer reductions in 2014 and AB1493 in 2023. Figure 1-3 provides a comparison of the 2002 and 2020 on-road annual average emissions (tons/day) by pollutant from these two models.

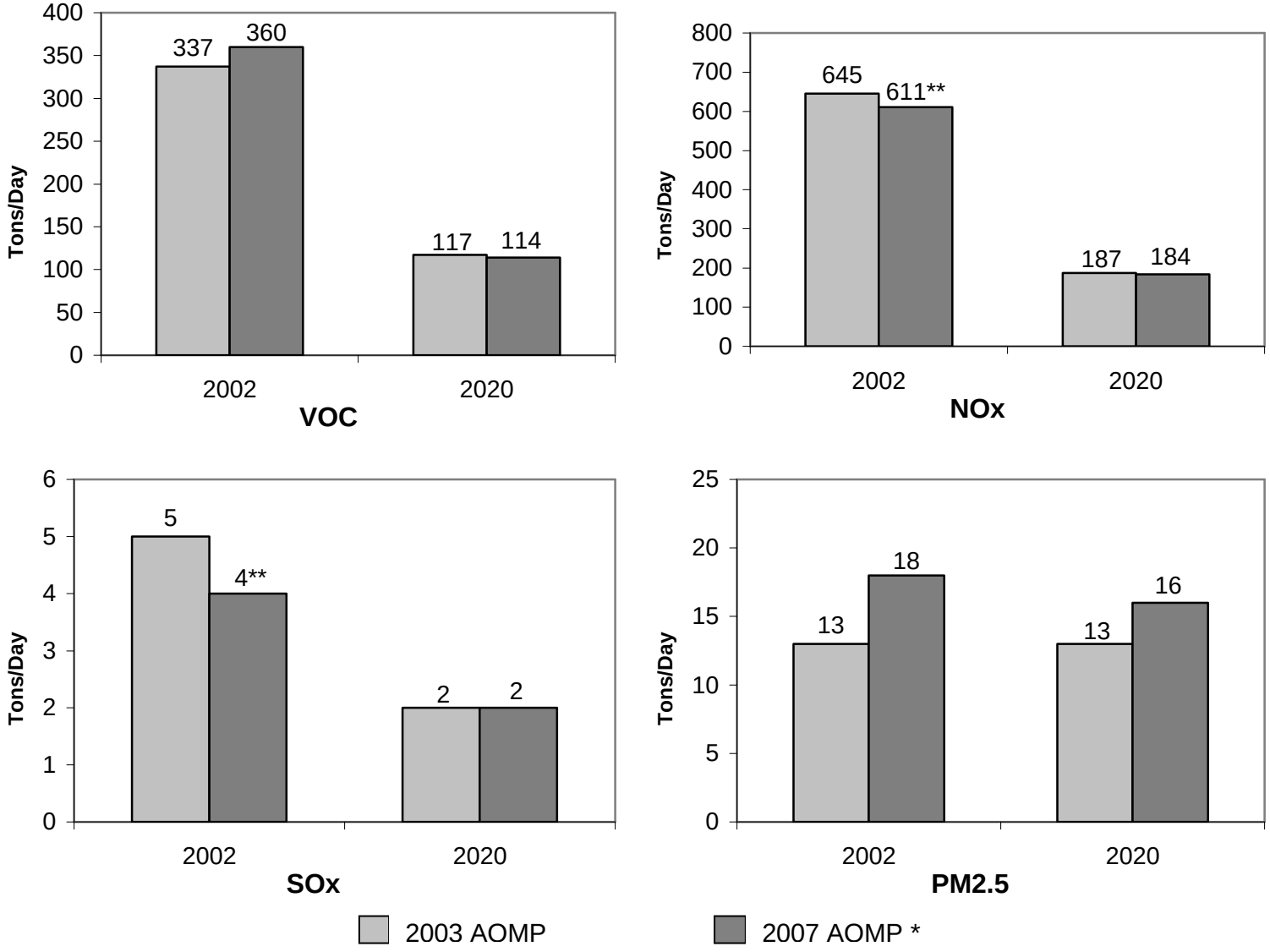

FIGURE 1-3

Comparison of On-Road Emissions Between EMFAC2002 (2003 AQMP)
and EMFAC2007 V2.3 (Final 2007 AQMP)
(VOC & NOx – Summer Planning; SOx & PM2.5 – Annual Average Inventory)

* Year 2020 inventories incorporate rules adopted since the release of EMFAC2002.
** Redistribution of the heavy-duty truck VMT in the EMFAC2007 V2.3 causes heavy duty truck VMT reduction in the SCAB. As a result, NOx and SOx emissions are relatively lower in the Final 2007 AQMP than in the 2003 AQMP.
Note: External adjustments to the EMFA2007 V2.3 are included.

Off-Road Mobile Sources

Mobile sources not included in the on-road mobile source emissions inventory are considered as off-road mobile sources. CARB uses the OFFROAD model to estimate emissions for more than one hundred off-road equipment types, including recreational vehicles, pleasure craft, and construction equipment. Ocean-going vessel, harborcraft, locomotive, gas can, and cargo handling emission estimates are developed using other category specific models. Aircraft emissions are provided by local air districts.

The OFFROAD model accounts for the effects of various adopted regulations, technology types, and seasonal conditions on emissions. The model combines population, activity, horsepower, load factors, and emission factors to yield the annual equipment emissions by county, air basin or statewide. Temporal usage profiles are used to develop seasonal emission estimates which are then spatially allocated to the county or grid scale level using surrogates such as human population.

An updated version of the OFFROAD model was released in November 2006. Documentation of the significant changes to the model are described in a series of technical memoranda available at www.arb.ca.gov/msei/msei.htm. It should be noted that reductions from the Carl Moyer program from past projects are not reflected in the model. The adjustments are made externally to the baseline inventories, which means that they are additional steps taken to adjust the inventory outputs from the model.

For off-road emission inventories, the external adjustments were made to reflect CARB's large spark-ignited equipment (LSI) regulation, which was adopted in 2006. This results in NOx reductions of 2.35 tpd in 2014 and 1.91 tpd in 2023.

Other adjustments for off-road categories were made to reflect CARB regulations on chip reflash, public fleets, idling, and low sulfur fuel requirements for auxiliary engines on ships, as well as AB1493, the Carl Moyer program, and changes to assumptions on average equipment life. Reductions assumed by CARB for the Carl Moyer program are in addition to reductions listed in Table 2-9.

Adjustments for VOC off-road were relatively small – decreases of 0.4 tpd in 2014 and 0.5 tpd in 2023. For NOx, the 2014 inventory decreased by 7.4 tpd in 2014 and 7.5 tpd in 2023, primarily due to the LSI and ship low sulfur fuel regulation for ship auxiliary engines mentioned above. PM2.5 (planning inventory) decreased by 3.2 tpd in 2014 and 4.5 tpd in 2023 primarily due to the low sulfur fuel regulation for ship auxiliary engines.

Figure 1-4 illustrates the comparison of emissions presented in the 2003 AQMP and Final 2007 AQMP.

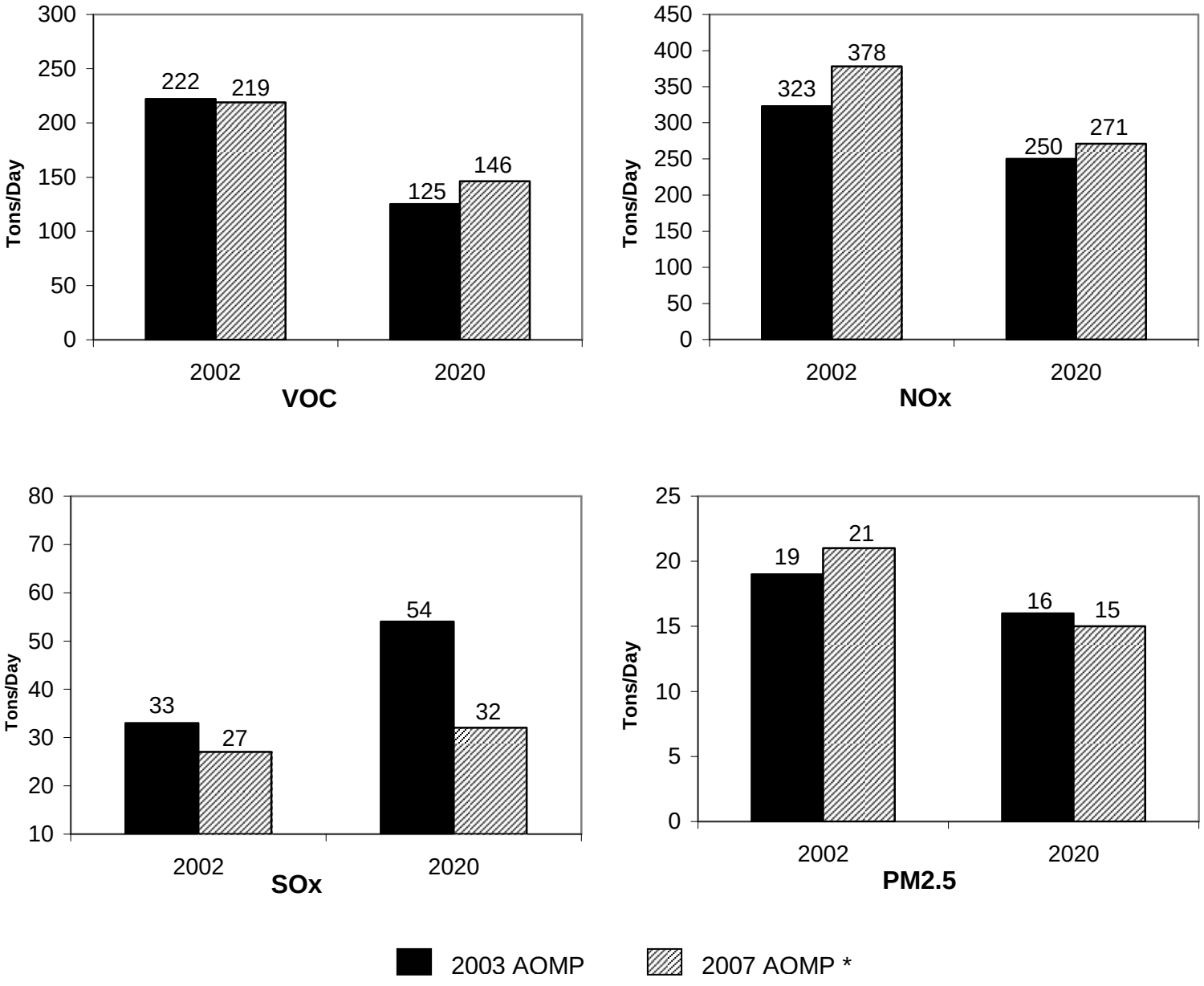

FIGURE 1-4

Comparison of Off-Road Emissions Between 2003 AQMP and Final 2007 AQMP
(VOC & NOx – Summer Planning; SOx & PM2.5 – Annual Average Inventory)

* Year 2020 inventories incorporate rules adopted since the release of EMFAC2002

INVENTORY TYPE

Different inventories are prepared for the Final 2007 AQMP for regulatory and SIP performance tracking, and transportation conformity: an annual average inventory and both summer and winter planning inventories.

Average Annual Day Inventory

The average annual day emissions inventory was derived primarily by dividing the annual total emissions by 365, except for the emissions derived from CARB's EMFAC2007 V2.3 (on-road mobile sources) and OFFROAD (most off-road mobile sources) models. In addition, the average annual day inventory was developed for all criteria pollutants regardless of their attainment status. The average annual day emissions are used to estimate cost-effectiveness of proposed control measures and future tracking of AQMP implementation (e.g., annual progress report on rule adoption).

Planning Inventory

The challenge of bringing the Basin air quality into compliance with state and federal air quality standards is complicated by the fact that ambient concentrations of ozone are typically at their highest during the summer (defined as May through October for planning purposes) while CO and NO_2 concentrations are generally highest during the winter months (November through April). Any strategy designed to mitigate air pollution in the Basin must consider this seasonal variation in ambient air quality.

Planning inventories are also referred to as seasonal inventories. These inventories only present emissions for those air pollutants or their precursors for which the area is in non-attainment with state or federal air quality standards. The intent of a planning inventory is to characterize emission levels representative of those that occur during the typical season of air quality violations. For example, the summer, or ozone, planning inventory contains emissions of ozone precursors (i.e. VOC and NOx) during the summertime. The winter, CO and NO_2, planning inventory represents emission levels during the wintertime. These planning inventories provide the basis for tracking emission reduction progress specified by the federal Clean Air Act (CAA) and California Clean Air Act (CCAA). The CAA requires the District to produce a plan for reducing all non-attainment pollutants or their precursors by fifteen percent between 1990 and 1996, and three percent each year thereafter, averaged every consecutive three years until reaching the attainment date. The CCAA requires emission reductions by five percent or more per year, averaged every three consecutive years until 2000. In addition, the CAA specifies 1990 as the base year, whereas the CCAA specifies 1987 as the base year.

CARB has developed guidelines for the development of planning inventories. For point sources emission estimates represent an "average annual operating day." Emissions from point sources are calculated by dividing the total annual emissions produced by a source by the number of days the source was in operation. For example, if a company emitted

150 tons in a year and the production lines operated 5 days a week for 40 weeks, then the average operating emissions from this facility are calculated to be 150 tons divided by 200 days or 0.75 tons per day.

For area and other mobile sources, planning emissions represent an "average seasonal operating day." As an example, VOC emissions produced by asphalt road-paving operations are calculated by taking into account the variation in monthly levels and weekly operating days for paving activity during the year. Road paving varies from maximum rates during the summer season to minimum levels during the winter season. Paving activity varies throughout the week with, on average, five operating days in a week. The allocation of annual area source emissions among the seasons is based on estimated relative monthly and weekly emissions patterns. As pointed out earlier, sources included in CARB's OFF-ROAD model include seasonal activity and temperature profiles which are used to develop the planning inventories.

Both summer and winter planning on-road emission inventories were provided by CARB by incorporating SCAG's updated activity data into CARB's EMFAC2007 V2.3.

CHAPTER 2

SUMMARY OF EMISSIONS

BASELINE EMISSION INVENTORIES

Base Year Emission Data

The 2002 emission inventory is used as the base year inventory to project future year emissions. It represents the most recent and comprehensive inventory development. For the purposes of Reasonable Further Progress (RFP) reporting as required by both the federal and state CAAs, 1990 emissions were reconstructed as shown in Figure 2-1. Attachments A, B, and C include emissions for 2002, 2005, 2008, 2010, 2011, 2014, 2017, 2020, 2023 and 2030 by major source categories. A major source category refers to a group of emission sources with similar characteristics.

Emissions result primarily from the combustion of fuels, evaporation of solvents or fuels, and processing of materials. Hence, stationary sources are grouped under fuel combustion; waste disposal; cleaning and surface coatings; petroleum production and marketing; industrial processes; solvent evaporation; and other miscellaneous processes.

Mobile sources are divided into two source categories: 1) on-road, and 2) other (off-road) mobile sources. On-road mobile sources include light-duty passenger vehicles; light-, medium-, and heavy- heavy duty trucks; motorcycles; urban buses; school buses and motor homes. Other mobile sources include aircraft; trains; ships and commercial boats; off-road recreational vehicles; off-road equipment; farm equipment; and fuel storage and handling equipment. Attachment A summarizes annual average day baseline inventories by major source category. Attachment B is summer planning baseline inventories and Attachment C is winter planning inventories also by major source category. Attachment D lists the top 300 VOC and NOx polluters (facilities) in the 2002 inventory in the SCAB. Attachment E illustrates on-road emissions by vehicle class for 2002, 2005, 2010, 2014, 2020, 2023, and 2030. Attachment F shows various source categories' emissions due to combustion of diesel fuel for 2202, 2010, 2014, 2020, and 2023.

Figure 2-1 compares the mobile source emissions between 1990 and 2002. All pollutants have been significantly reduced between these years. Adopted rules and regulations are the major contributors toward the reductions.

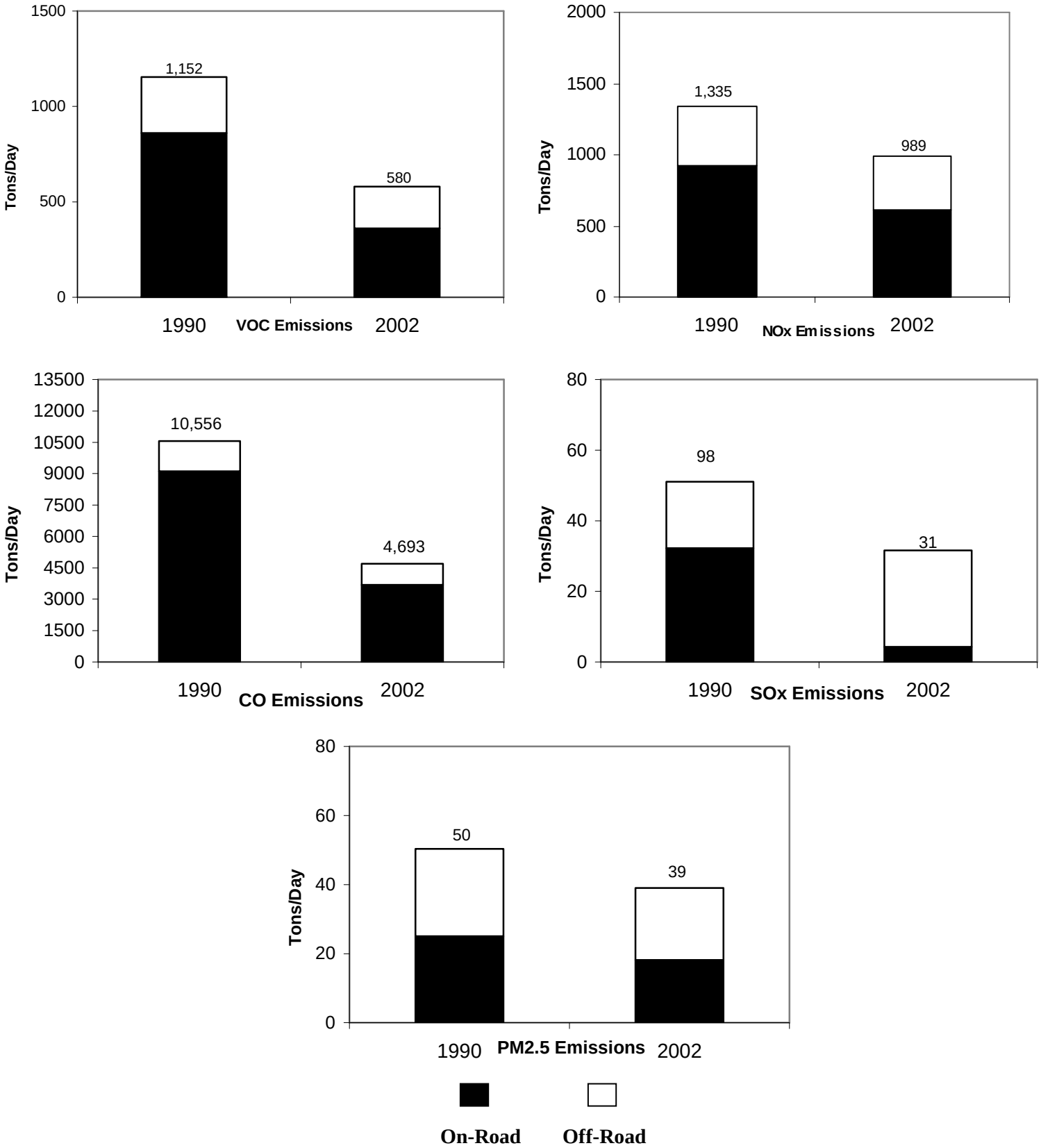

FIGURE 2-1

Comparison of Mobile Source Emission Inventory of 1990 and 2002

(VOC, NOx – Summer Planning; CO, SOx, and PM2.5 – Annual Average Inventory)

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Future Year Emission Data

Future baseline emissions, which are those expected if no additional air quality regulations are introduced, are given in this appendix for the years 2002, 2005, 2008, 2010, 2011, 2014, 2017, 2020, 2023, and 2030. These emissions are forecast from the 2002 base year by incorporating the controls implemented under AQMD rules adopted as of June 2006, and most CARB adopted by June 2005, and a specific set of growth rates from SCAG for population, industry, and motor vehicle activity. Growth projections from SCAG were replaced for certain categories where more specific information is available to improve emission forecasts. For example, 2006 California Gas Report's energy demand forecasts for natural gas are used to forecast the emissions of those source categories. Rules adopted after June 2006 are treated as baseline adjustments for emission reduction accounting purposes. From efforts currently underway for amending Rule 1110.2, staff has estimated additional emissions of 1.26 tons per day of NOx; 42.07 tons per day of CO; and 7.39 tons per day of VOC in 2005 due to unanticipated non compliance. These emissions are expected to be totally controlled by year 2008 if the proposed rule amendment, which is scheduled to be brought to the Governing Board this year, is adopted. Therefore, these emissions were not added to the 2007 AQMP inventories.

The impact of New Source Review and emissions budgeted for several District programs are addressed in the Controlled Emission Data section. Due to the adoption of the Regional Clean Air Incentive Market (RECLAIM) program in October 1993, emissions are divided into two categories, RECLAIM and non-RECLAIM. Future emissions from RECLAIM sources are estimated based on their allocations specified by District Rule 2002. The methodology used to forecast emissions for non-RECLAIM sources is described in the following sections. Baseline emissions for future years are obtained using the following equation:

$$\mathbf{(F.Y.)_i = (B.Y.)_i(C.F.)_i(G.F.)_i}$$

where $(F.Y.)_i$ is the forecast emissions of an air pollutant in the South Coast Air Basin for a future year. $(B.Y.)_i$ refers to the base year emissions of the air pollutant (i.e., 2002). The control factor, $(C.F.)_i$, is an indicator of the level of control on a specific source category as a result of adopted state and local air quality regulations. $(G.F.)_i$ is a growth factor determined for different categories of industry and socioeconomic data.

Control Factors

The impact of AQMD rules adopted or amended with compliance dates after 2002 are included in the baseline emission forecasts by means of control factors. Control factors were developed in reference to 2002 and applied to source categories and/or specific

industries affected by the adopted rules/amendments. For industry, the standard industrial codes (SIC) system is used, and for equipment, EPA's SCC system is used. A control factor $(C.F.)_i$ is calculated by the following equation for an individual source category:

$$\mathbf{(C.F.)_i = 1 - Control\ Efficiency}$$

Control efficiency is mostly based on estimates projected during rulemaking. Control factors represent the remaining emissions after a rule or regulation is implemented after 2002. Table 2-1 lists control factors for the years 2010 and 2020 for District rules with post-2002 compliance dates. In addition to criteria pollutants, District Rules 1127 – Livestock Waste and 1133.2 – Composting, result in 10 tons per day ammonia reduction by 2014 and 8.8 tons per day by 2020, which helps reduce PM precursors and assists in meeting the PM2.5 standard in 2015.

Growth Factors

Growth projections were developed primarily by SCAG. The Final 2007 AQMP growth data is based on SCAG's 2004 Regional Transportation Plan (RTP), adjusted with the most recent data from Bureau of Labor Statistics (BLS), California Department of Finance (DOF), California Employment Development Department and U.S. Census Bureau (Census). The overall Final 2007 AQMP growth estimates are lower than SCAG's 2001 RTP and 2004 RTP for the following reasons: (1) Recent population projections from BLS, DOF and Census indicate that SCAG region will face significant slow growth after 2010, which will affect long-term employment growth in SCAG region. This is due to the aging trend of the baby-boomer population. (2) The Final 2007 AQMP employment growth is based on the actual historical trend up to 2005, which incorporated slow employment growth starting in 2001. Since the employment forecast is based on a historical trend, sluggish job growth in recent years translates into slower short-term and long-term employment growth for the SCAG region.

Each emission inventory source grows based on its growth surrogate. Growth surrogates include industry output growth, employment growth, demographic growth and others. The selection of the surrogate by which emission growth is projected depends on the type of activity. For instance, manufacturing sectors use output growth as surrogate. Output growth is the product of employment and productivity. Employment growth is chosen for labor intensive sectors, such as construction and laundering. Certain emission sources use demographic data as their surrogate, such as architectural coatings (housing units as surrogate) and composting (population as surrogate). Some growth projections are from ARB's special studies or Gas Fuel Report. Table 2-2 lists the types of growth surrogates used for the inventory sources in the Final 2007 AQMP.

TABLE 2-1

Control Factors by District Rules with Post-2002 Compliance Dates

		2010				2020			
Rules*	**Description**	**VOC**	**NOx**	**SOx**	**PM**	**VOC**	**NOx**	**SOx**	**PM**
403	Fugitive Dust	-	-	-	0.98	-	-	-	0.98
431.2	Sulfur Content of Liquid Fuels	-	-	0.08	0.90	-	-	0.08	0.90
442	Usage of Solvents	Varies	-	-	-	Varies	-	-	-
1105.1	Fluid Catalytic Cracking Units (FCCUs)	-	-	-	0.56	-	-	-	0.56
1107	Coating of Metal Parts & Products	0.80	-	-	-	0.80	-	-	-
1110.2	Stationary Internal Combustion Engines	0.02	-	-	0.01	0.02	-	-	0.01
1113	Architectural Coatings	Varies	-	-	-	Varies	-	-	-
1118	Refinery Flares	-	-	-	-	0.55	0.45	0.30	0.40
1121	Residential – Natural-Gas-Fired Type Water Heaters	-	0.43	-	-	-	0.25	-	-
1122	Solvent Degreasers	0.50	-	-	-	0.50	-	-	-
1127	Livestock Wastes	0.63	-	-	-	0.63	-	-	-
1130.1	Screen Printing Operations	0.90	-	-	-	0.90	-	-	-
1132	High-Emitting Spray Booth Facilities	Varies	-	-	-	Varies	-	-	-
1133.2	Co-Composting & Related Operations	0.82	-	-	-	0.82	-	-	-
1136	Wood Products Coatings	0.34	-	-	-	0.34	-	-	-
1137	Woodworking Operations	-	-	-	0.94	-	-	-	0.94
1145	Plastic, Rubber, and Glass Coatings	0.48	-	-	-	0.48	-	-	-
1146.2	Large Water Heaters and Small Boilers	-	0.71	-	-	-	0.48	-	-
1148.1	Oil and Gas Production Wells	0.20	-	-	-	0.20	-	-	-
1151	Motor Vehicle & Equip. Non-Assembly Line Coatings Coatings Operations	0.64	-	-	-	0.64	-	-	-
1156	Cement Manufacturing Facilities	-	-	-	0.50	-	-	-	0.50
1157	Aggregate & Related Operations	-	-	-	Varies	-	-	-	Varies
1162	Polyester Resin Operations	Varies	-	-	-	Varies	-	-	-
1168	Adhesive and Sealant Applications	0.82	-	-	-	0.82	-	-	-
1171	Solvent Cleaning Operations	0.14	-	-	-	0.14	-	-	-
1173	Fugitive Emission of VOC	0.17	-	-	-	0.17	-	-	-
1178	Storage Tanks at Petroleum Facilities	Varies	-	-	-	Varies	-	-	-
1186	Paved & Unpaved Roads & Livestock Operations	-	-	-	Varies	-	-	-	Varies
1189	Hydrogen Plant Process Vents	0.42	-	-	-	0.42	-	-	-

* Current as of 6/06. Only rules with emission impact after 2002 are listed.

TABLE 2-2

Growth Surrogates by Source Category

Group 1: Source Categories Using Industry Output as Growth Surrogate

Area Sources

Source Description	Parameter
Bakeries	Manufacturing-Food
Chemical	Manufacturing-Rubber
Coating and Process Solvents	Manufacturing-by Industry
Degreasing	Manufacturing-Total
Manufacturing and Industrial	Manufacturing-Total (1)
Metal Processes	Manufacturing-Metal
Mineral Processes	Manufacturing-Stone, Clay, Glass
Other Coatings	Manufacturing-Total
Printing	Manufacturing-Printing
Sealant and Adhesives	Manufacturing-Total
Service and Commercial	Service-Total
Wood and Paper	Manufacturing- Furniture

Point Sources

SIC	Source Description
1-9	Agriculture (1)
10-12, 14	Mining
20-28	Manufacturing
30-39	Manufacturing
40-42, 44-46, 48	Transportation
52-59	Retail (1)
70-72	Services (1)
75-80	Services (1)
82	Education (1)

(1) Surrogate is changed from employment to output from last AQMP.

TABLE 2-2
(Continued)

Group 2: Source Categories Using Industry Employment as Growth Surrogate

Area Sources

Source Description	Parameter
Asphalt Paving	Construction Employment
Auto Refinishing	Auto Employment
Construction & Demolition	Construction Employment
Cooking	Total Employment
Laundering	Total Employment

Point Sources

SIC	Source Description
15-17	Construction
43	Postal Service
47	Travel Services
49	Utilities
50-51	Wholesale
60-62	Finance
63-64	Insurance
65-67	Real Estate
73	Business Services
81	Legal Services
83-86	Nonprofit Organization
87-89	Professional Services
91-97	Government
99	Others

TABLE 2-2
(Continued)

Group 3: Source Categories Using SCAG's Demographic Data as Growth Surrogate

Area Sources

Source Description	Parameter
Architectural Coatings	Housing Units
Composting	Population
Consumer Products	Population
Non-Agricultural Pesticides & Fertilizers	Housing Units
Residential Fireplaces	Housing Units
Residential LPG & Distillate Oil Combustion	Housing Units

Group 4: Others

Area Sources

Source Description	Parameter	Note
Agricultural IC Engines	ARB Data	(1)
Agricultural Pesticides & Fertilizers	ARB Data	(1)
Cogeneration	No Growth	
Farming Operations	ARB Data	(1)
Fires	No Growth	
Food and Agriculture	ARB Data	(2)
Fugitive Windblown Dust – Agriculture	ARB Data	(1)
Fugitive Windblown Dust – Non – Agriculture	No Growth	
Landfills	ARB Data	(2)
Natural Gas Combustion	CES Data	(3)
Oil & Gas Production (Petroleum Production)	No Growth	(3)
Oil & Gas Production (Combustion)	No Growth	
Paved Road Dust	Post Miles	
Petroleum Marketing	Fuel Usage	
Unpaved Road Dust	No Growth	
Waste Disposal	ARB Data	(2)

Comments:

(1) Use ARB's San Joaquin Study Results
(2) ARB's Pecan Study Results
(3) CEC's 1999 Fuel Report

Point Sources

Source Description	Parameter
Oil & Gas Extraction	No Growth
Petroleum Products	No Growth

The demographic forecasts from the year 2002 to the years 2020, and 2030 for population, housing, employment, and motor vehicle activity are shown in Table 2-3.

TABLE 2-3
Baseline Demographic Forecasts in the Final 2007 AQMP

Category	2002	2020 (% Growth)		2030 (% Growth)	
Population (Million)	15.1	18.4	22%	19.6	30%
Housing Units (Million)	4.8	5.9	23%	6.4	33%
Total Employment (Millions)	6.8	8.2	21%	9.0	32%
Daily VMT (Millions)	349	414	19%	453	30%

Table 2-4 shows the relative distribution of population by county in the Basin for the years 1997, 2002, 2010, 2015, 2020, and 2030. By 2020 the population in Los Angeles County is projected to increase by 14 percent from 2002 levels, compared with increases for Orange, San Bernardino, and Riverside counties of 21 percent, 35 percent, and 66 percent respectively.

TABLE 2-4
Population Distribution by County in SCAB (in Thousands)

Year	Los Angeles	Orange	Riverside	San Bernardino	Basin Total
1997	8,881	2,750	1,072	1,250	13,954
2002	9,486	2,931	1,278	1,410	15,105
2010	10,212	3,281	1,712	1,675	16,880
2015	10,493	3,437	1,921	1,788	17,640
2020	10,773	3,557	2,123	1,906	18,359
2030	11,308	3,678	2,495	2,133	19,615

* Source – SCAG socio-economic data (March 06)

Growth factors for specified ranges of SIC categories were projected by SCAG (2001), and are based on predictions of growth for different industrial sectors per county. SCAG has provided growth factors for the years 2005, 2010, 2015, 2020, 2025 and 2030. The growth factors for other years are interpolated between these years. Tables 2-5 and 2-6 list growth factors for 2010 and 2020 for Los Angeles County, Orange County, Riverside County and San Bernardino County in SCAB.

TABLE 2-5

SIC Growth Factors by County in the SCAB for the Year 2015

SIC Sector	SIC Code	Los Angeles	Orange	Riverside	San Bernardino
Agriculture	1-9	0.959	1.042	1.284	1.425
Mining	10-12,14	1.089	1.118	1.377	1.529
Oil and Gas Extr.	13	1.000	1.000	1.000	1.000
Construction	15-17	1.082	1.346	2.148	1.748
Food/Tobacco	20	0.955	1.163	1.464	1.441
Textile Mill	22	0.910	0.838	1.475	1.738
Apparel/Other Text.	23	0.980	1.460	1.201	1.136
Lumber/Wood	24	1.350	1.409	1.947	1.851
Furniture/Fixture	25	1.027	1.562	2.331	1.947
Paper	26	0.904	1.083	1.418	1.585
Printing	27	1.043	1.065	1.994	1.537
Chemicals	28	1.179	1.475	1.991	1.916
Petroleum Products	29	1.000	1.000	1.000	1.000
Rubber & Plastic	30	1.177	1.417	2.346	2.331
Leather	31	0.445	0.733	1.010	1.003
Stone, Clay & Glass	32	1.130	1.234	1.960	1.971
Primary Metals	33	0.922	1.102	1.546	1.692
Fabricated Metals	34	1.241	1.381	2.011	1.981
Machinery	35	1.331	1.427	2.173	2.225
Electronic Equip.	36	1.323	1.865	3.017	2.530
Trans. Equip.	37	1.449	1.545	1.943	1.941
Instruments	38	1.160	1.220	2.042	1.767
Misc. Mfg.	39	1.211	1.632	2.605	2.507
Railroads	40	1.379	0.917	1.440	1.994
Local Transits	41	1.206	1.243	2.076	2.056
Trucking	42	1.450	1.462	1.582	2.037
Water Transport	44	1.099	1.572	NA	NA
Air Transport	45	1.254	1.152	5.179	2.289
Pipelines Trans.	46	1.822	0.784	NA	1.963
Travel Services	47	1.052	1.201	3.023	5.069
Communications	48	1.622	1.667	2.551	2.418
Utilities	49	1.016	1.088	1.581	1.360
Wholesales	50-51	1.040	1.143	1.529	1.422
Retails	52-59	1.280	1.424	1.952	1.673
Finance	60-62	1.059	1.485	1.335	1.246
Insurance	63-64	0.986	1.368	1.256	1.215
Real Estate	65,67	1.169	1.308	2.308	2.296
Hotels	70	1.072	1.252	1.511	0.831
Personal Services	72	1.179	1.402	1.726	1.534
Business Services	73	1.346	1.372	1.641	1.468
Auto Repairs	75-76	1.305	1.511	2.127	1.872
Motion Pictures	78	1.015	1.072	1.034	0.817
Amusements	79	1.290	1.428	1.735	1.276
Health Services	80	1.025	1.130	1.792	1.536
Legal Services	81	1.046	1.195	1.282	1.139
Educational Services	82	1.211	1.374	1.402	1.284
Non-Profit Org.	83,84,86	1.039	1.176	1.871	1.637
Professional Services	87,89	FALSE	1.297	1.661	1.439
Government	91-97	0.953	0.972	1.532	1.172

Note: Base year is 2002.

TABLE 2-6

SIC Growth Factors by County in the SCAB for the Year 2020

SIC Sector	SIC Code	Los Angeles	Orange	Riverside	San Bernardino
Agriculture	1-9	0.994	1.090	1.403	1.577
Mining	10-12,14	1.136	1.169	1.505	1.692
Oil and Gas Extr.	13	1.000	1.000	1.000	1.000
Construction	15-17	1.117	1.398	2.491	1.990
Food/Tobacco	20	0.993	1.213	1.536	1.540
Textile Mill	22	0.933	0.795	1.552	1.922
Apparel/Other Text.	23	0.972	1.522	1.108	1.032
Lumber/Wood	24	1.455	1.483	2.104	2.025
Furniture/Fixture	25	1.078	1.708	2.650	2.202
Paper	26	0.917	1.095	1.465	1.706
Printing	27	1.097	1.089	2.143	1.667
Chemicals	28	1.257	1.585	2.186	2.140
Petroleum Products	29	1.000	1.000	1.000	1.000
Rubber & Plastic	30	1.249	1.504	2.656	2.684
Leather	31	0.401	0.727	1.038	1.003
Stone, Clay & Glass	32	1.202	1.290	2.180	2.227
Primary Metals	33	0.930	1.108	1.616	1.833
Fabricated Metals	34	1.324	1.456	2.209	2.211
Machinery	35	1.387	1.450	2.316	2.442
Electronic Equip.	36	1.392	2.021	3.333	2.874
Trans. Equip.	37	1.561	1.667	2.128	2.163
Instruments	38	1.225	1.251	2.217	1.924
Misc. Mfg.	39	1.260	1.737	2.889	2.859
Railroads	40	1.400	0.789	1.425	2.086
Local Transits	41	1.283	1.336	2.359	2.382
Trucking	42	1.549	1.562	1.757	2.272
Water Transport	44	1.129	1.718	NA	NA
Air Transport	45	1.316	1.174	6.253	2.623
Pipelines Trans.	46	1.973	0.636	NA	2.059
Travel Services	47	1.070	1.246	3.579	6.247
Communications	48	1.728	1.778	2.861	2.714
Utilities	49	1.018	1.107	1.657	1.405
Wholesales	50-51	1.061	1.173	1.671	1.545
Retails	52-59	1.355	1.517	2.336	1.884
Finance	60-62	1.084	1.551	1.423	1.307
Insurance	63-64	0.995	1.406	1.314	1.266
Real Estate	65,67	1.218	1.332	2.718	2.682
Hotels	70	1.091	1.304	1.678	0.840
Personal Services	72	1.186	1.450	1.922	1.678
Business Services	73	1.426	1.444	1.863	1.624
Auto Repairs	75-76	1.348	1.591	2.493	2.137
Motion Pictures	78	1.049	1.101	1.053	0.792
Amusements	79	1.365	1.523	1.989	1.377
Health Services	80	1.073	1.195	2.153	1.791
Legal Services	81	1.058	1.225	1.369	1.195
Educational Services	82	1.286	1.481	1.566	1.416
Non-Profit Org.	83,84,86	1.047	1.201	2.173	1.853
Professional Services	87,89	1.161	1.351	1.885	1.591
Government	91-97	0.962	0.987	1.782	1.258

Note: Base year is 2002.

TABLE 2-7

SIC Growth Factors by County in the SCAB for the Year 2030

SIC Sector	SIC Code	Los Angeles	Orange	Riverside	San Bernardino
Agriculture	1-9	1.064	1.172	1.697	1.931
Mining	10-12,14	1.234	1.257	1.820	2.072
Oil and Gas Extr.	13	1.000	1.000	1.000	1.000
Construction	15-17	1.197	1.501	3.261	2.539
Food/Tobacco	20	1.074	1.302	1.713	1.756
Textile Mill	22	0.978	0.679	1.740	2.358
Apparel/Other Text.	23	0.946	1.629	0.849	0.707
Lumber/Wood	24	1.683	1.619	2.498	2.429
Furniture/Fixture	25	1.185	2.006	3.468	2.824
Paper	26	0.939	1.099	1.574	1.978
Printing	27	1.210	1.121	2.516	1.965
Chemicals	28	1.426	1.802	2.680	2.680
Petroleum Products	29	1.000	1.000	1.000	1.000
Rubber & Plastic	30	1.404	1.673	3.450	3.557
Leather	31	0.297	0.698	1.099	1.061
Stone, Clay & Glass	32	1.356	1.389	2.741	2.849
Primary Metals	33	0.940	1.098	1.786	2.153
Fabricated Metals	34	1.503	1.596	2.709	2.764
Machinery	35	1.503	1.472	2.670	2.949
Electronic Equip.	36	1.538	2.334	4.135	3.717
Trans. Equip.	37	1.806	1.910	2.594	2.696
Instruments	38	1.362	1.294	2.657	2.284
Misc. Mfg.	39	1.362	1.940	3.612	3.723
Railroads	40	1.437	0.466	1.387	2.259
Local Transits	41	1.456	1.527	3.075	3.215
Trucking	42	1.769	1.764	2.186	2.848
Water Transport	44	1.191	2.026	NA	NA
Air Transport	45	1.452	1.199	9.077	3.465
Pipelines Trans.	46	2.314	0.271	NA	2.244
Travel Services	47	1.113	1.331	4.986	9.225
Communications	48	1.963	2.000	3.634	3.444
Utilities	49	1.027	1.137	1.837	1.501
Wholesales	50-51	1.110	1.228	2.015	1.839
Retails	52-59	1.521	1.704	3.253	2.407
Finance	60-62	1.144	1.682	1.612	1.444
Insurance	63-64	1.018	1.477	1.426	1.380
Real Estate	65,67	1.329	1.373	3.751	3.654
Hotels	70	1.129	1.397	2.020	0.900
Personal Services	72	1.192	1.533	2.331	1.990
Business Services	73	1.607	1.588	2.377	1.985
Auto Repairs	75-76	1.439	1.747	3.379	2.777
Motion Pictures	78	1.121	1.146	1.148	0.664
Amusements	79	1.534	1.716	2.575	1.583
Health Services	80	1.180	1.323	3.064	2.425
Legal Services	81	1.090	1.277	1.526	1.305
Educational Services	82	1.455	1.703	1.914	1.708
Non-Profit Org.	83,84,86	1.070	1.244	2.898	2.369
Professional Services	87,89	1.233	1.457	2.403	1.943
Government	91-97	0.981	1.007	2.343	1.460

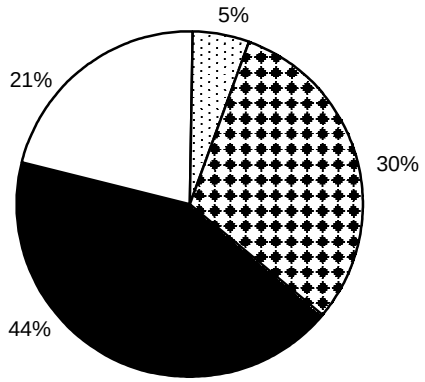
Note: Base year is 2002.

Future Year Emission Inventories

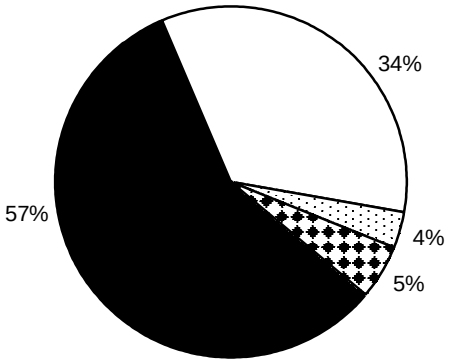
Based on the methodology described previously, future year emission inventories data for the milestone years 2005, 2008, 2010, 2011, 2014, 2017, 2020, 2023, and 2030 are presented in Attachments A (average annual day), B (summer planning inventory), and C (winter planning inventory) of this report. These target years are selected to correspond to the years required by either the federal or state CAA to demonstrate attainment with the corresponding air quality standards. Years 2014 and 2020 are milestones to attain PM2.5, and 8-hour ozone air quality standards, respectively.

Emission Trend Analysis

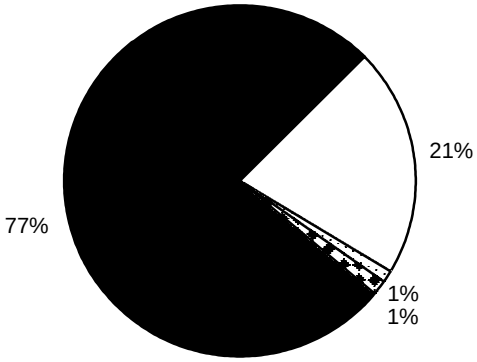
Figures 2-2 through 2-5 present the relative contributions by source categories (i.e., point, area, on-road, and off-road) to total emission levels in 2002 and 2020, respectively. As seen in the figures, in 2002 (average annual day) on-road and off-road mobile sources are major contributors of CO (98 percent), NOx (92 percent), SOx (59 percent) and VOC (64 percent) emissions. Fine particulate matter (PM2.5) is produced mostly from entrained road dust (19%); cooking (13%) and off-road equipment (13%). For 2020 (average annual day), mobile sources continue to be major contributors to total CO, NOx, and SOx emissions by approximately 92 percent, 86 percent, and 67 percent, respectively. However, contribution to VOC by mobile sources is reduced due to CARB regulations over time. Area sources become major contributors to VOC emissions (from 30 percent in 2002 to 46 percent in 2020). Figures 2-6 through 2-9 illustrate the emission trends by pollutant for 2002, 2014, 2020, and 2023.



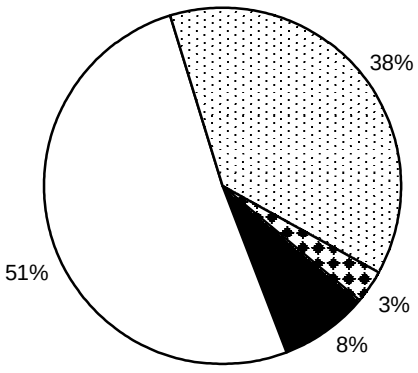
VOC Emissions: 844 Tons/Day



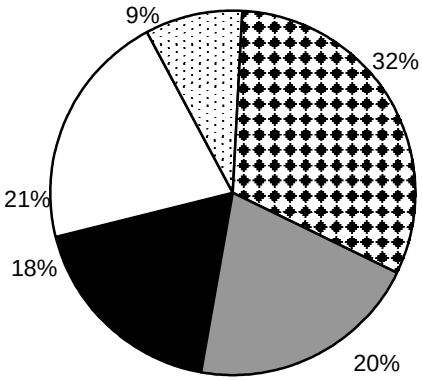
NOx Emissions: 1,093 Tons/Day



CO Emissions: 4,819 Tons/Day



SOx Emissions: 53 Tons/Day



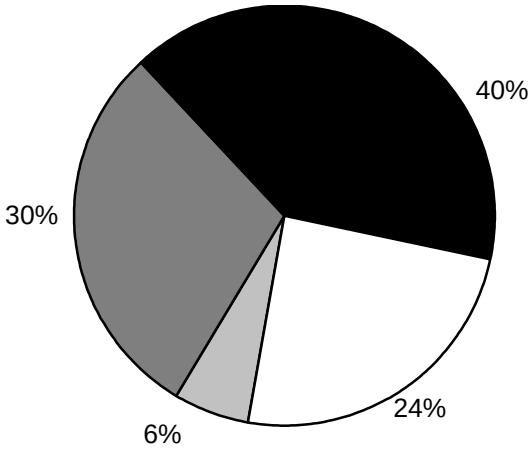
Directly Emitted
PM2.5 Emissions: 99 Tons/Day

On-Road **Off-Road** **Point** **Area** **Entrained Road Dust**

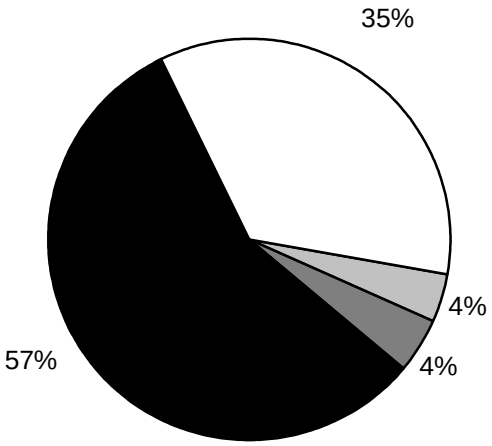
FIGURE 2-2

Relative Contribution by Source Category to
2002 Emissions Inventory – Average Annual Day

SUMMER

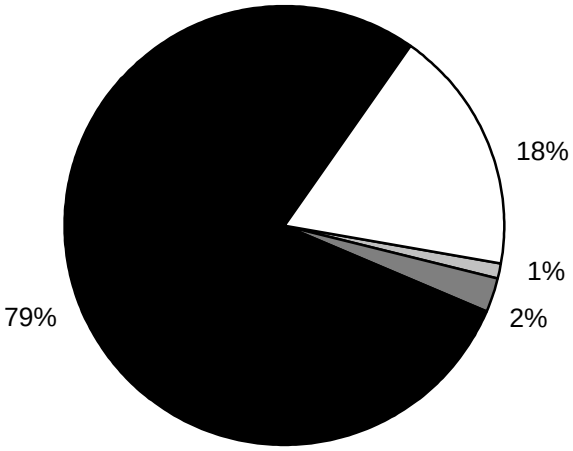


VOC Emissions = 897 Tons/Day

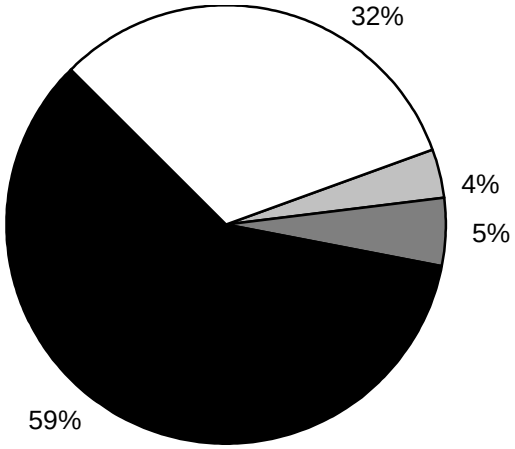


NOx Emissions =1,079 Tons/Day

WINTER



CO Emissions: 4,642 Tons/Day



NOx Emissions: 1,147 Tons/Day

Point **Area** **On-Road** **Off-Road**

FIGURE 2-3
Relative Contribution by Source Category to
2002 Emissions Inventory – Planning Inventory

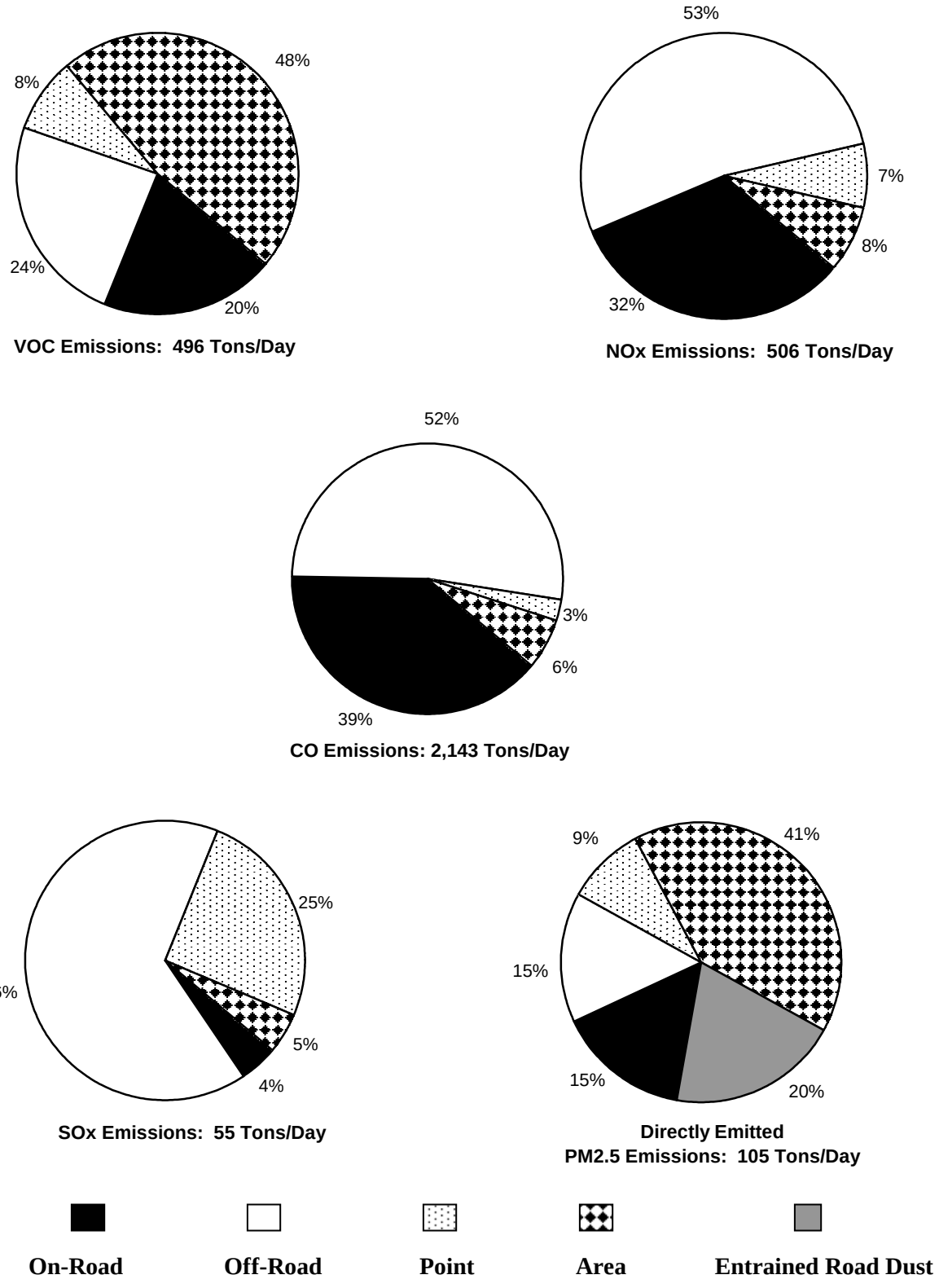
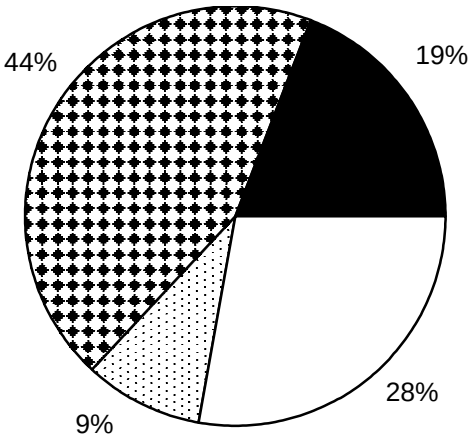
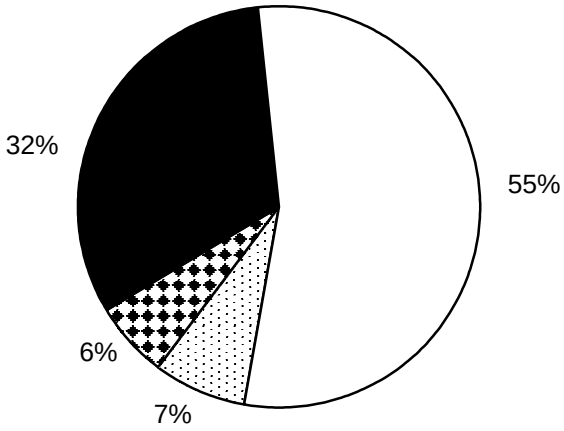


FIGURE 2-4
Relative Contribution by Source Category to
2023 Emissions Inventory – Average Annual Day

SUMMER

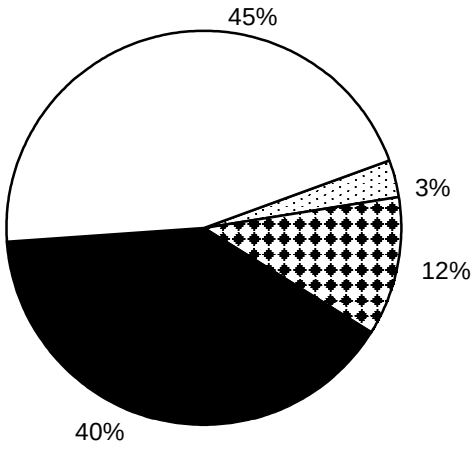


VOC Emissions: 536 Tons/Day

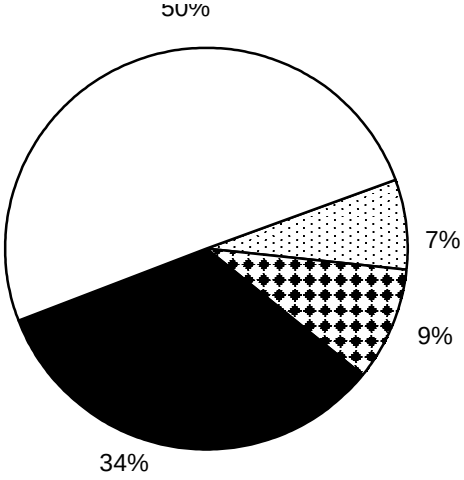


NOx Emissions: 506 Tons/Day

WINTER



CO Emissions: 2,057 Tons/Day



NOx Emissions: 520 Tons/Day

On-Road **Off-Road** **Point** **Area**

FIGURE 2-5
Relative Contribution by Source Category to
2023 Emissions Inventory – Planning Inventory

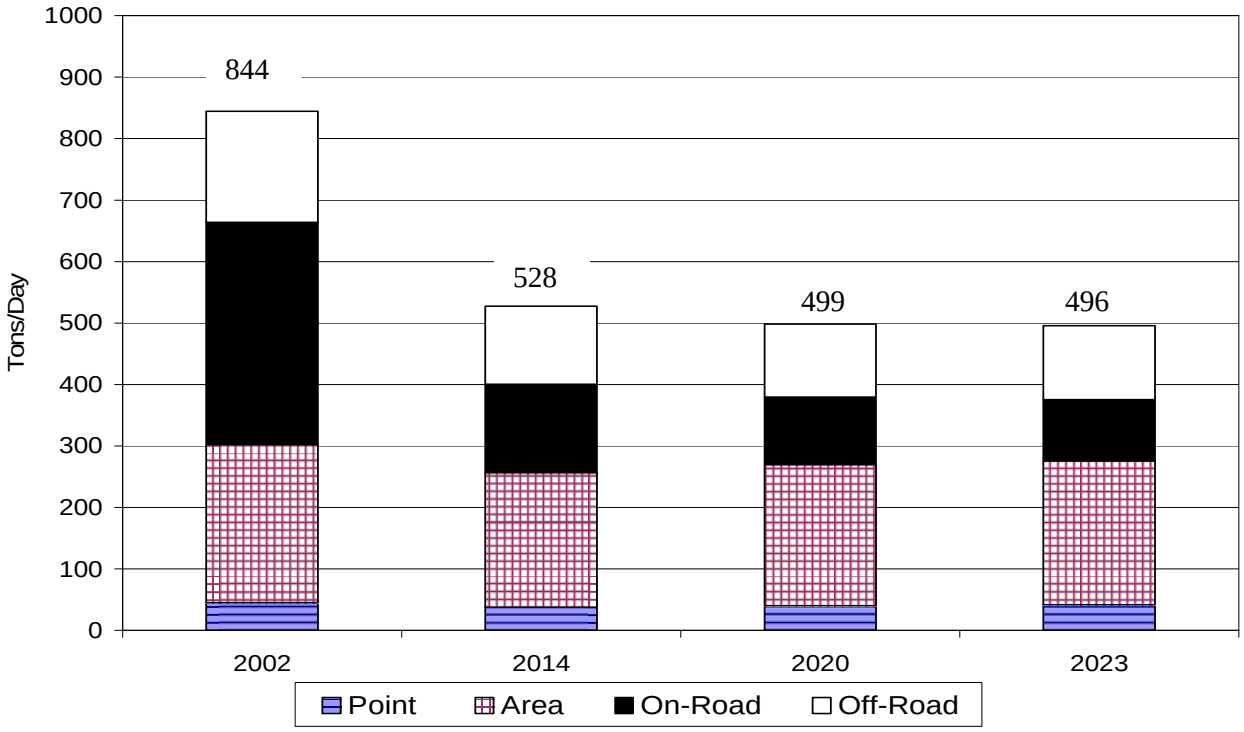


FIGURE 2-6A
VOC Emission Trend by Source Category - Average Annual Day

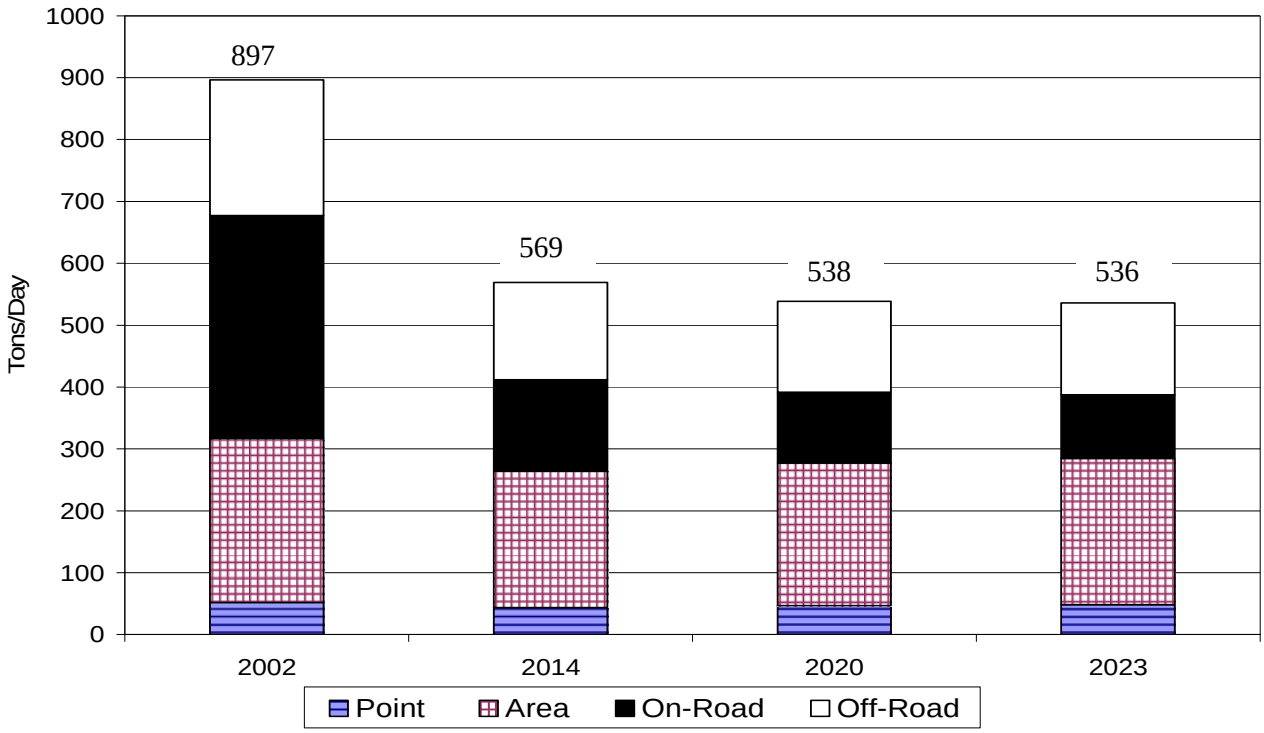


FIGURE 2-6B
VOC Emission Trend by Source Category - Summer Planning

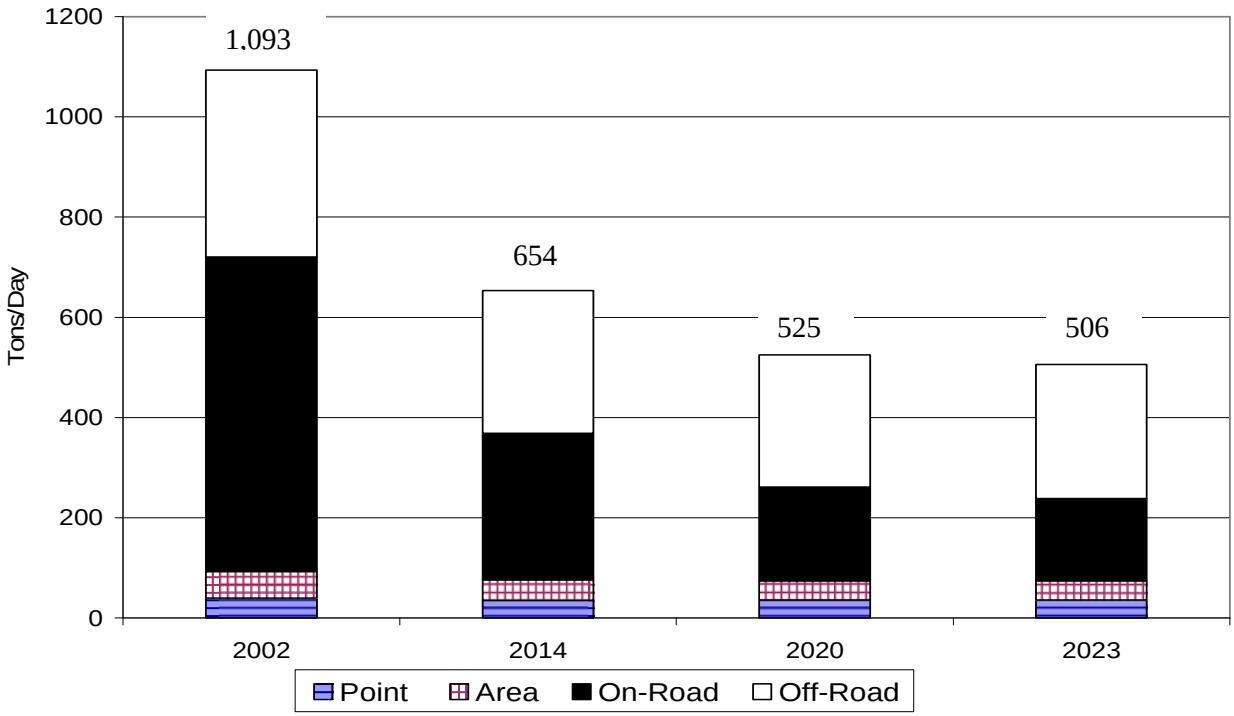


FIGURE 2-7A
NOx Emission Trend by Source Category - Average Annual Day

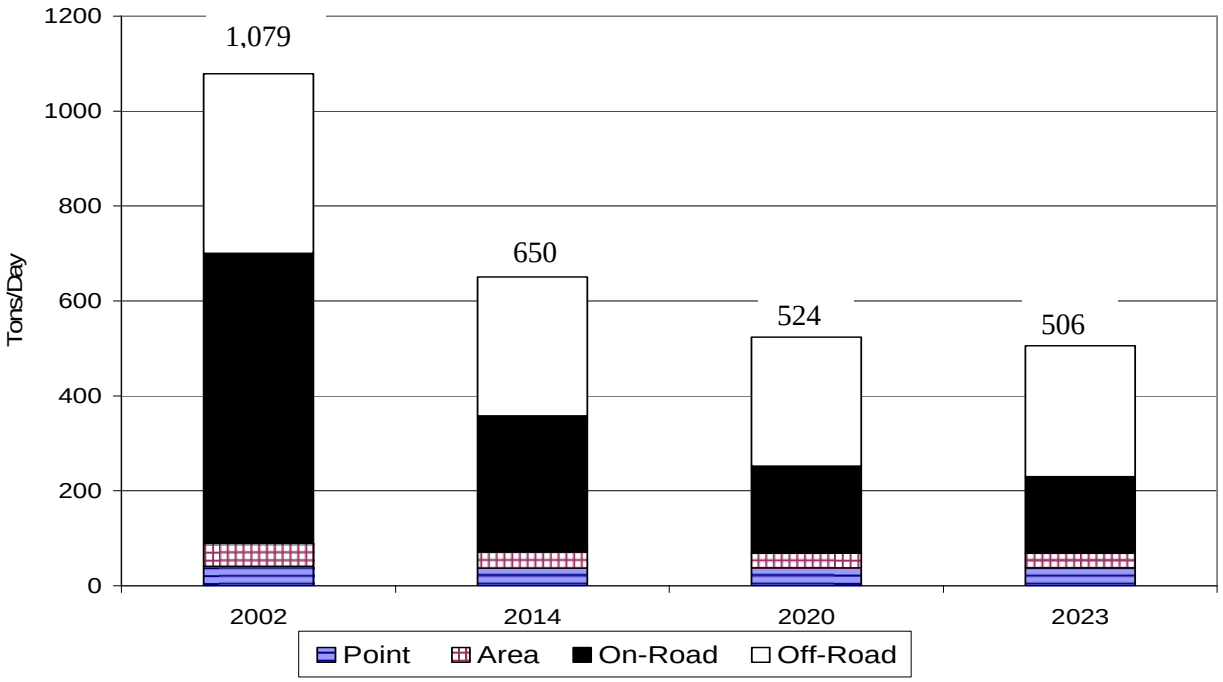


FIGURE 2-7B
NOx Emission Trend by Source Category - Summer Planning

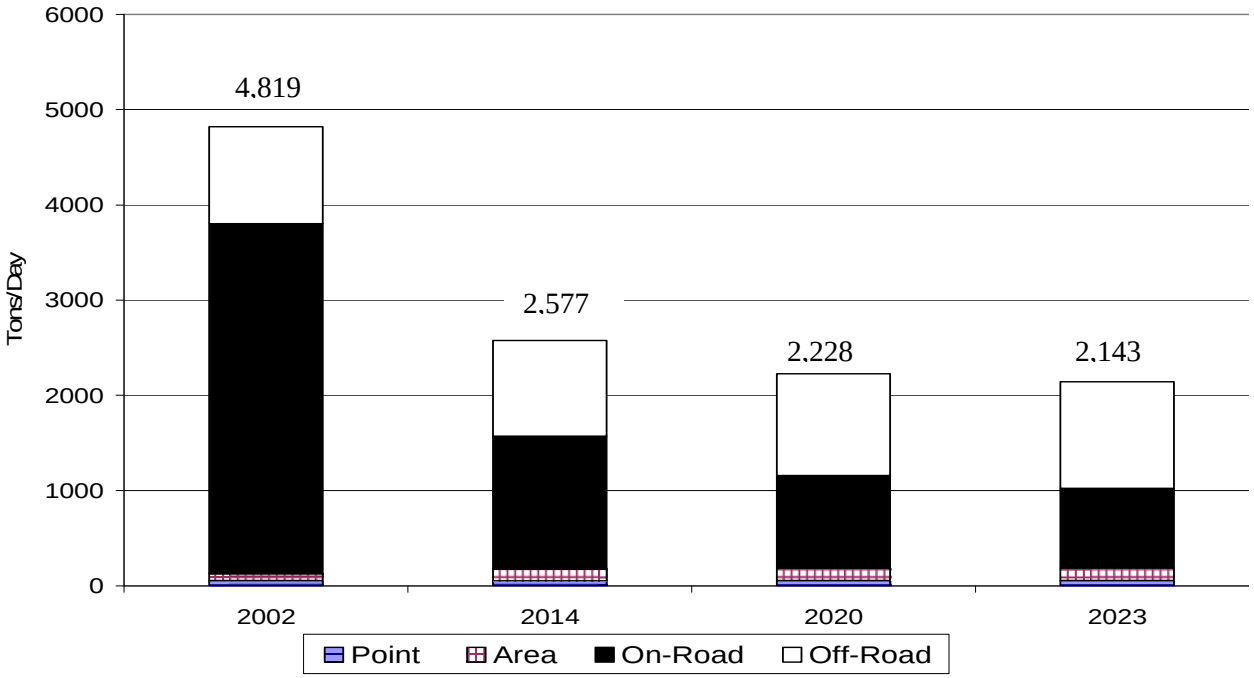


FIGURE 2-8A
CO Emission Trend by Source Category - Average Annual Day

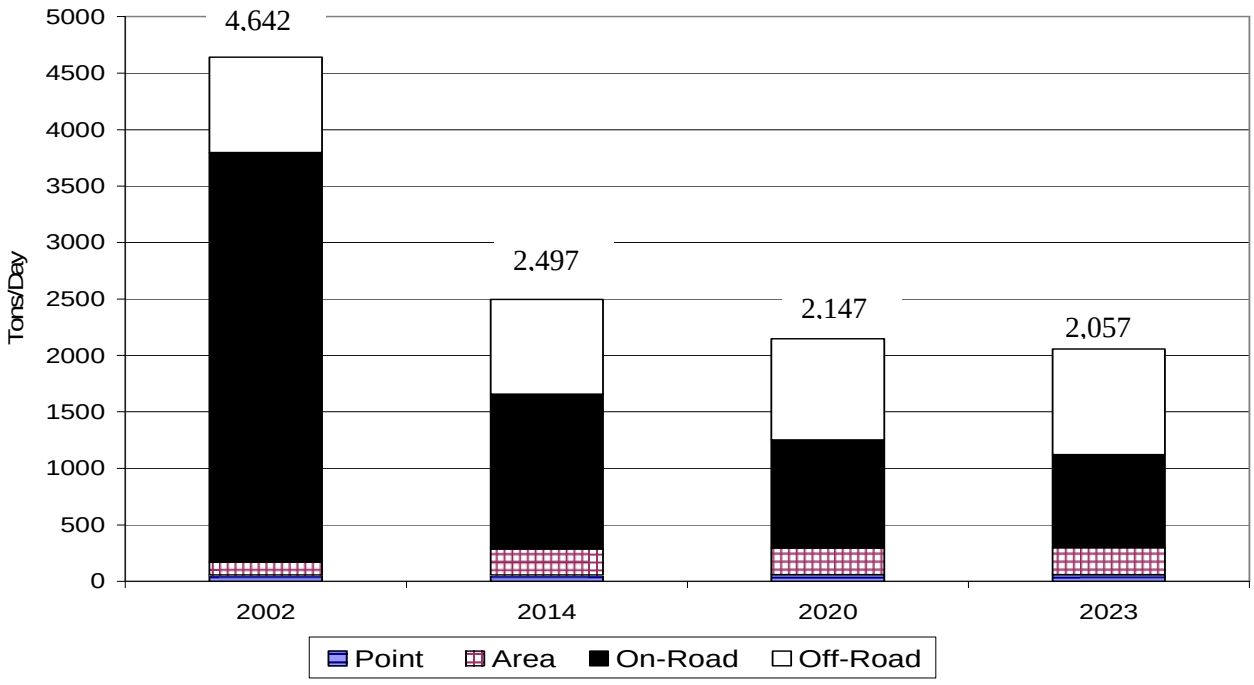


FIGURE 2-8B
CO Emission Trend by Source Category - Winter Planning

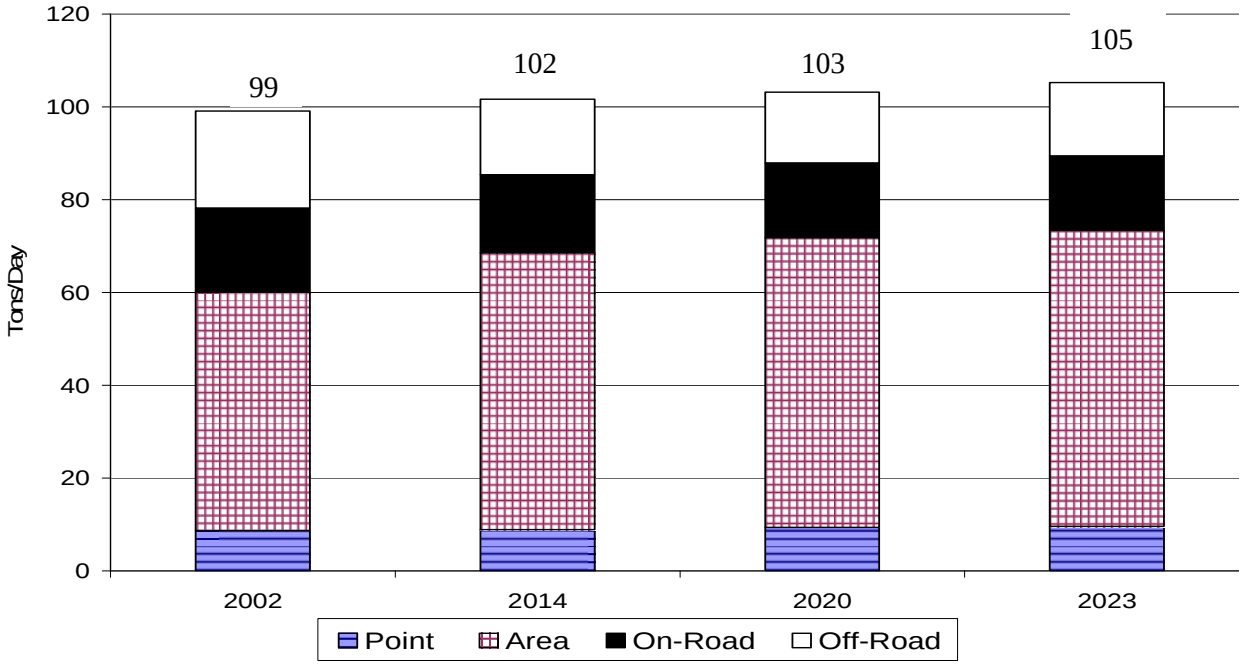


FIGURE 2-9

PM2.5 Emission Trend by Source Category - Average Annual Day

VOC Emissions

As presented in Figure 2-6, emissions from area sources, off-road mobile sources and on-road mobile sources all show a significant decrease over time. Summer planning area source emissions are projected to drop from 265 tons/day in 2002 to 236 tons/day in 2023. Between 2002 and 2023, emissions from off-road mobile sources are expected to fall from 213 tons/day to 135 tons/day, while on-road emissions should fall from 360 tons/day to 103 tons/day. Area source reductions are derived mainly from the AQMD's adopted rules for livestock waste (Rule 1127), architectural coatings (Rule 1113), solvent degreasing (Rule 1122), and solvent cleaning operations (Rule 1171). Off-road reductions result primarily from emission controls small engines and equipment (spark ignited engines under 25 horse power), retrofits on heavy-duty off-road equipment fleet, new standards and retrofits on off-road gas equipment. Since its adoption in 1990, California's Low Emission Vehicle I (LEV I) program has produced significant emission reductions from on-road passenger vehicles by relying on a systems-wide approach to achieve reductions from fuels and mobile source exhaust and evaporative emissions. Both LEV I and LEV II, adopted in 1998, include four primary elements: (1) increasingly stringent exhaust emission standards, (2) an increasingly stringent annual fleet average standard for non-methane organic gas (NMOG), (3) banking and trading provisions, and

(4) a requirement that a specific percentage of vehicles be Zero Emission Vehicles (ZEVs), vehicles with no emissions. Under LEV II, sport utility vehicles, pick-up trucks, and mini-vans must achieve the same emission standards as cars, beginning in 2004-2007. Other programs to reduce emissions from mobile sources include: (1) the Carl Moyer program, which provides financial incentives for the early introduction of clean heavy-duty engines, (2) regulations to reduce emissions from on-road heavy-duty engines and vehicles, (3) low sulfur diesel and cleaner burning gasoline requirements, (4) smog check programs, and (5) AQMD and CARB fleet rules.

NOx Emissions

Figure 2-7 illustrates the NOx emissions by major source category. Summer planning NOx emissions from both off-road mobile (366 tons/day to 246 tons/day) and on-road mobile (611 tons/day to 161 tons/day) sources are projected to decrease substantially between 2002 and 2023. The reductions largely reflect the replacement of existing engines and vehicles with cleaner models as rules are implemented and vehicle fleets turn over. As mentioned above, programs to reduce off-road emissions result primarily from emission controls for spark-ignition marine engines; new emission standards for small and large gasoline powered engines, and liquefied petroleum gas (LPG) use in off-road equipment. On road emission reductions derive from CARB's LEV programs, low-sulfur diesel fuel and cleaner-burning gasoline requirements, regulations to reduce emissions from on-road heavy-duty engines and vehicles, smog check requirements, and other programs.

CO Emissions

Figure 2-8 shows CO emissions projected over time. Almost all of the CO emissions are from mobile sources. The reduction between 2002 and 2023 is from on-road mobile sources (3677 tons/day to 838 tons/day (annual average inventory). The LEV program has been particularly effective in reducing carbon monoxide emissions from on-road vehicles.

PM2.5 Emissions

Figure 2-9 shows the PM2.5 emission trend. A good portion of the emissions are from dust. The projected dust inventories in 2002 and 2023 for paved and unpaved roads are 20 tons/day and 21 tons/day, respectively (annual average inventory).

Growth Impact

Despite rules and regulations adopted by AQMD, CARB and U.S. EPA as of June 2006, the projected future emissions are still above the levels required for achieving federal and state air quality standards. The main reason is that the region as a whole is projected to continue to grow in population; housing, employment and vehicle miles traveled (VMT).

To illustrate the impact from the growth, year 2020 no-growth emissions were estimated by removing the growth factors from the 2020 baseline emissions. Table 2-8 presents the 2020 forecasted emission estimates with and without growth. The growth impact to year 2020 for VOC, NOx, CO, SOx, and PM2.5 is 116, 138, 486, 14, and 19 tons per day, respectively. The majority of the NOx and SOx point sources are in RECLAIM, and the majority of the NOx and SOx area sources are from fuel combustion which, in general, has low growth due to energy conservation. Therefore, the emission differences between the growth and no growth scenarios are relatively small for NOx and SOx point and area sources.

As shown in Table 2-3, the growth from year 2002 to 2020 is significant. We are expecting 22% growth in population; 23% growth in housing units; 21% growth in employment; and 17% growth in vehicle miles traveled. The projected growth will offset the impressive progress made in VOC and NOx reductions through adopted regulations. To overcome the big challenge imposed by growth and meet EPA's more stringent standards necessitates continuing all aggressive efforts by all air quality agencies.

TABLE 2-8
Growth Impact to 2020 Emissions* in Tons Per Day

With Growth	**VOC**	**NOx**	**CO**	**SOx**	**PM2.5**
Point	47	37	57	14	9
Area	231	31	127	3	42
Road Dust	0	0	0	0	21
On-Road	114	184	973	2	16
Off-Road	146	272	1071	31	15
Total	538	524	2228	50	103

No Growth	**VOC**	**NOx**	**CO**	**SOx**	**PM2.5**
Point	35	36	53	14	8
Area	195	29	117	2	34
Road Dust	0	0	0	0	19
On-Road	88	130	763	2	13
Off-Road	104	191	809	18	10
Total	422	386	1742	36	84

* VOC, NOx – Summer Planning; CO, SOx & PM2.5 – Annual Average Inventory

Mobile and Area Source Credit Programs

In 2001, the AQMD Governing Board adopted six mobile and area source pilot credit generation rules: Rule 1612.1 - Mobile Source Credit Generation Pilot Program, Rule 1631 – Pilot Credit Generation Program for Marine Vessels; Rule 1632 – Pilot Credit Generation Program for Hotelling Operations; Rule 1633 – Pilot Credit Generation for Truck/Trailer Refrigeration Units; Rule 1634 – Pilot Credit Generation Program for Truck Stops; and Rule 2507 – Pilot Credit Generation Program for Agricultural Pumps. NOx emission reductions generated from these pilot credit generation rules were used in the RECLAIM program either directly or through the RECLAIM Reserve under the Executive Order (EO) Mitigation Fee Program for power producing facilities and in the Air Quality Investment Program (AQIP) for specific RECLAIM facilities.

All six pilot credit generation rules have been approved by EPA for inclusion in the State Implementation Plan (SIP). As part of EPA requirements, the AQMP needs to identify these emissions explicitly. In the next several months, if there are categories identified for credit generation, the AQMD staff will track them separately to satisfy EPA requirements.

CONTROLLED EMISSION INVENTORIES

This section describes the methodology used to estimate the controlled and remaining emissions after the proposed control measures in the Final 2007 AQMP are implemented for the years 2014 and 2020. Emission reductions are derived from applying the control efficiency of a control measure to the projected baseline inventories.

In addition to the proposed control measures, the impacts of NSR-related set aside tracking and other budgeted emissions for various District programs are also discussed in this section.

To project emission reductions and remaining emissions from the implementation of the proposed control measures, a mathematical algorithm called Controlled Emissions Projection Algorithm (CEPA) is used. CEPA is developed to calculate projected remaining emissions and/or emission reductions for specified control scenarios. CEPA is briefly discussed in this section. A more comprehensive and extensive discussion of CEPA is presented in Technical Report III-A of the 1991 AQMP.

Beginning in 1998 AQMD started several financial incentive programs such as the Carl Moyer Program and lower emission school bus programs to encourage the deployment of diesel replacement or retrofit technologies. Over the years, hundreds of diesel engines in both the on-road and off-road sectors were converted to natural gas, repowered, or retrofitted with particulate traps to achieve reductions needed for the SIP. Table 2-9 provides a summary of reductions expected from those projects already implemented which will still be operating in 2014 and 2020. Based on the typical equipment useful life (i.e., seven years) most of on-road vehicle retrofits are not included. The emission reductions were quantified according to the Carl Moyer Program Guidelines and projects were implemented through contractual agreements.

TABLE 2-9
SIP Reductions from Public Funding Programs
(Tons per Day)

	2014 - NOx	2014 – PM2.5	2020 - NOx	2020 – PM2.5
Carl Moyer Program*	3.90	0.06	5.90	0.17
School Bus Program	0.30	0.04	0.30	0.03
Total	4.20	0.10	6.20	0.20

*Reductions are in addition to Carl Moyer reductions accounted for by CARB.

The District has dedicated staff performing field, audits to ensure that the agreed upon protocols were followed. Based on past contract performance, emission reductions from newly awarded contracts were discounted by 30 percent to reflect the fact that occasionally contract awards were not executed or completed and monies were returned. Since these reductions were not incorporated into either the EMFAC2007 V2.3 or OFF-ROAD model, they were accounted for as part of the AQMP controlled scenarios.

Other public funding programs, such as AB2766 or MSRC, also implemented emission reductions projects. In addition transportation related projects (e.g., transportation demand management) have been incorporated into the SCAG model. As a result, no additional reductions were estimated to avoid double counting. Reductions expected from future public funding programs (i.e., the Carl Moyer Program) are accounted for in various control measures as one of the mechanisms to achieve the required reductions.

Emission Impacts of AQMD Programs

There are several AQMD regulatory programs that have specific impacts on future emissions through certain "set-aside" or exemption provisions. As a result, special emission accounts were created for the Final 2007 AQMP to track these emissions. For air quality modeling purposes, these emissions (except RECLAIM allocations) are distributed across the entire non-RECLAIM point source.

Hi-Lo

In previous AQMPs, a Clean Air Bank was established for high employment – low polluting (HILO) companies in the RECLAIM program. RECLAIM companies creating a minimum of 500 job positions and emitting at a rate (on a per employee basis) less than half of the AQMP 2010 goal from the 1997 AQMP would be exempt from NSR offset requirements. As a result, 0.25 tons/day of NOx and SOx (each) were set aside for this purpose, and added to the RECLAIM baseline emissions in previous AQMPs. Since no facilities have ever applied for these emissions and the 1997 AQMP emissions per employee are out of date, the Final 2007 AQMP no longer includes this set-aside.

SIP Set Aside Accounts

Background

The Final 2007 AQMP includes a series of accounts to track growth from new and modified sources, the Offset Budget, and a SIP Reserve for potential technology assessments. The methodology and assumptions used to develop these tracking accounts for the Final 2007 AQMP are discussed in detail below. It should be noted that emission increases or decreases discussed herein are in reference to the projected AQMP baseline which do not reflect the effect of implementation of the AQMD's New Source Review program.

Growth from New and Modified Sources

The Final 2007 AQMP accounts for growth from new and modified sources based on emission offsets used and generated through the AQMD's New Source Review program. The AQMD's Regulation XIII – New Source Review (NSR) program is an emission reduction control strategy program. It requires new and modified sources to meet a Best Available Control Technology (BACT) emissions level (which is generally cleaner than a Best Available Retrofit Control Technology (BARCT) emissions level), and all external offsets must be traded at a 1.2 to 1 trading ratio. In addition, the AQMD's NSR program requires that all emission increases from new and modified sources be fully offset. Emission offsets are obtained from either the open market or from the AQMD's NSR Account. In general, any facility with a potential to emit greater than or equal to four tons per year of VOC, NOx, SOx, or PM10 must provide offsets or Emission Reduction Credits (ERCs) for all increases of that pollutant. For this Final 2007 AQMP, PM10 in the NSR program is treated the same as PM2.5, and CO is excluded based on the expectation that the federal attainment re-designation will occur prior to the plan submittal to the U.S. EPA. Emission increases from sources below these emissions thresholds or specific source categories that are exempt from obtaining offsets from the open market can obtain emission offsets from the AQMD's NSR Account. The purpose of tracking these emissions is two-fold: 1) estimating the emission benefits of the NSR program by identifying future emission growth that is likely to be subject to NSR's BACT and offset requirements; 2) estimating the amount of ERCs or banked reductions that were not part of 2002 base year emissions and are likely to be used in the future.

Overall Approach and Methodology

The following three steps were used to estimate the potential increase in emissions from new and modified sources by the year 2014 and 2020:

Step 1: Estimate net demand from open market;
Step 2: Estimate net demand from AQMD's NSR Account; and
Step 3: Total Net Demand from New and Modified Sources.

In general, the NSR emissions are estimated based on historical ERC demand from the open market and the debits from the AQMD's NSR Account. The 2014 and 2020 NSR emissions were projected based on the total demand/debits over a period of 8 years. Such estimates are revised as part of AQMP revisions every 3 years through baseline inventory updates. The net demand represents the emission increases in the future years likely to be offset by reductions previously banked (i.e., prior to the AQMP base year 2002) assuming ERCs or credits to the AQMD's NSR account generated post- 2002 will be consumed first. Each of these steps is discussed in more detail below.

Step 1: Estimate NSR Emissions from Open Market

To account for emissions growth from sources that are accessing the open market, the AQMD staff assessed the annual average demand of ERCs from the open market between 2003 and 2005. The pre-2002 ERCs needed are represented by the net demand for ERCs from the open market and are based on the difference between the annual average demand and supply of ERCs for a period of 8 years.

Historical ERC generation and use records were compiled to estimate an average annual demand and supply. The demand excludes those ERCs that were used for CEQA mitigation, orders of abatements, inter-district transfers, non-VOC removal, Rule 2202-On-Road Motor Vehicle Mitigation Options, and variances. ERC demand or consumption in the electric generating sector is separated from other sectors for the purpose of calculating actual emissions. ERC demand includes an offset ratio of 1.2 to 1 and is based on the maximum daily emissions. In order to estimate the actual emissions as the standard methodology for SIP inventory the maximum daily emissions are reduced by 20 percent for all industries, whereas a capacity factor 0.35 is applied to the electric generating facilities (EGFs) based on their typical operations. Table 2-10 shows the total NSR emissions projected for 2014 and 2020. As shown in the table, transactions in the open market are limited, except for VOC, which reflect the fact that ERC availability in the market is scarce. Parentheses indicate negative numbers.

TABLE 2-10
Estimated 2014 and 2020 NSR Emissions in the Open Market
(Tons per Day)

	VOC	NOx	SOx	PM2.5
Annual Average Demand	0.42	0.003	0.002	0.002
Annual Average Supply	0.03	0.003	0.002	0.008
Total NSR Emissions (Demand)	3.32	0.02	0.01	0.01
Pre-2002 ERCs Needed	3.1	0	0	(0.006)

Step 2: Calculate NSR Emissions from AQMD's NSR Account

Sources accessing the AQMD's NSR Account include those sources that are exempt from obtaining offsets from the open market. These sources include those exempt from offset requirements under AQMD Rules 1304-Exemptions and 1309.1-Priority Reserve. R1309.1 was amended several times in the last couple years to address the need for new power plants. Limited access was allowed for new power plants to purchase credits from the AQMD's NSR account. Credits purchased due to the 2002 amendments and the anticipated purchases due to the 2006 amendments were accounted for in this calculation. As previously described, appropriate offset ratio and a capacity factor of 0.35 were applied to EFGs to estimate average daily actual emissions. To estimate emissions growth from these sources, the annual average amount of debits and credits were estimated. Annual average debits and credits are averaged over a two year period, from July 2002 to August 2004. Detail records of such information were documented in the recent R1315 staff report (September 2006).

The net annual average demand and supply is the difference between the annual average demand minus the annual average supply of offsets from the AQMD's NSR Account. As shown in Table 2-11, the annual credits to the NSR account are sufficient for the debits that there is no need to have debits from the pre-2002 credits. Therefore, no addition to the current baseline inventory is necessary for this category.

TABLE 2-11
Estimated 2014 and 2020 NSR Emissions from the AQMD's NSR Account
(Tons per Day)

	VOC	NOx	SOx	PM2.5
Annual Average Demand[1]	0.4	0.7	0.1	0.3
Annual Average Supply[2]	6.5	2.0	0.5	1.2
Total NSR Emissions	3.2	5.5	0.8	2.1
Pre-2002 Debits Needed	0	0	0	0

[1] Based on annual use of offsets from the AQMD's NSR Account, which includes offsets used sources below emissions thresholds, Priority Reserve, and Rule 1304 offset exemptions.

[2] Based on annual supply of offsets into the AQMD's NSR Account, which includes offsets generated from orphan shutdowns and surplus ERC use (see R1315 staff report).

Step 3: Total 2014 and 2020 Net Demand from New and Modified Sources

The total 2014 and 2020 emissions growth and potential need for pre-2002 emission reduction credits for new and modified sources are equivalent to the sum of the NSR emissions from the open market and the AQMD's NSR account and their respective credit supply as shown in Tables 2-10 and 2-11.

TABLE 2-12
Total 2014 and 2020 NSR Emissions and Pre-2002 Credits Needed from New and Modified Sources
(Tons per Day)

	VOC	NOx	SOx	PM10
Total NSR Emissions	6.5	5.5	0.8	2.1
Total Pre-2002 ERC/Debits Needed	3.1	0	0	0

Offset Budget

Rule 1309.2 – Offset Budget, creates an emissions bank to provide offsets to sources that otherwise cannot obtain offsets. Strict eligibility requirements are placed on the offset budget. Only those sources which are not exempt from offsets under Rule 1304 – Exemptions; and not eligible for offsets under Rule 1309.1 – Priority Reserve; can apply for offset budget credits. Other eligibility criteria include a facility having all sources at or below BARCT and conducting a good faith effort to obtain open market offsets. Finally, a non-refundable mitigation fee is required for each pound of credits obtained. The Offset Budget will be funded by expired permit source shutdown credits, emissions reductions from projects funded by mitigation fees collected, and other methods approved by the Executive Officer, CARB, and U.S. EPA. The initial funding of the Offset Budget will be from expired minor source shutdown credits for the years 2000 through 2002.

The Final 2007 AQMP includes a set aside account of one ton per day for each criteria pollutant for the Offset Budget. This line item is to account for emissions that may not be included in the AQMP baseline inventories. As such, the set aside account should not be viewed as the cap for the Offset Budget. Furthermore, AQMP inventories are based on actual emissions not potential to emit or offsets needed under New Source Review. The Offset Budget is designed to be a source of offsets, but used as a "bank of last resort." It ensures the availability of offsets, but encourages sources to seek offsets from the open market first.

NSR Reduction Benefit

Since the AQMP future year baseline inventories already include emissions growth based on SCAG projections in the absence of NSR constraints, adding additional related emissions growth to the baseline inventories would be overstating the potential growth. Therefore, reconciliation of growth projections between existing sources and new sources are necessary. In other words, estimated NSR emissions should displace certain amount of emission growth projected in the current inventories based on the existing equipment mix, without taking into account of NSR requirements. Following a similar methodology employed in the 2003 AQMP, emission reductions attributable to the NSR program due to installation of BACT rather than BARCT were estimated. For VOC, PM2.5, and SOx sources, it is assumed that BACT and BARCT are the same. For NOx, it is assumed that BACT represents, on average, approximately 40 percent of BARCT emissions. Table 2-13 shows the total estimated NSR emissions based on values presented in Table 2-12 plus 1 tpd of offset budget for each pollutant.

TABLE 2-13
Estimated Emission Reduction Benefit from
Installation of BACT for New and Modified Sources
(Tons per Day)

	VOC	NOx	SOx	PM2.5
Estimated New and Modified Sources (2014/2020)	7.5	6.5	1.8	3.1
Emission Displacement	7.5	9.7	1.8	3.1

VOC Emissions from Phase-Out of ODCs and Toxics

The 2003 AQMP included an emissions set-aside for potential VOC emissions increases from the phase-out of ozone depleting compounds (ODCs). The 1997 AQMP set aside approximately 10 tons per day of VOC emissions due to the potential conversion of ODCs to VOC containing materials. Based on historical use, the 2003 AQMP modified the amount of the set aside to 2 tons per day of VOC emissions for the potential increase in VOC emissions from the conversion of ODCs to VOC containing materials and the potential conversion of toxic materials to VOC containing materials. No facilities have needed the ODC conversion for many years. However, due to increasing focus on air toxic controls certain amount of conversion from toxics to VOCs may be inevitable in the future. Therefore, two tons per day are included for potential VOC emission increases to reduce toxics, such as AQMD's R1421- Dry Cleaning Operations.

SIP Reserve for Potential Technology Assessments

To achieve air quality goals, adopted and amended rules and regulations that rely on technology forcing emission limits are often needed. Technology forcing emission limits are designed to provide ample time for the development and implementation of new air pollution technologies. In the event, however, that the new air pollution control technology does not come to fruition by the implementation date of the adopted or amended rule there may be a need to delay or relax the future emission limits. The SIP Reserve is designed to ensure that delaying or relaxing future emission limits for technology forcing rules will not interfere with the Basin's attainment demonstration. In addition, the SIP Reserve allows the AQMD to adopt and amend rules with technology forcing limits, while maintaining SIP approvability if a rule relaxation or delay is needed.

Table 2-14 summarizes the total NSR emissions projected, the demand for pre-2002 emissions and SIP set-aside emissions. These emissions are tracked and accounted for in

the Final 2007 AQMP. Table 2-14 also includes the net emission added to the SIP inventories.

TABLE 2-14
Summary of NSR Emissions Growth and Set-Aside for the Final 2007 AQMP
(2014/2020 Tons per Day)

	VOC	NOx	SOx	PM2.5
Estimated New and Modified Sources	7.5	6.5	1.8	3.1
VOC Emissions from Phase-out of ODC or Toxics	2	N/A	N/A	N/A
SIP Reserve (Technology Assessment)	3	2	N/A	N/A
Total	12.5	8.5	1.8	3.1
Emission Displacement	7.5	9.7	1.8	3.1
Net Addition to SIP Inventories	5	-1.2	0	0

Proposed Control Measures

In order to assess emission reduction potential and remaining emissions from proposed control measures, a control factor profile needs to be developed identifying source category targeted by a measure, its control efficiency, and implementation schedule.

Control Efficiency/Control Factor

One factor that determines the effectiveness of a control measure is its control efficiency (CE), expressed in percentage. Control efficiency is dependent on the specific control technologies proposed, and each control measure may have one or more technology options available. If there is only one feasible control technology in a control measure, its control efficiency is primarily based on an engineering evaluation of the proposed technology. However, if several control technologies are available to control an emission source, the average control efficiency is used. If multiple control technologies are proposed to reduce emissions from various steps of an operation, a weighted average control efficiency is developed to represent an overall control of the emission sources. Once the control efficiency of a control measure is determined, it is used to estimate

emission reductions of the proposed measure. Control efficiencies for the proposed control measures are identified and discussed in detail in Appendix IV of the Final 2007 AQMP.

The control factor (CF) is used to estimate remaining emissions once a proposed control measure is implemented. A control factor equal to 0 indicates complete emission control or 100 percent efficiency. A control factor equal to 1 indicates no emission control or emissions remain unchanged. A high control factor value indicates a low control efficiency. As the control efficiency goes up, the control factor value goes down. The equation to calculate a control factor follows:

$$\mathbf{CF = 1 - (CE/100)}$$

And, the remaining emissions can be calculated as:

$$\mathbf{REM = BE * CF}$$

Where REM is Remaining Emissions, and BE is Baseline Emissions

The Final 2007 AQMP has many milestones for which emission reduction progress needs to be projected. As a result, control factors for each milestone year were developed. The control factor profile for each measure is developed considering the following factors:

- proposed adoption date;
- implementation lead time; and
- phase-in period, if any.

The adoption date as proposed in the Final 2007 AQMP is the date the District or other agency is expected to adopt the control measure as a rule. The implementation lead time reflects the time allowed for the emission sources to install controls. When a rule is implemented, it is not unusual that it may have multiple interim implementation dates prior to full implementation. This is because the requirements in a rule may require two or three phases to reach the final emission target (e.g., a technology-forcing regulation). Or, a rule may regulate such a large population of equipment that it is impractical to implement it all at once, and it becomes administratively necessary to phase in its implementation. In either case, a control profile would indicate an initial implementation date and an ending implementation date. The adoption and implementation schedule of the proposed control measures is presented in Chapter 7 of the Final 2007 AQMP.

Impact Factors

Each proposed control measure describes specific emission sources subject to potential controls. Based on the description of these sources, corresponding sources as tracked in

the emission inventory are identified. In general, emission sources are grouped by major source category, which can be further subcategorized into point sources denoted by Source Classification Codes (SCC) and area sources denoted by Category Emission Source (CES) Codes. To track emission reductions more accurately, the control factors at the SCC/CES level become necessary.

An SCC, an 8-digit EPA code, is used to identify emissions from a point source at the equipment level. A CES, a 5-digit CARB code, is used to describe an area source for which emissions are distributed across the region with no specific locations.

For some measures the controls apply not only to the type of equipment, but also to the industries engaged in a particular activity. In those cases, control factors will be developed by pairing SCCs and Standard Industrial Classification (SIC) Codes to clearly and specifically point out the emission sources in the inventory that the measure is designed to reduce. Such SCC/SIC pairs significantly enhance the ability to quantify emissions closely following the intent of a proposed control measure.

There are instances where an SCC or CES category is not fully impacted by a control measure. As a result, an impact factor (IF) is developed as a weighing factor for such an adjustment. For example, an IF this case, CF is calculated as

$$\mathbf{CF = 1 - ((CE /100) \times IF)}$$

Impact factors will accurately track the measure's baseline emissions, and calculate more accurate reductions from the proposed control measures.

CEPA Emission Calculations

The District uses the CEPA program to calculate emission projections for the proposed AQMP control measures. Based on the control factor profile and projected baseline emissions, CEPA estimates emission reductions and remaining emissions for future years by pollutant (i.e., summer VOC and NOx; winter CO and NO_2; and average annual day for VOC, NOx, CO, SOx and PM10).

CEPA allows interaction of multiple control measures affecting a specific emission source, avoiding double counting of emission reductions from additional measures. It also provides flexibility in analyzing various scenarios and improves accuracy by standardizing calculation methodologies.

To run CEPA, the program requires four data input files. These input files are as follows:

1. Master Measure File - This file contains all the measures proposed in the AQMP. There is one master measure file in the CEPA program.

2. Scenario File - This file is a listing of selected measures to characterize emission reductions, and is a subset of the master measure file. For example, it can contain a group of control measures for mobile sources only, or a group of measures to be implemented by U.S. EPA.

3. Control Factor File - This file shows control factor by pollutant by SCC/SIC (or CES/CES) pairs for each control measure in a specified year.

4. Baseline Emission File - This file contains projected emission data (tons/day) for future years based on the 2002 emissions inventory. There are different types of baseline emission data available for CEPA runs. These are the average annual day emissions inventory with pollutants VOC, NOx, CO, SOx, PM10; and PM2.5; and the planning inventory with pollutants VOC and NOx during summer, and CO and NO_2 during winter.

CEPA calculates the remaining emissions at the SCC/SIC level. It can generate many types of emission summary reports or electronic files. For example, the program can provide composite control factors for on-road mobile sources in sixteen categories used in the air quality modeling analysis or composite control factors from all the proposed control measures in the scenario file. It can also provide remaining emissions by SCC/S1C or CES/CES pairs; by major source category; or by SIC. It can present emission reductions by each control measure in the absence of other competing measures; or reductions for each control measure following a pre-determined implementation sequence. The result of CEPA runs will be presented in Appendix V of the Final 2007 AQMP.

CARB Emission Data Reports System

As mentioned in Chapter 1, of this appendix the entire emission inventories are compiled and maintained by CARB in its statewide emission related information databases named California Emission Inventory Development and Reporting System (CEIDARS), and California Emission Forecasting and Planning Inventory System (CEFIS).

In both systems, emissions are traced by CARB's coding method called Emission Inventory Codes (EIC code). The EIC code is a 14-digit number arranged into four fields: major category, source category, materials description and emission sub-category. For example, EIC 210-200-3300-0000 is for dry cleaning using perchloroethylene. 210 indicates this source is under laundering group. 200 means the source category is dry cleaning. 3300 refers to the material perchloroethylene. 0000 implies there is no sub-category for this particular source. EIC separates emission sources into four major divisions: stationary, area, non-anthropogenic, and mobile source. This coding system allows flexibility in how sources are selected,

sorted and grouped to fit users' needs. EIC links area sources and point sources together to allow a computer program to automatically reconcile point and area source emissions. In the Final 2007 AQMP, all the emission summary reports are based on CARB's EIC codes. Because only the anthropogenic sources are included in this document, all summary reports in appendices include three major divisions. They are stationary, area, and mobile source.

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Section 13.1 used for forest burning.

ATTACHMENT A

FINAL 2007 AQMP APPENDIX III

ANNUAL AVERAGE EMISSIONS

BY MAJOR SOURCE CATEGORY

TABLE A-1

2002 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.81	1.72	16.13	1.31	0.45	1.40	1.40	1.40
20	Cogeneration	1.03	0.12	0.80	0.06	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.30	0.02	0.16	0.16	0.16
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	11.96	1.58	8.10	9.33	1.13	1.16	1.14	1.14
52	Food and Agricultural Processing	0.25	0.16	0.97	1.83	0.03	0.18	0.18	0.17
60	Service and Commercial	7.65	1.26	9.76	15.76	0.58	1.43	1.43	1.43
99	Other (Fuel Combustion)	1.03	0.79	2.59	6.15	0.03	0.33	0.33	0.31
Total Fuel Combustion		35.51	7.16	52.64	34.74	2.25	6.51	6.40	6.33
Waste Disposal									
110	Sewage Treatment	0.53	0.30	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	4.69	0.09	0.24	0.54	0.33	0.48	0.31	0.30
130	Incineration	0.51	0.08	0.76	1.22	0.08	0.18	0.10	0.09
199	Other (Waste Disposal)	59.52	7.09	0.00	0.00	0.00	0.03	0.02	0.02
Total Waste Disposal		65.25	7.56	1.01	1.77	0.41	0.69	0.44	0.42
Cleaning and Surface Coatings									
210	Laundering	3.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	61.43	18.55	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	25.96	25.01	0.03	0.03	0.00	0.56	0.54	0.52
240	Printing	5.50	5.50	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	3.85	3.36	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	1.36	1.36	0.16	0.09	0.02	0.09	0.09	0.09
Total Cleaning and Surface Coatings		101.23	53.91	0.19	0.11	0.02	0.65	0.63	0.60
Petroleum Production and Marketing									
310	Oil and Gas Production	4.46	2.49	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	6.49	4.68	8.27	0.36	6.96	1.64	1.08	0.87
330	Petroleum Marketing	28.72	27.75	0.48	0.02	0.00	0.03	0.03	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		39.68	34.93	8.77	0.41	6.96	1.67	1.11	0.90

TABLE A-1
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	12.30	10.99	0.03	0.00	0.00	0.61	0.51	0.47
420	Food and Agriculture	2.81	2.69	0.00	0.00	0.00	0.54	0.18	0.03
430	Mineral Processes	0.40	0.35	0.24	0.03	0.00	13.76	7.23	1.68
440	Metal Processes	0.05	0.04	1.34	0.01	0.02	0.73	0.48	0.34
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.16	3.58	2.17
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.28	0.26	0.25
470	Electronics	0.07	0.06	0.00	0.00	0.00	0.01	0.01	0.00
499	Other (Industrial Processes)	6.75	6.43	0.48	0.14	0.00	0.41	0.28	0.22
Total Industrial Processes		22.51	20.68	2.11	0.18	0.04	21.51	12.53	5.17
Solvent Evaporation									
510	Consumer Products	130.40	110.40	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	49.81	48.58	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	2.27	2.26	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.80	0.73	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		183.28	161.96	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	8.97	3.89	54.60	26.51	0.39	8.48	8.06	7.84
620	Farming Operations	123.37	9.87	0.00	0.00	0.00	1.71	0.78	0.17
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	81.61	39.91	4.00
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	274.39	125.39	18.93
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	22.99	13.56	1.35
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	5.57	2.80	0.42
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	0.63	0.36	4.20	0.17	0.01	0.56	0.55	0.51
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.57	1.80	0.00	0.00	0.00	15.41	14.22	13.00
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				28.62	11.66			
Total Miscellaneous Processes		135.88	16.16	61.82	55.38	12.06	411.17	205.71	46.63

TABLE A-1
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	193.21	178.47	1631.91	147.56	1.19	7.13	6.99	4.03
722	Light Duty Trucks 1 (T1)	33.02	30.56	333.41	28.92	0.27	1.22	1.20	0.68
723	Light Duty Trucks 2 (T2)	66.90	60.71	730.20	98.28	0.54	3.80	3.71	2.50
724	Medium Duty Trucks (T3)	34.75	31.35	403.58	51.69	0.33	1.58	1.55	1.01
732	Light Heavy Duty Gas Trucks 1 (T4)	20.74	18.83	202.03	26.88	0.07	0.26	0.26	0.14
733	Light Heavy Duty Gas Trucks 2 (T5)	3.28	3.01	30.71	4.01	0.01	0.05	0.05	0.02
734	Medium Heavy Duty Gas Trucks (T6)	8.92	8.26	78.44	7.94	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	5.01	4.46	71.93	9.46	0.01	0.04	0.04	0.02
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.02	0.02	0.08	0.64	0.00	0.01	0.01	0.01
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.22	0.19	0.83	8.37	0.04	0.08	0.08	0.06
744	Medium Heavy Duty Diesel Truck (T6)	1.28	1.07	10.15	71.09	0.57	1.60	1.60	1.41
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	14.38	12.03	49.22	147.84	1.01	8.69	8.69	7.75
750	Motorcycles (MCY)	10.06	9.49	72.94	1.74	0.00	0.09	0.08	0.06
760	Diesel Urban Buses (UB)	0.50	0.42	2.65	12.86	0.13	0.23	0.23	0.21
762	Gas Urban Buses (UB)	0.58	0.48	5.36	0.92	0.00	0.01	0.01	0.00
770	School Buses (SB)	0.38	0.34	4.69	4.23	0.04	0.14	0.14	0.13
776	Other Bus (OB)	0.76	0.70	8.16	3.58	0.02	0.06	0.06	0.05
780	Motor Homes (MH)	1.41	1.23	40.56	3.94	0.02	0.04	0.04	0.02
	On-Road Baseline Adjustment	0.00	0.00	0.00	-1.65	0.00	0.00	0.00	0.00
Total On-Road Motor Vehicles		395.42	361.62	3676.85	628.30	4.26	25.08	24.79	18.13
Other Mobile Sources									
810	Aircraft	7.16	6.39	46.02	13.24	1.30	0.82	0.77	0.75
820	Trains	3.01	2.51	6.31	37.91	1.24	0.93	0.92	0.84
830	Ships and Commercial Boats	4.30	3.60	8.80	64.29	23.45	4.58	4.44	4.28
840	Recreational Boats	47.23	44.15	202.50	7.37	0.02	2.41	2.17	1.64
850	Off-Road Recreational Vehicles	6.56	6.21	22.64	0.20	0.04	0.09	0.08	0.06
860	Off-Road Equipment	113.37	99.23	721.55	241.71	1.23	14.35	14.19	12.82
870	Farm Equipment	2.04	1.76	8.21	8.56	0.06	0.53	0.53	0.48
890	Fuel Storage and Handling	16.30	16.25	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
	Off-Road Baseline Adjustment	0.00	0.00	0.00	-0.98	0.00	0.00	0.00	0.00
Total Other Mobile Sources		199.97	180.10	1016.03	372.30	27.34	23.71	23.10	20.87
Total Stationary and Area Sources		583.34	302.36	126.54	92.59	21.74	442.22	226.84	60.07
Total On-Road Vehicles		395.42	361.62	3676.85	628.30	4.26	25.08	24.79	18.13
Total Other Mobile		199.97	180.10	1016.03	372.30	27.34	23.71	23.10	20.87
Total Anthropogenic		1178.73	844.08	4819.42	1093.18	53.34	491.01	274.73	99.07

TABLE A-2

2005 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.10	1.34	12.57	0.86	0.33	1.08	1.08	1.08
20	Cogeneration	1.05	0.12	0.81	0.06	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.21	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	12.21	1.64	8.49	9.12	1.21	1.23	1.21	1.21
52	Food and Agricultural Processing	0.23	0.14	0.91	1.58	0.01	0.15	0.15	0.15
60	Service and Commercial	7.92	1.30	10.02	14.89	0.56	1.44	1.44	1.44
99	Other (Fuel Combustion)	0.96	0.71	2.36	5.65	0.03	0.30	0.30	0.28
Total Fuel Combustion		34.25	6.78	49.45	32.36	2.16	6.20	6.09	6.02
Waste Disposal									
110	Sewage Treatment	0.56	0.32	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	4.80	0.09	0.25	0.56	0.33	0.49	0.32	0.31
130	Incineration	0.54	0.09	0.77	1.23	0.08	0.18	0.11	0.10
199	Other (Waste Disposal)	63.73	7.57	0.00	0.00	0.00	0.03	0.02	0.02
Total Waste Disposal		69.63	8.07	1.02	1.79	0.41	0.70	0.46	0.43
Cleaning and Surface Coatings									
210	Laundering	3.26	0.14	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	48.06	8.11	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	24.71	23.79	0.03	0.03	0.00	0.63	0.61	0.59
240	Printing	5.49	5.49	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	3.57	3.11	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.59	0.59	0.16	0.10	0.02	0.09	0.09	0.09
Total Cleaning and Surface Coatings		85.67	41.23	0.20	0.13	0.02	0.73	0.70	0.67
Petroleum Production and Marketing									
310	Oil and Gas Production	2.22	1.34	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.15	3.80	8.27	0.36	6.96	1.54	1.02	0.81
330	Petroleum Marketing	27.96	27.28	0.49	0.02	0.00	0.03	0.03	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		35.34	32.42	8.79	0.41	6.96	1.57	1.05	0.84

TABLE A-2
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	10.13	9.18	0.04	0.00	0.00	0.66	0.55	0.51
420	Food and Agriculture	2.80	2.68	0.00	0.00	0.00	0.54	0.18	0.03
430	Mineral Processes	0.40	0.35	0.24	0.03	0.00	14.92	7.86	1.82
440	Metal Processes	0.05	0.04	1.53	0.01	0.01	0.79	0.52	0.37
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.19	3.60	2.18
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.28	0.26
470	Electronics	0.09	0.07	0.00	0.00	0.00	0.02	0.01	0.00
499	Other (Industrial Processes)	7.08	6.74	0.50	0.14	0.00	0.42	0.28	0.22
Total Industrial Processes		20.67	19.18	2.33	0.19	0.05	22.83	13.27	5.39
Solvent Evaporation									
510	Consumer Products	118.71	100.70	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	39.72	38.79	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	2.02	2.01	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.89	0.81	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		161.34	142.31	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	8.97	3.89	55.39	25.14	0.38	8.55	8.13	7.90
620	Farming Operations	94.36	7.55	0.00	0.00	0.00	1.55	0.70	0.16
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	92.76	45.36	4.55
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	271.48	124.06	18.73
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	20.54	12.12	1.20
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	4.88	2.45	0.37
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	5.70	3.25	50.74	1.53	0.46	5.40	5.19	4.64
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.65	1.85	0.00	0.00	0.00	15.89	14.66	13.39
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				33.46	11.74			
Total Miscellaneous Processes		112.02	16.78	109.15	60.21	12.58	421.50	213.11	51.35

TABLE A-2
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	140.98	130.67	1205.17	102.06	0.91	7.33	7.18	4.11
722	Light Duty Trucks 1 (T1)	26.52	24.60	256.12	21.36	0.20	1.21	1.18	0.70
723	Light Duty Trucks 2 (T2)	57.25	52.32	611.07	78.03	0.50	4.70	4.59	3.08
724	Medium Duty Trucks (T3)	30.42	27.52	338.10	44.59	0.33	2.12	2.08	1.37
732	Light Heavy Duty Gas Trucks 1 (T4)	18.08	16.47	159.54	23.51	0.06	0.29	0.29	0.15
733	Light Heavy Duty Gas Trucks 2 (T5)	3.21	2.95	27.06	4.04	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	7.52	6.95	67.14	7.69	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	4.79	4.22	66.56	9.28	0.01	0.04	0.04	0.02
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.28	0.24	1.45	13.79	0.09	0.13	0.13	0.09
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.30	0.25	1.21	10.89	0.06	0.11	0.11	0.08
744	Medium Heavy Duty Diesel Truck (T6)	1.54	1.29	12.42	77.16	0.74	1.89	1.89	1.65
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	15.82	13.24	52.93	166.15	1.20	9.05	9.04	8.03
750	Motorcycles (MCY)	15.70	14.62	132.16	3.31	0.01	0.16	0.15	0.10
760	Diesel Urban Buses (UB)	0.46	0.39	2.37	11.55	0.12	0.21	0.21	0.19
762	Gas Urban Buses (UB)	0.53	0.44	4.73	0.77	0.00	0.01	0.01	0.00
770	School Buses (SB)	0.34	0.29	3.92	4.09	0.04	0.14	0.14	0.13
776	Other Bus (OB)	0.73	0.67	7.95	3.89	0.03	0.07	0.07	0.06
780	Motor Homes (MH)	1.07	0.94	28.89	3.46	0.02	0.05	0.05	0.03
	On-Road Baseline Adjustment	0.00	0.00	0.00	-9.57	0.00	N/A	N/A	-0.09
Total On-Road Motor Vehicles		325.54	298.07	2978.79	576.05	4.34	27.62	27.27	19.76
Other Mobile Sources									
810	Aircraft	8.14	7.26	52.17	15.36	1.49	0.89	0.83	0.81
820	Trains	3.06	2.55	6.65	32.26	1.33	0.94	0.94	0.86
830	Ships and Commercial Boats	4.37	3.67	9.69	73.33	30.98	5.55	5.37	5.18
840	Recreational Boats	45.59	42.86	208.56	9.58	0.02	2.67	2.40	1.82
850	Off-Road Recreational Vehicles	7.16	6.85	16.42	0.17	0.04	0.06	0.06	0.04
860	Off-Road Equipment	106.99	94.82	685.35	221.03	1.28	13.53	13.36	12.05
870	Farm Equipment	1.85	1.59	7.59	7.68	0.06	0.48	0.47	0.44
890	Fuel Storage and Handling	15.48	15.43	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
	Off-Road Baseline Adjustment	0.00	0.00	0.00	-1.38	0.00	N/A	N/A	-0.09
Total Other Mobile Sources		192.64	175.03	986.43	358.03	35.20	24.12	23.43	21.11
Total Stationary and Area Sources		518.92	266.77	170.94	95.09	22.18	453.55	234.70	64.72
Total On-Road Vehicles		325.54	298.07	2978.79	576.05	4.34	27.62	27.27	19.76
Total Other Mobile		192.64	175.03	986.43	358.03	35.20	24.12	23.43	21.11
Total Anthropogenic		1037.10	739.87	4136.16	1029.16	61.72	505.29	285.40	105.59

TABLE A-3

2008 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.64	1.68	15.76	1.03	0.41	1.36	1.35	1.35
20	Cogeneration	1.06	0.12	0.83	0.06	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.20	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	13.07	1.76	9.16	9.04	1.33	1.22	1.20	1.20
52	Food and Agricultural Processing	0.17	0.09	0.77	0.84	0.01	0.11	0.10	0.10
60	Service and Commercial	8.30	1.36	10.52	13.40	0.59	1.49	1.49	1.49
99	Other (Fuel Combustion)	0.86	0.61	2.12	5.00	0.03	0.27	0.26	0.25
Total Fuel Combustion		36.88	7.16	53.44	29.57	2.38	6.42	6.32	6.26
Waste Disposal									
110	Sewage Treatment	0.58	0.33	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	4.92	0.09	0.25	0.58	0.34	0.50	0.33	0.31
130	Incineration	0.58	0.10	0.79	1.27	0.08	0.19	0.12	0.11
199	Other (Waste Disposal)	59.14	7.05	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		65.23	7.57	1.05	1.85	0.42	0.73	0.47	0.45
Cleaning and Surface Coatings									
210	Laundering	3.41	0.15	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	52.08	8.65	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	20.85	20.02	0.04	0.04	0.00	0.72	0.69	0.67
240	Printing	4.10	4.10	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.05	3.54	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.64	0.64	0.17	0.11	0.02	0.05	0.05	0.05
Total Cleaning and Surface Coatings		85.13	37.09	0.21	0.15	0.02	0.77	0.74	0.71
Petroleum Production and Marketing									
310	Oil and Gas Production	1.45	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.09	3.74	8.27	0.36	1.11	1.34	0.90	0.70
330	Petroleum Marketing	27.70	27.01	0.52	0.02	0.00	0.01	0.01	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		34.26	31.60	8.81	0.41	1.11	1.36	0.91	0.72

TABLE A-3
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	10.57	9.55	0.04	0.00	0.01	0.72	0.60	0.55
420	Food and Agriculture	2.88	2.74	0.00	0.01	0.00	0.56	0.19	0.03
430	Mineral Processes	0.41	0.36	0.26	0.04	0.00	5.18	2.82	0.97
440	Metal Processes	0.05	0.04	1.80	0.01	0.01	0.88	0.58	0.41
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.63	3.90	2.37
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.29	0.28	0.27
470	Electronics	0.11	0.08	0.00	0.00	0.00	0.02	0.01	0.00
499	Other (Industrial Processes)	6.85	6.50	0.52	0.15	0.00	0.43	0.29	0.23
Total Industrial Processes		20.99	19.39	2.63	0.21	0.05	13.71	8.66	4.82
Solvent Evaporation									
510	Consumer Products	119.64	101.83	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	23.21	22.65	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.80	1.78	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.96	0.88	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		145.61	127.14	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	9.35	4.05	57.51	24.22	0.40	8.89	8.45	8.21
620	Farming Operations	70.58	5.65	0.00	0.00	0.00	1.41	0.64	0.14
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	101.91	49.83	4.99
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	267.56	122.28	18.46
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.47	10.31	1.02
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	4.53	2.29	0.34
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	5.70	3.25	50.73	1.53	0.46	5.40	5.19	4.64
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.77	1.94	0.00	0.00	0.00	16.61	15.32	14.00
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				28.78	11.76			
Total Miscellaneous Processes		88.74	15.13	111.26	54.61	12.62	424.23	214.75	52.21

TABLE A-3
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	94.42	86.93	834.01	69.42	0.83	7.05	6.91	3.96
722	Light Duty Trucks 1 (T1)	18.60	17.16	180.73	15.14	0.15	1.14	1.12	0.67
723	Light Duty Trucks 2 (T2)	42.72	38.83	446.29	55.07	0.47	4.60	4.50	3.07
724	Medium Duty Trucks (T3)	23.27	20.88	251.97	32.49	0.30	2.10	2.05	1.38
732	Light Heavy Duty Gas Trucks 1 (T4)	10.98	9.94	89.37	16.03	0.05	0.23	0.23	0.12
733	Light Heavy Duty Gas Trucks 2 (T5)	2.04	1.86	15.53	3.07	0.01	0.05	0.05	0.02
734	Medium Heavy Duty Gas Trucks (T6)	4.34	3.98	40.63	5.27	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	3.12	2.69	42.98	6.35	0.00	0.03	0.03	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.18	9.16	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.23	0.19	0.97	7.61	0.01	0.08	0.08	0.06
744	Medium Heavy Duty Diesel Truck (T6)	1.16	0.97	9.68	52.46	0.07	1.36	1.36	1.18
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	14.52	12.16	48.33	152.77	0.15	7.82	7.82	6.89
750	Motorcycles (MCY)	13.57	12.47	117.44	3.23	0.01	0.15	0.14	0.09
760	Diesel Urban Buses (UB)	0.45	0.37	2.27	11.03	0.01	0.20	0.20	0.17
762	Gas Urban Buses (UB)	0.53	0.42	4.63	0.80	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.32	0.27	3.49	4.12	0.00	0.15	0.15	0.13
776	Other Bus (OB)	0.56	0.51	6.30	3.35	0.01	0.07	0.07	0.05
780	Motor Homes (MH)	0.76	0.64	19.94	2.96	0.01	0.05	0.05	0.03
	On-Road Baseline Adjustment	N/A	-0.11	0.00	-14.99	0.00	N/A	N/A	-0.17
Total On-Road Motor Vehicles		231.82	210.35	2115.74	435.34	2.10	25.22	24.90	17.75
Other Mobile Sources									
810	Aircraft	9.07	8.10	58.31	17.42	1.68	0.97	0.91	0.89
820	Trains	2.97	2.48	7.06	28.95	0.14	0.86	0.85	0.78
830	Ships and Commercial Boats	4.31	3.61	10.35	76.95	20.10	4.18	4.05	3.90
840	Recreational Boats	42.37	39.93	206.88	10.74	0.02	3.11	2.80	2.12
850	Off-Road Recreational Vehicles	7.16	6.85	15.89	0.16	0.04	0.06	0.05	0.04
860	Off-Road Equipment	89.51	79.91	674.97	190.69	0.18	11.82	11.65	10.47
870	Farm Equipment	1.56	1.35	7.20	6.65	0.01	0.40	0.40	0.36
890	Fuel Storage and Handling	10.37	10.33	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
	Off-Road Baseline Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Other Mobile Sources		167.32	152.56	980.66	331.56	22.17	21.40	20.71	18.56
Total Stationary and Area Sources		476.84	245.08	177.40	86.80	16.60	447.24	231.87	65.19
Total On-Road Vehicles		231.82	210.35	2115.74	435.34	2.10	25.22	24.90	17.75
Total Other Mobile		167.32	152.56	980.66	331.56	22.17	21.40	20.71	18.56
Total Anthropogenic		875.98	607.99	3273.80	853.70	40.87	493.86	277.48	101.50

TABLE A-4

2010 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.02	1.32	12.39	0.69	0.33	1.07	1.07	1.06
20	Cogeneration	1.07	0.12	0.83	0.05	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.13	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	13.51	1.83	9.56	8.77	1.41	1.28	1.26	1.26
52	Food and Agricultural Processing	0.17	0.09	0.76	0.78	0.01	0.10	0.10	0.10
60	Service and Commercial	8.52	1.38	10.69	11.88	0.60	1.50	1.50	1.50
99	Other (Fuel Combustion)	0.80	0.54	1.97	4.51	0.03	0.24	0.24	0.22
Total Fuel Combustion		35.87	6.82	50.49	26.80	2.39	6.18	6.08	6.02
Waste Disposal									
110	Sewage Treatment	0.60	0.34	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.01	0.09	0.26	0.59	0.35	0.52	0.33	0.32
130	Incineration	0.61	0.10	0.80	1.29	0.08	0.20	0.12	0.11
199	Other (Waste Disposal)	56.97	6.80	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		63.19	7.34	1.06	1.89	0.43	0.74	0.49	0.46
Cleaning and Surface Coatings									
210	Laundering	3.51	0.15	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	54.93	9.12	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	21.61	20.74	0.05	0.04	0.00	0.78	0.75	0.72
240	Printing	4.20	4.19	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.38	3.82	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.68	0.68	0.18	0.12	0.02	0.05	0.05	0.05
Total Cleaning and Surface Coatings		89.30	38.70	0.22	0.16	0.02	0.83	0.80	0.77
Petroleum Production and Marketing									
310	Oil and Gas Production	1.45	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.08	3.72	8.27	0.36	0.80	1.24	0.84	0.65
330	Petroleum Marketing	27.84	27.13	0.54	0.02	0.00	0.01	0.01	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		34.38	31.71	8.83	0.41	0.81	1.26	0.85	0.66

TABLE A-4
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	11.16	10.07	0.04	0.00	0.01	0.76	0.63	0.58
420	Food and Agriculture	2.93	2.79	0.00	0.01	0.00	0.58	0.19	0.03
430	Mineral Processes	0.41	0.36	0.26	0.04	0.00	5.40	2.95	1.01
440	Metal Processes	0.06	0.04	1.98	0.01	0.01	0.93	0.61	0.43
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.92	4.11	2.49
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.28	0.27
470	Electronics	0.12	0.09	0.00	0.00	0.00	0.02	0.01	0.01
499	Other (Industrial Processes)	6.98	6.62	0.53	0.15	0.00	0.44	0.30	0.23
Total Industrial Processes		21.78	20.09	2.84	0.21	0.05	14.36	9.08	5.06
Solvent Evaporation									
510	Consumer Products	121.81	103.67	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	23.71	23.13	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.70	1.69	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.01	0.93	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		148.23	129.42	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	9.50	4.12	58.58	21.49	0.40	9.04	8.59	8.35
620	Farming Operations	59.33	4.75	0.00	0.00	0.00	1.33	0.60	0.13
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	108.12	52.87	5.30
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	269.98	123.38	18.63
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.43	10.28	1.02
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	4.32	2.19	0.33
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	5.70	3.25	50.72	1.53	0.46	5.40	5.19	4.64
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.86	2.00	0.00	0.00	0.00	17.09	15.77	14.41
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.08	11.76			
Total Miscellaneous Processes		77.73	14.36	112.32	50.18	12.62	433.16	219.31	53.22

TABLE A-4
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	77.10	71.10	695.06	55.16	0.84	7.21	7.07	4.06
722	Light Duty Trucks 1 (T1)	15.25	14.08	149.19	12.18	0.15	1.17	1.14	0.69
723	Light Duty Trucks 2 (T2)	38.73	35.39	394.60	45.68	0.47	4.78	4.67	3.21
724	Medium Duty Trucks (T3)	21.30	19.21	224.73	27.33	0.29	2.18	2.13	1.46
732	Light Heavy Duty Gas Trucks 1 (T4)	9.92	9.01	76.30	14.67	0.05	0.24	0.24	0.12
733	Light Heavy Duty Gas Trucks 2 (T5)	1.82	1.68	12.85	2.88	0.01	0.05	0.05	0.03
734	Medium Heavy Duty Gas Trucks (T6)	3.61	3.32	35.14	4.65	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	2.72	2.34	37.42	5.45	0.00	0.02	0.02	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.25	8.10	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.23	0.19	0.99	6.72	0.01	0.07	0.07	0.05
744	Medium Heavy Duty Diesel Truck (T6)	1.12	0.94	9.68	45.00	0.07	1.28	1.28	1.10
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	13.38	11.20	45.22	135.29	0.16	6.95	6.95	6.07
750	Motorcycles (MCY)	12.74	11.57	104.32	3.07	0.01	0.13	0.12	0.08
760	Diesel Urban Buses (UB)	0.44	0.37	2.23	10.45	0.01	0.19	0.19	0.17
762	Gas Urban Buses (UB)	0.51	0.41	4.43	0.78	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.33	0.27	3.42	4.01	0.00	0.15	0.15	0.13
776	Other Bus (OB)	0.48	0.43	5.49	2.76	0.01	0.06	0.06	0.05
780	Motor Homes (MH)	0.59	0.50	15.30	2.53	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		200.51	182.19	1817.62	386.72	2.11	24.68	24.33	17.35
Other Mobile Sources									
810	Aircraft	9.74	8.69	62.43	18.84	1.81	1.03	0.96	0.94
820	Trains	2.93	2.45	7.33	19.69	0.15	0.85	0.84	0.77
830	Ships and Commercial Boats	4.29	3.59	10.84	80.92	18.57	4.16	4.03	3.89
840	Recreational Boats	40.01	37.78	203.94	10.69	0.02	3.47	3.12	2.36
850	Off-Road Recreational Vehicles	7.36	7.03	16.47	0.15	0.05	0.06	0.06	0.04
860	Off-Road Equipment	80.61	72.31	671.87	171.88	0.18	10.73	10.55	9.46
870	Farm Equipment	1.42	1.23	7.02	6.11	0.01	0.37	0.37	0.34
890	Fuel Storage and Handling	8.73	8.70	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
Total Other Mobile Sources		155.09	141.79	979.91	308.28	20.79	20.66	19.93	17.80
Total Stationary and Area Sources		470.48	248.44	175.76	79.65	16.32	456.55	236.63	66.21
Total On-Road Vehicles		200.51	182.19	1817.62	386.72	2.11	24.68	24.33	17.35
Total Other Mobile		155.09	141.79	979.91	308.28	20.79	20.66	19.93	17.80
Total Anthropogenic		826.08	572.42	2973.29	774.65	39.22	501.89	280.89	101.36

TABLE A-5

2011 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.04	1.32	12.43	0.69	0.33	1.07	1.07	1.07
20	Cogeneration	0.78	0.09	0.62	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.13	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	13.53	1.84	9.63	8.63	1.42	1.29	1.28	1.27
52	Food and Agricultural Processing	0.17	0.09	0.76	0.76	0.01	0.10	0.10	0.10
60	Service and Commercial	8.56	1.39	10.74	11.40	0.60	1.50	1.50	1.50
99	Other (Fuel Combustion)	0.78	0.52	1.91	4.34	0.03	0.23	0.23	0.22
Total Fuel Combustion		35.63	6.78	50.38	25.98	2.40	6.16	6.06	6.00
Waste Disposal									
110	Sewage Treatment	0.61	0.34	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.06	0.10	0.26	0.60	0.35	0.52	0.34	0.32
130	Incineration	0.61	0.10	0.81	1.29	0.08	0.20	0.12	0.11
199	Other (Waste Disposal)	57.66	6.88	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		63.94	7.42	1.07	1.90	0.43	0.75	0.49	0.47
Cleaning and Surface Coatings									
210	Laundering	3.56	0.15	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	55.35	9.19	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	21.91	21.02	0.05	0.04	0.00	0.79	0.76	0.74
240	Printing	4.23	4.23	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.45	3.88	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.68	0.68	0.18	0.12	0.02	0.05	0.05	0.05
Total Cleaning and Surface Coatings		90.18	39.17	0.22	0.16	0.03	0.85	0.81	0.78
Petroleum Production and Marketing									
310	Oil and Gas Production	1.45	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.08	3.72	8.27	0.36	0.80	1.24	0.84	0.65
330	Petroleum Marketing	28.07	27.37	0.55	0.02	0.00	0.01	0.01	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		34.61	31.95	8.84	0.41	0.81	1.26	0.85	0.66

TABLE A-5
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	11.37	10.25	0.04	0.00	0.01	0.78	0.64	0.59
420	Food and Agriculture	2.95	2.81	0.00	0.01	0.00	0.59	0.19	0.03
430	Mineral Processes	0.41	0.36	0.27	0.04	0.00	5.47	2.99	1.03
440	Metal Processes	0.06	0.04	2.04	0.01	0.01	0.95	0.62	0.44
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	6.01	4.17	2.53
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.28	0.27
470	Electronics	0.12	0.09	0.00	0.00	0.00	0.02	0.01	0.01
499	Other (Industrial Processes)	7.04	6.68	0.53	0.15	0.00	0.44	0.30	0.23
Total Industrial Processes		22.06	20.35	2.89	0.22	0.05	14.56	9.21	5.13
Solvent Evaporation									
510	Consumer Products	122.75	104.48	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	23.98	23.40	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.67	1.66	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.04	0.95	0.00	0.00	0.00	0.03	0.02	0.02
Total Solvent Evaporation		149.43	130.49	0.00	0.00	0.00	0.03	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	9.59	4.16	59.19	21.68	0.41	9.13	8.68	8.43
620	Farming Operations	57.26	4.58	0.00	0.00	0.00	1.29	0.59	0.13
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	111.06	54.31	5.44
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	271.28	123.97	18.72
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.41	10.28	1.02
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	4.23	2.15	0.32
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	5.70	3.25	50.72	1.53	0.46	5.40	5.19	4.64
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.89	2.02	0.00	0.00	0.00	17.30	15.96	14.58
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				26.51	11.76			
Total Miscellaneous Processes		75.78	14.25	112.93	49.80	12.63	437.55	221.57	53.69

TABLE A-5
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	70.32	64.88	639.05	50.01	0.85	7.35	7.21	4.16
722	Light Duty Trucks 1 (T1)	14.18	13.10	137.82	11.16	0.16	1.19	1.17	0.71
723	Light Duty Trucks 2 (T2)	37.45	34.27	376.64	42.73	0.48	4.97	4.85	3.37
724	Medium Duty Trucks (T3)	20.80	18.79	216.01	25.79	0.30	2.27	2.22	1.54
732	Light Heavy Duty Gas Trucks 1 (T4)	9.57	8.70	71.33	14.28	0.05	0.25	0.24	0.12
733	Light Heavy Duty Gas Trucks 2 (T5)	1.73	1.60	11.69	2.81	0.01	0.05	0.05	0.03
734	Medium Heavy Duty Gas Trucks (T6)	3.31	3.03	32.63	4.40	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	2.49	2.13	33.91	5.06	0.00	0.02	0.02	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.27	7.56	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.22	0.19	0.99	6.26	0.01	0.07	0.07	0.05
744	Medium Heavy Duty Diesel Truck (T6)	1.10	0.92	9.63	41.19	0.08	1.25	1.25	1.07
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	12.78	10.69	43.70	127.07	0.16	6.56	6.56	5.69
750	Motorcycles (MCY)	12.46	11.25	97.61	3.07	0.01	0.13	0.12	0.08
760	Diesel Urban Buses (UB)	0.43	0.36	2.22	10.37	0.01	0.19	0.19	0.17
762	Gas Urban Buses (UB)	0.52	0.42	4.43	0.79	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.33	0.27	3.37	4.00	0.01	0.15	0.15	0.14
776	Other Bus (OB)	0.45	0.41	5.18	2.51	0.01	0.06	0.06	0.05
780	Motor Homes (MH)	0.53	0.44	13.32	2.34	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		188.89	171.66	1700.81	361.40	2.15	24.69	24.34	17.30
Other Mobile Sources									
810	Aircraft	10.10	9.01	64.14	19.62	1.88	1.05	0.98	0.96
820	Trains	2.96	2.47	7.48	21.13	0.02	0.84	0.83	0.76
830	Ships and Commercial Boats	4.25	3.56	11.04	82.27	19.35	4.22	4.09	3.94
840	Recreational Boats	39.11	36.98	203.33	10.69	0.02	3.66	3.29	2.49
850	Off-Road Recreational Vehicles	7.51	7.17	16.91	0.16	0.05	0.06	0.06	0.04
860	Off-Road Equipment	76.76	68.95	672.65	163.40	0.18	10.17	10.00	8.95
870	Farm Equipment	1.34	1.16	6.92	5.78	0.01	0.35	0.35	0.32
890	Fuel Storage and Handling	8.09	8.07	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
Total Other Mobile Sources		150.12	137.37	982.48	303.05	21.51	20.36	19.60	17.47
Total Stationary and Area Sources		471.63	250.41	176.33	78.47	16.35	461.16	239.01	66.75
Total On-Road Vehicles		188.89	171.66	1700.81	361.40	2.15	24.69	24.34	17.30
Total Other Mobile		150.12	137.37	982.48	303.05	21.51	20.36	19.60	17.47
Total Anthropogenic		810.64	559.44	2859.62	742.92	40.01	506.21	282.95	101.52

TABLE A-6

2014 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.25	1.37	12.86	0.71	0.34	1.11	1.11	1.10
20	Cogeneration	0.80	0.09	0.63	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.13	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	13.96	1.90	9.98	8.36	1.47	1.34	1.33	1.32
52	Food and Agricultural Processing	0.17	0.08	0.75	0.70	0.01	0.10	0.10	0.09
60	Service and Commercial	8.88	1.42	10.90	9.78	0.62	1.49	1.49	1.49
99	Other (Fuel Combustion)	0.71	0.44	1.76	3.84	0.03	0.21	0.21	0.19
Total Fuel Combustion		36.54	6.84	51.17	23.56	2.48	6.22	6.11	6.06
Waste Disposal									
110	Sewage Treatment	0.63	0.36	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.23	0.10	0.27	0.62	0.36	0.53	0.35	0.33
130	Incineration	0.63	0.10	0.82	1.30	0.08	0.20	0.13	0.12
199	Other (Waste Disposal)	59.71	7.13	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		66.19	7.68	1.09	1.93	0.44	0.77	0.50	0.48
Cleaning and Surface Coatings									
210	Laundering	3.69	0.16	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	56.68	9.43	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	22.81	21.88	0.05	0.04	0.00	0.84	0.81	0.78
240	Printing	4.33	4.33	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.68	4.08	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.70	0.70	0.18	0.13	0.03	0.05	0.05	0.05
Total Cleaning and Surface Coatings		92.90	40.59	0.23	0.17	0.03	0.90	0.86	0.83
Petroleum Production and Marketing									
310	Oil and Gas Production	1.45	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	28.77	28.05	0.58	0.02	0.00	0.01	0.01	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		35.00	32.39	7.52	0.17	0.60	1.20	0.82	0.63

TABLE A-6
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	11.99	10.83	0.04	0.00	0.01	0.81	0.67	0.61
420	Food and Agriculture	3.02	2.87	0.00	0.01	0.00	0.61	0.20	0.04
430	Mineral Processes	0.41	0.36	0.27	0.05	0.00	5.69	3.13	1.07
440	Metal Processes	0.06	0.05	2.20	0.01	0.01	0.99	0.65	0.46
450	Wood and Paper	0.09	0.09	0.00	0.00	0.00	6.30	4.36	2.64
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.29	0.28
470	Electronics	0.13	0.10	0.00	0.00	0.00	0.02	0.01	0.01
499	Other (Industrial Processes)	7.23	6.86	0.54	0.16	0.00	0.45	0.30	0.23
Total Industrial Processes		22.95	21.17	3.07	0.23	0.05	15.17	9.61	5.34
Solvent Evaporation									
510	Consumer Products	125.75	107.08	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	24.80	24.19	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.56	1.55	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.11	1.02	0.00	0.00	0.00	0.03	0.03	0.02
Total Solvent Evaporation		153.22	133.85	0.00	0.00	0.00	0.03	0.03	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	9.85	4.27	61.00	22.20	0.42	9.39	8.92	8.67
620	Farming Operations	52.20	4.18	0.00	0.00	0.00	1.17	0.53	0.12
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	119.99	58.68	5.88
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	275.20	125.76	18.99
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.37	10.26	1.02
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	3.96	2.03	0.30
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	5.70	3.25	50.71	1.53	0.46	5.39	5.19	4.63
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.00	2.10	0.00	0.00	0.00	17.97	16.58	15.15
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				26.51	11.76			
Total Miscellaneous Processes		71.09	14.04	114.73	50.32	12.64	450.89	228.39	55.17

TABLE A-6
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	54.62	50.09	495.62	37.33	0.87	7.64	7.49	4.37
722	Light Duty Trucks 1 (T1)	11.32	10.41	106.84	8.56	0.16	1.25	1.22	0.74
723	Light Duty Trucks 2 (T2)	33.99	30.98	324.76	34.82	0.49	5.40	5.28	3.73
724	Medium Duty Trucks (T3)	19.11	17.17	188.55	21.26	0.31	2.49	2.43	1.72
732	Light Heavy Duty Gas Trucks 1 (T4)	8.60	7.79	58.84	13.36	0.05	0.26	0.26	0.13
733	Light Heavy Duty Gas Trucks 2 (T5)	1.50	1.39	9.10	2.65	0.01	0.05	0.05	0.03
734	Medium Heavy Duty Gas Trucks (T6)	2.51	2.29	25.93	3.64	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	1.75	1.45	24.06	3.88	0.00	0.02	0.02	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.20	1.36	6.51	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.21	0.17	0.99	5.18	0.01	0.07	0.07	0.05
744	Medium Heavy Duty Diesel Truck (T6)	1.01	0.84	9.30	31.61	0.08	1.14	1.14	0.97
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	10.59	8.86	38.05	101.99	0.19	5.37	5.37	4.55
750	Motorcycles (MCY)	12.22	10.75	87.33	3.13	0.01	0.11	0.11	0.07
760	Diesel Urban Buses (UB)	0.41	0.35	2.11	9.72	0.01	0.18	0.18	0.16
762	Gas Urban Buses (UB)	0.55	0.42	4.37	0.82	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.31	0.26	3.03	3.97	0.01	0.16	0.16	0.14
776	Other Bus (OB)	0.38	0.34	4.34	1.94	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.36	0.29	8.34	1.86	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		159.67	144.06	1392.93	292.24	2.22	24.39	24.01	16.83
Other Mobile Sources									
810	Aircraft	11.19	9.99	69.27	21.95	2.08	1.11	1.03	1.01
820	Trains	3.00	2.50	7.99	22.75	0.02	0.85	0.84	0.77
830	Ships and Commercial Boats	4.18	3.50	11.72	87.45	22.01	4.46	4.31	4.17
840	Recreational Boats	37.33	35.39	204.46	10.82	0.02	4.29	3.86	2.92
850	Off-Road Recreational Vehicles	8.08	7.70	18.26	0.17	0.05	0.07	0.06	0.05
860	Off-Road Equipment	67.17	60.51	687.69	137.23	0.19	8.16	7.99	7.10
870	Farm Equipment	1.03	0.89	6.56	4.63	0.01	0.27	0.26	0.24
890	Fuel Storage and Handling	6.63	6.61	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
Total Other Mobile Sources		138.59	127.09	1005.95	285.02	24.38	19.20	18.36	16.26
Total Stationary and Area Sources		477.89	256.56	177.81	76.38	16.24	475.18	246.32	68.53
Total On-Road Vehicles		159.67	144.06	1392.93	292.24	2.22	24.39	24.01	16.83
Total Other Mobile		138.59	127.09	1005.95	285.02	24.38	19.20	18.36	16.26
Total Anthropogenic		776.15	527.71	2576.69	653.64	42.84	518.77	288.69	101.62

TABLE A-7

2017 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.55	1.43	13.46	0.75	0.35	1.16	1.16	1.15
20	Cogeneration	0.82	0.09	0.65	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.13	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.25	1.94	10.29	8.41	1.52	1.39	1.37	1.37
52	Food and Agricultural Processing	0.16	0.08	0.75	0.64	0.01	0.10	0.09	0.09
60	Service and Commercial	9.14	1.45	10.98	9.29	0.63	1.48	1.47	1.47
99	Other (Fuel Combustion)	0.65	0.38	1.65	3.44	0.03	0.18	0.18	0.17
Total Fuel Combustion		37.35	6.92	52.08	22.69	2.56	6.27	6.17	6.11
Waste Disposal									
110	Sewage Treatment	0.64	0.37	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.37	0.10	0.28	0.64	0.37	0.54	0.35	0.34
130	Incineration	0.64	0.11	0.84	1.32	0.08	0.21	0.13	0.12
199	Other (Waste Disposal)	61.72	7.36	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		68.38	7.94	1.11	1.96	0.45	0.78	0.52	0.49
Cleaning and Surface Coatings									
210	Laundering	3.81	0.16	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	58.38	9.73	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	23.65	22.69	0.06	0.04	0.00	0.89	0.85	0.82
240	Printing	4.45	4.45	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.89	4.27	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.73	0.73	0.19	0.14	0.03	0.06	0.05	0.05
Total Cleaning and Surface Coatings		95.92	42.02	0.24	0.18	0.03	0.94	0.91	0.87
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	29.53	28.82	0.61	0.02	0.00	0.01	0.01	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		35.77	33.16	7.55	0.17	0.60	1.20	0.82	0.63

TABLE A-7
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	12.60	11.38	0.04	0.00	0.01	0.84	0.69	0.63
420	Food and Agriculture	3.09	2.94	0.00	0.01	0.00	0.63	0.21	0.04
430	Mineral Processes	0.42	0.37	0.28	0.05	0.00	5.89	3.25	1.11
440	Metal Processes	0.06	0.05	2.33	0.02	0.01	1.03	0.68	0.48
450	Wood and Paper	0.09	0.09	0.00	0.00	0.00	6.60	4.57	2.77
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.31	0.30	0.29
470	Electronics	0.13	0.10	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.41	7.03	0.55	0.16	0.00	0.45	0.30	0.24
Total Industrial Processes		23.82	21.97	3.22	0.23	0.05	15.78	10.01	5.56
Solvent Evaporation									
510	Consumer Products	128.67	109.60	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	25.63	25.01	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.47	1.46	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.18	1.08	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		156.95	137.15	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	10.11	4.38	62.81	20.72	0.43	9.65	9.17	8.91
620	Farming Operations	48.40	3.87	0.00	0.00	0.00	1.07	0.49	0.11
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	127.74	62.47	6.26
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	278.99	127.50	19.25
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.33	10.24	1.02
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	3.71	1.92	0.29
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	5.70	3.25	50.71	1.53	0.46	5.39	5.19	4.63
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.10	2.16	0.00	0.00	0.00	18.51	17.08	15.60
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				26.51	11.76			
Total Miscellaneous Processes		67.65	13.90	116.54	48.84	12.65	462.84	234.50	56.48

TABLE A-7
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	44.39	40.89	390.77	28.36	0.88	7.90	7.75	4.56
722	Light Duty Trucks 1 (T1)	9.06	8.37	81.59	6.49	0.17	1.29	1.26	0.78
723	Light Duty Trucks 2 (T2)	31.08	28.52	279.66	28.32	0.51	5.79	5.65	4.05
724	Medium Duty Trucks (T3)	17.51	15.86	164.13	17.36	0.32	2.67	2.61	1.87
732	Light Heavy Duty Gas Trucks 1 (T4)	7.81	7.14	49.28	12.57	0.05	0.27	0.27	0.14
733	Light Heavy Duty Gas Trucks 2 (T5)	1.31	1.22	7.14	2.46	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	1.90	1.74	20.29	2.96	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	1.24	1.03	18.05	2.87	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.44	5.72	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.19	0.16	0.99	4.32	0.01	0.07	0.07	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.91	0.77	9.00	24.40	0.08	1.04	1.04	0.88
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	8.52	7.13	32.53	79.91	0.21	4.34	4.33	3.55
750	Motorcycles (MCY)	12.17	10.60	81.28	3.17	0.01	0.11	0.10	0.06
760	Diesel Urban Buses (UB)	0.39	0.33	2.00	9.11	0.01	0.17	0.17	0.15
762	Gas Urban Buses (UB)	0.56	0.43	4.12	0.83	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.31	0.26	2.87	3.95	0.01	0.17	0.17	0.15
776	Other Bus (OB)	0.33	0.29	3.67	1.58	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.24	0.19	4.92	1.50	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		138.14	125.10	1153.72	235.87	2.29	24.14	23.73	16.42
Other Mobile Sources									
810	Aircraft	12.27	10.96	74.40	24.29	2.27	1.16	1.08	1.06
820	Trains	3.05	2.55	8.56	24.20	0.02	0.86	0.86	0.79
830	Ships and Commercial Boats	4.27	3.58	12.53	94.77	25.11	4.83	4.66	4.51
840	Recreational Boats	36.36	34.57	209.03	11.11	0.02	5.00	4.51	3.41
850	Off-Road Recreational Vehicles	8.81	8.40	19.69	0.19	0.06	0.08	0.07	0.05
860	Off-Road Equipment	60.55	54.59	703.03	112.62	0.20	6.42	6.25	5.49
870	Farm Equipment	0.78	0.68	6.34	3.61	0.01	0.20	0.20	0.18
890	Fuel Storage and Handling	5.70	5.68	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
Total Other Mobile Sources		131.81	121.01	1033.58	270.79	27.70	18.55	17.62	15.49
Total Stationary and Area Sources		485.84	263.06	180.74	74.07	16.34	487.84	252.96	70.17
Total On-Road Vehicles		138.14	125.10	1153.72	235.87	2.29	24.14	23.73	16.42
Total Other Mobile		131.81	121.01	1033.58	270.79	27.70	18.55	17.62	15.49
Total Anthropogenic		755.79	509.17	2368.04	580.73	46.33	530.53	294.31	102.08

TABLE A-8

2020 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.90	1.51	14.19	0.79	0.37	1.22	1.22	1.22
20	Cogeneration	0.83	0.09	0.66	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.13	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.43	1.98	10.55	8.50	1.57	1.43	1.41	1.41
52	Food and Agricultural Processing	0.16	0.08	0.76	0.60	0.01	0.09	0.09	0.09
60	Service and Commercial	9.36	1.47	11.02	8.96	0.64	1.45	1.45	1.45
99	Other (Fuel Combustion)	0.61	0.33	1.57	3.08	0.03	0.16	0.16	0.15
Total Fuel Combustion		38.07	7.00	53.03	22.08	2.64	6.33	6.22	6.17
Waste Disposal									
110	Sewage Treatment	0.66	0.38	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.52	0.10	0.28	0.65	0.38	0.56	0.36	0.34
130	Incineration	0.66	0.11	0.86	1.34	0.08	0.21	0.14	0.12
199	Other (Waste Disposal)	63.70	7.60	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		70.55	8.19	1.14	2.00	0.46	0.80	0.53	0.50
Cleaning and Surface Coatings									
210	Laundering	3.91	0.17	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	60.29	10.06	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	24.46	23.46	0.06	0.04	0.00	0.93	0.89	0.86
240	Printing	4.58	4.57	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	5.10	4.45	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.75	0.75	0.19	0.14	0.03	0.06	0.05	0.05
Total Cleaning and Surface Coatings		99.10	43.46	0.25	0.19	0.03	0.99	0.95	0.92
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	30.36	29.64	0.64	0.02	0.00	0.02	0.01	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		36.60	33.98	7.58	0.17	0.60	1.20	0.82	0.63

TABLE A-8
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	13.20	11.92	0.04	0.00	0.01	0.88	0.72	0.66
420	Food and Agriculture	3.18	3.02	0.00	0.01	0.00	0.65	0.22	0.04
430	Mineral Processes	0.42	0.37	0.29	0.05	0.00	6.08	3.36	1.15
440	Metal Processes	0.06	0.05	2.44	0.02	0.01	1.06	0.70	0.50
450	Wood and Paper	0.09	0.09	0.00	0.00	0.00	6.91	4.79	2.90
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.32	0.31	0.30
470	Electronics	0.14	0.11	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.59	7.20	0.57	0.16	0.00	0.46	0.31	0.24
Total Industrial Processes		24.69	22.77	3.36	0.24	0.05	16.40	10.42	5.79
Solvent Evaporation									
510	Consumer Products	131.53	112.08	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	26.45	25.81	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.40	1.39	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.24	1.14	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		160.62	140.42	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	10.41	4.52	64.79	21.14	0.44	9.94	9.45	9.18
620	Farming Operations	45.51	3.64	0.00	0.00	0.00	0.98	0.44	0.10
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	134.89	65.96	6.61
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	282.90	129.28	19.52
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.30	10.23	1.02
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	3.49	1.82	0.27
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	5.70	3.25	50.70	1.53	0.46	5.39	5.19	4.63
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.18	2.22	0.00	0.00	0.00	19.01	17.53	16.02
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				26.51	11.76			
Total Miscellaneous Processes		65.14	13.87	118.51	49.26	12.66	474.35	240.34	57.76

TABLE A-8
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	37.15	34.06	313.26	21.24	0.90	8.12	7.97	4.70
722	Light Duty Trucks 1 (T1)	7.67	7.06	64.92	4.88	0.17	1.33	1.30	0.80
723	Light Duty Trucks 2 (T2)	28.69	26.24	242.73	22.51	0.52	6.08	5.94	4.29
724	Medium Duty Trucks (T3)	15.83	14.29	142.35	13.61	0.33	2.82	2.75	1.98
732	Light Heavy Duty Gas Trucks 1 (T4)	7.06	6.45	41.05	11.55	0.06	0.29	0.28	0.15
733	Light Heavy Duty Gas Trucks 2 (T5)	1.13	1.06	5.72	2.23	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	1.49	1.36	15.98	2.32	0.01	0.05	0.05	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	0.88	0.72	14.04	2.04	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.22	0.19	1.49	4.81	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.17	0.14	0.99	3.43	0.01	0.06	0.06	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.84	0.71	8.74	17.99	0.08	0.97	0.97	0.81
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	6.91	5.78	28.17	62.37	0.22	3.54	3.53	2.78
750	Motorcycles (MCY)	12.35	10.52	79.39	3.15	0.01	0.10	0.10	0.06
760	Diesel Urban Buses (UB)	0.36	0.30	1.79	7.81	0.01	0.16	0.16	0.14
762	Gas Urban Buses (UB)	0.58	0.42	3.77	0.84	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.30	0.24	2.57	3.80	0.01	0.18	0.18	0.16
776	Other Bus (OB)	0.28	0.26	3.05	1.24	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.16	0.12	2.70	1.16	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		122.06	109.89	972.70	186.96	2.36	23.99	23.56	16.11
Other Mobile Sources									
810	Aircraft	13.36	11.93	79.53	26.63	2.47	1.22	1.14	1.11
820	Trains	3.11	2.60	9.20	25.82	0.02	0.88	0.87	0.80
830	Ships and Commercial Boats	4.49	3.77	13.47	103.90	28.76	5.30	5.11	4.96
840	Recreational Boats	35.92	34.25	216.20	11.36	0.03	5.78	5.21	3.94
850	Off-Road Recreational Vehicles	9.72	9.26	21.27	0.21	0.07	0.08	0.07	0.06
860	Off-Road Equipment	57.14	51.54	725.56	93.66	0.21	5.08	4.90	4.25
870	Farm Equipment	0.60	0.52	6.24	2.76	0.01	0.14	0.14	0.13
890	Fuel Storage and Handling	5.09	5.07	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
Total Other Mobile Sources		129.43	118.94	1071.46	264.33	31.57	18.48	17.44	15.25
Total Stationary and Area Sources		494.77	269.69	183.87	73.94	16.44	500.10	259.31	71.80
Total On-Road Vehicles		122.06	109.89	972.70	186.96	2.36	23.99	23.56	16.11
Total Other Mobile		129.43	118.94	1071.46	264.33	31.57	18.48	17.44	15.25
Total Anthropogenic		746.26	498.52	2228.03	525.23	50.37	542.57	300.31	103.16

TABLE A-9

2023 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.91	1.51	14.20	0.79	0.37	1.22	1.22	1.22
20	Cogeneration	0.84	0.09	0.67	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.13	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.70	2.03	10.87	8.69	1.63	1.48	1.46	1.46
52	Food and Agricultural Processing	0.16	0.08	0.77	0.57	0.01	0.09	0.09	0.09
60	Service and Commercial	9.63	1.50	11.18	8.98	0.65	1.45	1.45	1.45
99	Other (Fuel Combustion)	0.62	0.33	1.59	3.08	0.03	0.16	0.16	0.15
Total Fuel Combustion		38.66	7.08	53.57	22.28	2.72	6.38	6.27	6.22
Waste Disposal									
110	Sewage Treatment	0.68	0.39	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.67	0.11	0.29	0.67	0.39	0.57	0.37	0.35
130	Incineration	0.68	0.11	0.88	1.37	0.08	0.22	0.14	0.13
199	Other (Waste Disposal)	65.48	7.81	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		72.52	8.42	1.16	2.04	0.47	0.82	0.54	0.51
Cleaning and Surface Coatings									
210	Laundering	4.03	0.17	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	62.39	10.42	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	25.36	24.32	0.06	0.05	0.00	0.98	0.94	0.91
240	Printing	4.72	4.71	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	5.33	4.66	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.78	0.78	0.19	0.15	0.03	0.06	0.06	0.05
Total Cleaning and Surface Coatings		102.60	45.05	0.26	0.20	0.03	1.04	1.00	0.96
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	31.19	30.46	0.66	0.02	0.00	0.02	0.01	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		37.42	34.80	7.60	0.17	0.60	1.20	0.82	0.63

TABLE A-9
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	13.88	12.54	0.05	0.00	0.01	0.92	0.75	0.69
420	Food and Agriculture	3.27	3.10	0.00	0.01	0.00	0.67	0.22	0.04
430	Mineral Processes	0.43	0.37	0.30	0.06	0.00	6.30	3.50	1.20
440	Metal Processes	0.06	0.05	2.57	0.02	0.01	1.10	0.73	0.52
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	7.26	5.03	3.05
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.33	0.32	0.31
470	Electronics	0.14	0.11	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.75	7.36	0.59	0.17	0.00	0.47	0.31	0.24
Total Industrial Processes		25.64	23.64	3.52	0.25	0.05	17.09	10.88	6.04
Solvent Evaporation									
510	Consumer Products	134.11	114.32	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	27.22	26.55	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.35	1.34	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.30	1.20	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		163.98	143.40	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	10.58	4.59	66.24	21.32	0.45	10.14	9.63	9.35
620	Farming Operations	43.39	3.47	0.00	0.00	0.00	0.90	0.41	0.09
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	142.63	69.74	6.99
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	286.81	131.07	19.79
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.27	10.21	1.01
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	3.31	1.73	0.26
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	5.70	3.25	50.69	1.53	0.46	5.39	5.19	4.63
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.27	2.29	0.00	0.00	0.00	19.54	18.03	16.47
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				26.51	11.76			
Total Miscellaneous Processes		63.28	13.84	119.95	49.44	12.67	486.44	246.45	59.00

TABLE A-9
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	31.79	29.26	259.08	17.41	0.90	8.25	8.09	4.79
722	Light Duty Trucks 1 (T1)	6.80	6.30	53.53	4.00	0.17	1.37	1.34	0.83
723	Light Duty Trucks 2 (T2)	26.92	24.74	214.87	19.31	0.54	6.35	6.20	4.49
724	Medium Duty Trucks (T3)	14.24	12.93	122.72	11.33	0.34	2.95	2.88	2.08
732	Light Heavy Duty Gas Trucks 1 (T4)	6.27	5.80	33.98	11.18	0.06	0.30	0.30	0.16
733	Light Heavy Duty Gas Trucks 2 (T5)	0.99	0.93	4.85	2.14	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	1.25	1.15	12.97	1.94	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	0.63	0.52	11.39	1.62	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.21	0.18	1.54	4.26	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.15	0.13	0.99	2.91	0.01	0.06	0.06	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.80	0.67	8.65	14.41	0.09	0.94	0.94	0.78
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	6.03	5.04	25.88	55.94	0.24	3.08	3.07	2.32
750	Motorcycles (MCY)	12.04	10.22	75.16	3.17	0.01	0.10	0.09	0.06
760	Diesel Urban Buses (UB)	0.35	0.29	1.75	7.74	0.01	0.15	0.15	0.14
762	Gas Urban Buses (UB)	0.60	0.43	3.74	0.87	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.28	0.23	2.36	3.84	0.01	0.18	0.18	0.16
776	Other Bus (OB)	0.24	0.22	2.50	1.03	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.11	0.08	1.57	0.97	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		109.69	99.13	837.54	164.07	2.42	24.06	23.63	16.04
Other Mobile Sources									
810	Aircraft	14.64	13.08	85.14	29.34	2.69	1.28	1.19	1.17
820	Trains	3.19	2.66	9.92	27.63	0.03	0.90	0.89	0.82
830	Ships and Commercial Boats	4.92	4.13	14.57	116.19	33.05	5.94	5.72	5.55
840	Recreational Boats	36.40	34.79	226.00	11.54	0.03	6.73	6.06	4.58
850	Off-Road Recreational Vehicles	10.73	10.23	22.73	0.23	0.07	0.09	0.08	0.06
860	Off-Road Equipment	55.85	50.41	754.69	80.86	0.22	4.27	4.09	3.49
870	Farm Equipment	0.50	0.44	6.25	2.12	0.01	0.10	0.10	0.09
890	Fuel Storage and Handling	4.62	4.60	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
Total Other Mobile Sources		130.85	120.33	1119.30	267.90	36.10	19.30	18.13	15.77
Total Stationary and Area Sources		504.10	276.23	186.06	74.38	16.54	513.00	265.99	73.39
Total On-Road Vehicles		109.69	99.13	837.54	164.07	2.42	24.06	23.63	16.04
Total Other Mobile		130.85	120.33	1119.30	267.90	36.10	19.30	18.13	15.77
Total Anthropogenic		744.64	495.69	2142.90	506.35	55.06	556.36	307.75	105.20

TABLE A-10

2030 Annual Average Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.93	1.51	14.23	0.79	0.37	1.22	1.22	1.22
20	Cogeneration	0.87	0.10	0.70	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.20	0.23	0.66	0.13	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	15.49	2.16	11.71	9.19	1.77	1.60	1.58	1.58
52	Food and Agricultural Processing	0.17	0.08	0.79	0.51	0.01	0.09	0.09	0.09
60	Service and Commercial	10.32	1.59	11.72	9.26	0.69	1.49	1.49	1.49
99	Other (Fuel Combustion)	0.66	0.34	1.65	3.09	0.04	0.17	0.16	0.15
Total Fuel Combustion		40.22	7.31	55.09	23.01	2.90	6.54	6.44	6.38
Waste Disposal									
110	Sewage Treatment	0.71	0.41	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	6.06	0.12	0.30	0.71	0.40	0.59	0.38	0.37
130	Incineration	0.73	0.12	0.93	1.43	0.08	0.23	0.15	0.14
199	Other (Waste Disposal)	69.37	8.28	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		76.88	8.92	1.23	2.14	0.49	0.86	0.57	0.54
Cleaning and Surface Coatings									
210	Laundering	4.30	0.17	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	67.06	11.24	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	27.52	26.38	0.07	0.05	0.00	1.10	1.05	1.02
240	Printing	5.04	5.03	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	5.89	5.14	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.84	0.84	0.21	0.17	0.04	0.06	0.06	0.06
Total Cleaning and Surface Coatings		110.63	48.80	0.28	0.22	0.04	1.16	1.12	1.08
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	33.12	32.39	0.73	0.02	0.00	0.02	0.02	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		39.36	36.73	7.67	0.17	0.60	1.20	0.82	0.63

TABLE A-10
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	15.53	14.04	0.05	0.00	0.01	1.02	0.83	0.75
420	Food and Agriculture	3.47	3.29	0.00	0.01	0.00	0.72	0.24	0.04
430	Mineral Processes	0.44	0.38	0.33	0.06	0.00	6.84	3.82	1.31
440	Metal Processes	0.06	0.05	2.87	0.02	0.01	1.20	0.79	0.56
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	8.09	5.61	3.40
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.03	0.36	0.35	0.33
470	Electronics	0.16	0.12	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	8.11	7.70	0.63	0.18	0.00	0.49	0.32	0.25
Total Industrial Processes		27.89	25.70	3.88	0.27	0.06	18.76	11.98	6.65
Solvent Evaporation									
510	Consumer Products	139.75	119.19	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	28.96	28.25	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.26	1.24	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.46	1.35	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		171.43	150.04	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	11.12	4.82	70.16	22.06	0.47	10.69	10.15	9.86
620	Farming Operations	40.29	3.22	0.00	0.00	0.00	0.73	0.33	0.07
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	161.41	78.93	7.91
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	295.90	135.23	20.42
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.21	10.19	1.01
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	2.94	1.56	0.23
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	5.69	3.25	50.68	1.53	0.46	5.39	5.19	4.63
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.49	2.44	0.00	0.00	0.00	20.85	19.23	17.57
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				26.51	11.76			
Total Miscellaneous Processes		60.93	13.97	123.86	50.18	12.69	515.57	261.25	62.11

TABLE A-10
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	23.46	21.73	189.03	11.89	0.94	8.58	8.41	4.98
722	Light Duty Trucks 1 (T1)	5.27	4.93	38.53	2.58	0.19	1.47	1.44	0.89
723	Light Duty Trucks 2 (T2)	23.48	21.74	176.11	13.58	0.59	6.91	6.74	4.88
724	Medium Duty Trucks (T3)	12.38	11.37	105.19	7.80	0.37	3.24	3.17	2.29
732	Light Heavy Duty Gas Trucks 1 (T4)	5.08	4.79	24.53	10.36	0.07	0.34	0.33	0.17
733	Light Heavy Duty Gas Trucks 2 (T5)	0.81	0.76	4.06	1.96	0.01	0.07	0.07	0.04
734	Medium Heavy Duty Gas Trucks (T6)	1.05	0.98	9.71	1.45	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	0.37	0.31	9.06	1.18	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.18	0.15	1.62	3.26	0.01	0.10	0.10	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.12	0.10	1.02	2.08	0.01	0.06	0.06	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.76	0.64	8.92	10.42	0.10	0.91	0.91	0.74
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	5.30	4.43	25.05	50.77	0.27	2.85	2.84	2.04
750	Motorcycles (MCY)	12.21	10.34	75.22	3.20	0.01	0.10	0.09	0.06
760	Diesel Urban Buses (UB)	0.28	0.24	1.34	5.74	0.01	0.13	0.13	0.11
762	Gas Urban Buses (UB)	0.29	0.22	3.38	0.88	0.00	0.02	0.02	0.01
770	School Buses (SB)	0.28	0.23	2.29	3.72	0.01	0.20	0.20	0.18
776	Other Bus (OB)	0.18	0.17	1.77	0.76	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.06	0.05	0.63	0.66	0.01	0.06	0.06	0.03
Total On-Road Motor Vehicles		91.57	83.18	677.45	132.31	2.61	25.15	24.69	16.58
Other Mobile Sources									
810	Aircraft	17.63	15.75	98.23	35.67	3.21	1.42	1.33	1.30
820	Trains	3.41	2.85	11.99	32.86	0.03	0.95	0.95	0.87
830	Ships and Commercial Boats	6.13	5.13	17.69	152.49	48.64	8.31	8.00	7.77
840	Recreational Boats	43.30	41.42	265.77	13.20	0.04	10.18	9.16	6.93
850	Off-Road Recreational Vehicles	13.59	12.96	26.80	0.27	0.09	0.11	0.10	0.08
860	Off-Road Equipment	56.90	51.40	809.76	67.79	0.25	3.29	3.09	2.57
870	Farm Equipment	0.36	0.32	6.32	1.25	0.01	0.04	0.04	0.04
890	Fuel Storage and Handling	3.96	3.95	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
Total Other Mobile Sources		145.28	133.77	1236.55	303.53	52.27	24.30	22.67	19.55
Total Stationary and Area Sources		527.34	291.47	192.01	75.99	16.78	544.12	282.21	77.42
Total On-Road Vehicles		91.57	83.18	677.45	132.31	2.61	25.15	24.69	16.58
Total Other Mobile		145.28	133.77	1236.55	303.53	52.27	24.30	22.67	19.55
Total Anthropogenic		764.19	508.42	2106.01	511.83	71.66	593.57	329.57	113.55

ATTACHMENT B

FINAL 2007 AQMP APPENDIX III

SUMMER PLANNING EMISSIONS

BY MAJOR SOURCE CATEGORY

TABLE B-1

2002 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	8.06	1.74	16.23	1.31	0.45	1.41	1.41	1.41
20	Cogeneration	1.03	0.12	0.80	0.06	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.34	0.02	0.16	0.16	0.16
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	12.41	1.69	8.79	9.85	1.14	1.23	1.21	1.21
52	Food and Agricultural Processing	0.27	0.17	1.04	1.88	0.03	0.19	0.19	0.18
60	Service and Commercial	7.84	1.30	10.00	16.10	0.64	1.48	1.48	1.48
99	Other (Fuel Combustion)	1.14	0.88	2.88	6.90	0.03	0.37	0.37	0.34
Total Fuel Combustion		36.57	7.43	54.02	36.45	2.32	6.69	6.58	6.50
Waste Disposal									
110	Sewage Treatment	0.53	0.30	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.53	0.10	0.29	0.63	0.38	0.56	0.36	0.35
130	Incineration	0.55	0.09	0.86	1.29	0.08	0.19	0.12	0.11
199	Other (Waste Disposal)	59.61	7.15	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		66.21	7.64	1.14	1.91	0.46	0.78	0.51	0.48
Cleaning and Surface Coatings									
210	Laundering	3.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	63.36	19.50	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	29.99	28.87	0.03	0.03	0.00	0.75	0.72	0.70
240	Printing	6.28	6.28	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	3.95	3.44	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	1.39	1.39	0.16	0.09	0.02	0.11	0.11	0.10
Total Cleaning and Surface Coatings		108.14	59.65	0.19	0.12	0.02	0.86	0.83	0.80
Petroleum Production and Marketing									
310	Oil and Gas Production	4.47	2.50	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	6.49	4.68	8.27	0.36	6.96	1.64	1.08	0.87
330	Petroleum Marketing	28.78	27.80	0.06	0.00	0.00	0.03	0.03	0.03
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		39.75	34.99	8.35	0.40	6.96	1.67	1.11	0.90

TABLE B-1
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	14.07	12.40	0.04	0.00	0.01	0.69	0.58	0.53
420	Food and Agriculture	2.92	2.77	0.00	0.00	0.00	0.69	0.23	0.04
430	Mineral Processes	0.43	0.37	0.25	0.03	0.00	14.23	7.50	1.86
440	Metal Processes	0.07	0.05	1.34	0.01	0.02	0.88	0.56	0.39
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.19	3.59	2.18
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.28	0.27	0.25
470	Electronics	0.08	0.06	0.00	0.00	0.00	0.02	0.01	0.00
499	Other (Industrial Processes)	6.78	6.46	0.50	0.15	0.00	0.48	0.31	0.24
Total Industrial Processes		24.47	22.24	2.15	0.20	0.05	22.45	13.04	5.50
Solvent Evaporation									
510	Consumer Products	130.40	110.40	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	58.73	57.29	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	2.87	2.86	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.98	0.90	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		192.98	171.44	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	3.47	1.49	16.85	20.47	0.30	2.84	2.76	2.72
620	Farming Operations	123.37	9.87	0.00	0.00	0.00	1.16	0.53	0.12
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	127.12	62.16	6.23
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	280.81	128.33	19.38
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	23.31	13.76	1.37
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	8.10	3.96	0.59
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	0.44	0.25	2.87	0.11	0.01	0.38	0.38	0.35
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.57	1.80	0.00	0.00	0.00	15.41	14.22	13.00
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				29.40	11.70			
Total Miscellaneous Processes		130.19	13.65	22.74	50.06	12.01	459.58	226.54	44.17

TABLE B-1
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	194.89	180.08	1634.19	140.79	1.25	7.13	6.99	4.03
722	Light Duty Trucks 1 (T1)	32.80	30.38	332.63	27.64	0.28	1.22	1.20	0.68
723	Light Duty Trucks 2 (T2)	67.11	60.85	737.25	93.68	0.57	3.80	3.71	2.50
724	Medium Duty Trucks (T3)	34.45	31.03	401.05	49.31	0.35	1.58	1.55	1.01
732	Light Heavy Duty Gas Trucks 1 (T4)	19.68	17.80	182.71	25.82	0.07	0.26	0.26	0.14
733	Light Heavy Duty Gas Trucks 2 (T5)	3.08	2.82	27.94	3.86	0.01	0.05	0.05	0.02
734	Medium Heavy Duty Gas Trucks (T6)	8.01	7.41	72.09	7.61	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	4.65	4.12	69.68	9.09	0.01	0.04	0.04	0.02
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.02	0.02	0.08	0.64	0.00	0.01	0.01	0.01
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.22	0.19	0.83	8.39	0.04	0.08	0.08	0.06
744	Medium Heavy Duty Diesel Truck (T6)	1.28	1.07	10.15	71.06	0.57	1.60	1.60	1.41
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	14.30	11.97	48.34	148.07	1.01	8.66	8.66	7.72
750	Motorcycles (MCY)	10.06	9.52	69.06	1.65	0.00	0.09	0.08	0.06
760	Diesel Urban Buses (UB)	0.50	0.42	2.65	12.83	0.13	0.23	0.23	0.21
762	Gas Urban Buses (UB)	0.59	0.49	5.30	0.89	0.00	0.01	0.01	0.00
770	School Buses (SB)	0.37	0.32	4.55	4.22	0.04	0.14	0.14	0.13
776	Other Bus (OB)	0.69	0.63	7.24	3.53	0.02	0.06	0.06	0.05
780	Motor Homes (MH)	1.40	1.22	40.17	3.80	0.02	0.04	0.04	0.02
	On-Road Baseline Adjustment	0.00	0.00	0.00	-1.61	0.00	0.00	0.00	0.00
Total On-Road Motor Vehicles		394.10	360.34	3645.91	611.27	4.38	25.05	24.76	18.10
Other Mobile Sources									
810	Aircraft	7.16	6.39	46.04	13.24	1.30	0.82	0.77	0.75
820	Trains	3.01	2.51	6.31	37.91	1.24	0.93	0.92	0.84
830	Ships and Commercial Boats	4.30	3.60	8.80	64.29	23.45	4.58	4.44	4.28
840	Recreational Boats	72.87	67.90	346.45	11.61	0.03	3.93	3.54	2.68
850	Off-Road Recreational Vehicles	7.76	7.38	27.00	0.22	0.05	0.10	0.09	0.07
860	Off-Road Equipment	120.41	106.00	784.37	241.39	1.24	14.51	14.33	12.93
870	Farm Equipment	2.51	2.16	11.22	10.43	0.07	0.64	0.64	0.59
890	Fuel Storage and Handling	23.51	23.44	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
	Off-Road Baseline Adjustment	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	0.00
Total Other Mobile Sources		241.53	219.38	1230.19	378.09	27.38	25.51	24.73	22.14
Total Stationary and Area Sources		598.31	317.04	88.59	89.14	21.82	492.05	248.63	58.37
Total On-Road Vehicles		394.10	360.34	3645.91	611.27	4.38	25.05	24.76	18.10
Total Other Mobile		241.53	219.38	1230.19	378.09	27.38	25.51	24.73	22.14
Total Anthropogenic		1233.94	896.76	4964.69	1078.50	53.58	542.61	298.12	98.61

TABLE B-2

2005 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.30	1.36	12.65	0.86	0.33	1.09	1.09	1.09
20	Cogeneration	1.05	0.12	0.81	0.06	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.24	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	12.70	1.75	9.23	9.63	1.22	1.31	1.29	1.28
52	Food and Agricultural Processing	0.25	0.15	0.97	1.63	0.01	0.16	0.16	0.16
60	Service and Commercial	8.13	1.34	10.26	15.17	0.62	1.49	1.49	1.49
99	Other (Fuel Combustion)	1.07	0.79	2.62	6.32	0.03	0.33	0.33	0.31
Total Fuel Combustion		35.29	7.05	50.84	33.91	2.22	6.37	6.26	6.19
Waste Disposal									
110	Sewage Treatment	0.56	0.32	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.68	0.10	0.29	0.64	0.39	0.57	0.37	0.36
130	Incineration	0.58	0.10	0.86	1.30	0.08	0.20	0.12	0.11
199	Other (Waste Disposal)	63.81	7.63	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		70.63	8.14	1.16	1.95	0.47	0.80	0.52	0.50
Cleaning and Surface Coatings									
210	Laundering	3.30	0.18	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	48.87	8.44	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	28.37	27.29	0.04	0.04	0.00	0.85	0.82	0.79
240	Printing	6.27	6.26	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	3.65	3.19	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.63	0.63	0.16	0.10	0.02	0.11	0.11	0.10
Total Cleaning and Surface Coatings		91.08	45.99	0.20	0.14	0.02	0.97	0.93	0.89
Petroleum Production and Marketing									
310	Oil and Gas Production	2.22	1.34	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.15	3.80	8.27	0.36	6.96	1.54	1.02	0.81
330	Petroleum Marketing	28.01	27.32	0.06	0.00	0.00	0.03	0.03	0.03
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		35.39	32.47	8.36	0.40	6.96	1.57	1.05	0.84

TABLE B-2
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	11.54	10.32	0.04	0.00	0.01	0.75	0.63	0.57
420	Food and Agriculture	2.92	2.76	0.00	0.00	0.00	0.69	0.23	0.04
430	Mineral Processes	0.43	0.37	0.27	0.03	0.00	15.41	8.15	2.01
440	Metal Processes	0.07	0.06	1.53	0.01	0.01	0.95	0.59	0.42
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.21	3.61	2.19
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.28	0.26
470	Electronics	0.10	0.08	0.00	0.00	0.00	0.02	0.01	0.00
499	Other (Industrial Processes)	7.12	6.77	0.51	0.16	0.00	0.48	0.31	0.24
Total Industrial Processes		22.29	20.47	2.36	0.21	0.05	23.81	13.80	5.74
Solvent Evaporation									
510	Consumer Products	118.71	100.70	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	46.83	45.74	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	2.45	2.44	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.09	1.00	0.00	0.00	0.00	0.03	0.02	0.02
Total Solvent Evaporation		169.08	149.87	0.00	0.00	0.00	0.03	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	3.38	1.45	16.65	19.39	0.28	2.79	2.70	2.66
620	Farming Operations	94.36	7.55	0.00	0.00	0.00	1.06	0.48	0.11
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	144.49	70.66	7.08
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	277.83	126.97	19.17
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	20.82	12.30	1.22
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	7.13	3.48	0.52
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	3.08	1.76	27.11	0.82	0.24	2.90	2.80	2.50
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.65	1.85	0.00	0.00	0.00	15.89	14.66	13.39
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				34.37	11.78			
Total Miscellaneous Processes		103.81	12.85	46.78	54.66	12.30	473.36	234.49	47.06

TABLE B-2
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	144.93	134.63	1207.90	97.42	0.96	7.33	7.18	4.11
722	Light Duty Trucks 1 (T1)	26.68	24.79	255.46	20.45	0.21	1.21	1.18	0.70
723	Light Duty Trucks 2 (T2)	58.35	53.37	617.80	74.40	0.53	4.70	4.59	3.08
724	Medium Duty Trucks (T3)	30.64	27.72	338.06	42.58	0.35	2.12	2.08	1.37
732	Light Heavy Duty Gas Trucks 1 (T4)	17.22	15.64	143.31	22.58	0.06	0.29	0.29	0.15
733	Light Heavy Duty Gas Trucks 2 (T5)	3.02	2.77	24.43	3.88	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	6.80	6.27	61.10	7.38	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	4.48	3.93	64.22	8.91	0.01	0.04	0.04	0.02
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.28	0.24	1.45	13.80	0.09	0.13	0.13	0.09
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.30	0.25	1.21	10.90	0.06	0.11	0.11	0.08
744	Medium Heavy Duty Diesel Truck (T6)	1.54	1.29	12.42	77.12	0.74	1.89	1.89	1.65
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	15.75	13.18	51.96	166.44	1.20	9.02	9.01	8.00
750	Motorcycles (MCY)	15.83	14.80	125.57	3.14	0.01	0.16	0.15	0.10
760	Diesel Urban Buses (UB)	0.46	0.39	2.37	11.53	0.12	0.21	0.21	0.19
762	Gas Urban Buses (UB)	0.54	0.44	4.67	0.74	0.00	0.01	0.01	0.00
770	School Buses (SB)	0.33	0.28	3.82	4.08	0.04	0.14	0.14	0.13
776	Other Bus (OB)	0.67	0.61	7.02	3.84	0.03	0.07	0.07	0.06
780	Motor Homes (MH)	1.08	0.94	28.56	3.36	0.02	0.05	0.05	0.03
	On-Road Baseline Adjustment	0.00	0.00	0.00	-9.36	0.00	N/A	N/A	-0.09
Total On-Road Motor Vehicles		328.90	301.54	2951.33	563.19	4.45	27.59	27.24	19.73
Other Mobile Sources									
810	Aircraft	8.14	7.26	52.19	15.36	1.49	0.89	0.83	0.81
820	Trains	3.06	2.55	6.65	32.26	1.33	0.94	0.94	0.86
830	Ships and Commercial Boats	4.37	3.67	9.69	73.33	30.98	5.55	5.37	5.18
840	Recreational Boats	70.11	65.69	357.86	15.11	0.03	4.35	3.92	2.97
850	Off-Road Recreational Vehicles	9.42	9.09	19.38	0.18	0.04	0.06	0.06	0.04
860	Off-Road Equipment	117.45	105.04	744.72	220.86	1.29	13.69	13.50	12.16
870	Farm Equipment	2.30	1.99	10.40	9.36	0.07	0.58	0.58	0.53
890	Fuel Storage and Handling	22.29	22.22	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
	Off-Road Baseline Adjustment	0.00	0.00	0.00	-1.41	0.00	N/A	N/A	-0.09
Total Other Mobile Sources		237.14	217.51	1200.89	365.05	35.23	26.06	25.20	22.46
Total Stationary and Area Sources		527.57	276.84	109.70	91.27	22.02	506.91	257.07	61.24
Total On-Road Vehicles		328.90	301.54	2951.33	563.19	4.45	27.59	27.24	19.73
Total Other Mobile		237.14	217.51	1200.89	365.05	35.23	26.06	25.20	22.46
Total Anthropogenic		1093.61	795.89	4261.92	1019.51	61.70	560.56	309.51	103.43

TABLE B-3

2008 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.88	1.70	15.86	1.03	0.41	1.37	1.36	1.36
20	Cogeneration	1.06	0.12	0.83	0.06	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.22	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	13.60	1.88	9.95	9.59	1.34	1.29	1.28	1.28
52	Food and Agricultural Processing	0.19	0.10	0.83	0.89	0.01	0.11	0.11	0.11
60	Service and Commercial	8.51	1.40	10.77	13.68	0.64	1.54	1.54	1.54
99	Other (Fuel Combustion)	0.96	0.68	2.36	5.60	0.03	0.29	0.29	0.27
Total Fuel Combustion		38.02	7.43	54.89	31.07	2.45	6.60	6.50	6.43
Waste Disposal									
110	Sewage Treatment	0.58	0.33	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.82	0.11	0.30	0.67	0.40	0.59	0.38	0.37
130	Incineration	0.62	0.10	0.89	1.34	0.08	0.21	0.13	0.12
199	Other (Waste Disposal)	59.22	7.11	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		66.25	7.65	1.19	2.01	0.48	0.83	0.54	0.52
Cleaning and Surface Coatings									
210	Laundering	3.45	0.19	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	52.93	9.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	24.24	23.24	0.04	0.04	0.00	0.97	0.93	0.90
240	Printing	4.56	4.56	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.15	3.62	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.68	0.68	0.17	0.11	0.02	0.06	0.06	0.06
Total Cleaning and Surface Coatings		90.01	41.28	0.22	0.16	0.02	1.03	0.99	0.95
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.09	3.74	8.27	0.36	1.11	1.34	0.90	0.70
330	Petroleum Marketing	27.75	27.05	0.07	0.01	0.00	0.02	0.02	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		34.31	31.65	8.36	0.40	1.11	1.36	0.92	0.72

TABLE B-3
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	12.12	10.81	0.04	0.00	0.01	0.83	0.68	0.62
420	Food and Agriculture	3.01	2.83	0.00	0.01	0.00	0.72	0.24	0.04
430	Mineral Processes	0.43	0.38	0.28	0.04	0.00	5.57	3.07	1.14
440	Metal Processes	0.07	0.06	1.80	0.02	0.01	1.05	0.66	0.46
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.65	3.91	2.37
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.29	0.28	0.27
470	Electronics	0.12	0.09	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	6.89	6.53	0.53	0.17	0.00	0.50	0.32	0.24
Total Industrial Processes		22.76	20.81	2.67	0.23	0.05	14.63	9.17	5.17
Solvent Evaporation									
510	Consumer Products	119.64	101.83	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	27.37	26.70	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	2.21	2.20	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.18	1.09	0.00	0.00	0.00	0.03	0.03	0.02
Total Solvent Evaporation		150.40	131.82	0.00	0.00	0.00	0.03	0.03	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	3.57	1.53	17.49	18.02	0.30	2.93	2.85	2.80
620	Farming Operations	70.58	5.65	0.00	0.00	0.00	0.96	0.44	0.10
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	158.75	77.63	7.78
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	273.92	125.18	18.90
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.76	10.49	1.04
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	6.54	3.21	0.48
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	3.08	1.76	27.10	0.82	0.24	2.90	2.80	2.50
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.77	1.94	0.00	0.00	0.00	16.61	15.32	14.00
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				29.56	11.80			
Total Miscellaneous Processes		80.34	11.12	47.61	48.48	12.34	480.82	238.36	48.01

TABLE B-3
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	97.74	90.19	836.46	66.27	0.88	7.05	6.91	3.96
722	Light Duty Trucks 1 (T1)	18.81	17.38	180.79	14.50	0.16	1.14	1.12	0.67
723	Light Duty Trucks 2 (T2)	43.61	39.65	451.40	52.52	0.49	4.60	4.50	3.07
724	Medium Duty Trucks (T3)	23.45	21.03	252.18	31.02	0.31	2.10	2.05	1.38
732	Light Heavy Duty Gas Trucks 1 (T4)	10.45	9.42	79.63	15.40	0.05	0.23	0.23	0.12
733	Light Heavy Duty Gas Trucks 2 (T5)	1.92	1.76	13.83	2.95	0.01	0.05	0.05	0.02
734	Medium Heavy Duty Gas Trucks (T6)	3.93	3.61	36.43	5.05	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	2.93	2.51	41.19	6.10	0.00	0.03	0.03	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.18	9.17	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.23	0.19	0.97	7.62	0.01	0.08	0.08	0.06
744	Medium Heavy Duty Diesel Truck (T6)	1.16	0.97	9.68	52.44	0.07	1.36	1.36	1.18
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	14.46	12.10	47.35	153.10	0.15	7.80	7.80	6.87
750	Motorcycles (MCY)	13.66	12.60	111.50	3.06	0.01	0.15	0.14	0.09
760	Diesel Urban Buses (UB)	0.45	0.37	2.27	11.01	0.01	0.20	0.20	0.17
762	Gas Urban Buses (UB)	0.54	0.43	4.57	0.77	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.32	0.27	3.42	4.11	0.00	0.15	0.15	0.13
776	Other Bus (OB)	0.52	0.47	5.54	3.31	0.01	0.07	0.07	0.05
780	Motor Homes (MH)	0.77	0.65	19.87	2.88	0.01	0.05	0.05	0.03
	On-Road Baseline Adjustment	N/A	-0.11	0.00	-14.69	0.00	N/A	N/A	-0.17
Total On-Road Motor Vehicles		235.18	213.68	2098.26	426.59	2.19	25.20	24.88	17.73
Other Mobile Sources									
810	Aircraft	9.07	8.10	58.34	17.42	1.68	0.97	0.91	0.89
820	Trains	2.97	2.48	7.06	28.95	0.14	0.86	0.85	0.78
830	Ships and Commercial Boats	4.31	3.61	10.35	76.95	20.10	4.18	4.05	3.90
840	Recreational Boats	64.68	60.73	355.57	16.96	0.03	5.07	4.57	3.46
850	Off-Road Recreational Vehicles	9.31	8.97	18.64	0.17	0.05	0.06	0.05	0.04
860	Off-Road Equipment	98.36	88.54	732.96	190.62	0.18	11.97	11.78	10.57
870	Farm Equipment	1.95	1.69	9.89	8.11	0.01	0.49	0.49	0.44
890	Fuel Storage and Handling	15.39	15.34	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
	Off-Road Baseline Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Other Mobile Sources		206.04	189.46	1192.81	339.18	22.19	23.60	22.70	20.08
Total Stationary and Area Sources		482.09	251.76	114.94	82.35	16.45	505.30	256.51	61.82
Total On-Road Vehicles		235.18	213.68	2098.26	426.59	2.19	25.20	24.88	17.73
Total Other Mobile		206.04	189.46	1192.81	339.18	22.19	23.60	22.70	20.08
Total Anthropogenic		923.31	654.90	3406.01	848.12	40.83	554.10	304.09	99.63

TABLE B-4

2010 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.22	1.34	12.47	0.69	0.33	1.08	1.07	1.07
20	Cogeneration	1.07	0.12	0.83	0.05	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.07	1.96	10.38	9.29	1.42	1.36	1.34	1.34
52	Food and Agricultural Processing	0.19	0.10	0.82	0.84	0.01	0.11	0.11	0.11
60	Service and Commercial	8.74	1.43	10.95	12.10	0.65	1.56	1.55	1.55
99	Other (Fuel Combustion)	0.88	0.61	2.18	5.04	0.03	0.27	0.27	0.25
Total Fuel Combustion		36.99	7.09	51.94	28.14	2.46	6.36	6.25	6.19
Waste Disposal									
110	Sewage Treatment	0.60	0.34	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.93	0.11	0.31	0.69	0.41	0.60	0.39	0.37
130	Incineration	0.65	0.11	0.90	1.36	0.08	0.21	0.14	0.13
199	Other (Waste Disposal)	57.05	6.86	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		64.23	7.42	1.21	2.06	0.49	0.85	0.56	0.53
Cleaning and Surface Coatings									
210	Laundering	3.55	0.20	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	55.84	9.49	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	25.17	24.13	0.05	0.05	0.00	1.05	1.01	0.97
240	Printing	4.67	4.66	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.48	3.91	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.72	0.72	0.18	0.12	0.02	0.06	0.06	0.06
Total Cleaning and Surface Coatings		94.42	43.10	0.23	0.17	0.02	1.11	1.07	1.03
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.08	3.73	8.27	0.36	0.80	1.24	0.84	0.65
330	Petroleum Marketing	27.88	27.18	0.07	0.01	0.00	0.02	0.02	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		34.43	31.76	8.37	0.40	0.80	1.26	0.86	0.66

TABLE B-4
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	12.83	11.42	0.04	0.00	0.01	0.88	0.72	0.66
420	Food and Agriculture	3.07	2.88	0.00	0.01	0.00	0.74	0.25	0.05
430	Mineral Processes	0.44	0.38	0.29	0.04	0.00	5.80	3.22	1.20
440	Metal Processes	0.08	0.06	1.98	0.02	0.01	1.11	0.70	0.49
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.95	4.12	2.50
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.28	0.27
470	Electronics	0.13	0.10	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.02	6.66	0.55	0.17	0.00	0.51	0.33	0.25
Total Industrial Processes		23.68	21.61	2.88	0.24	0.05	15.32	9.62	5.42
Solvent Evaporation									
510	Consumer Products	121.81	103.67	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	27.96	27.28	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	2.08	2.07	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.24	1.14	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		153.09	134.16	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	3.62	1.55	17.77	15.18	0.30	2.98	2.89	2.84
620	Farming Operations	59.33	4.75	0.00	0.00	0.00	0.90	0.41	0.09
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	168.42	82.36	8.25
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	276.40	126.31	19.07
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.72	10.47	1.04
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	6.19	3.05	0.46
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	3.08	1.76	27.09	0.82	0.24	2.90	2.79	2.50
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.86	2.00	0.00	0.00	0.00	17.09	15.77	14.41
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.82	11.80			
Total Miscellaneous Processes		69.23	10.30	47.88	43.90	12.34	493.05	244.49	49.07

TABLE B-4
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	80.28	74.23	697.55	52.62	0.89	7.21	7.07	4.06
722	Light Duty Trucks 1 (T1)	15.52	14.35	149.69	11.66	0.16	1.17	1.14	0.69
723	Light Duty Trucks 2 (T2)	39.63	36.22	399.35	43.58	0.50	4.78	4.67	3.21
724	Medium Duty Trucks (T3)	21.52	19.39	225.16	26.09	0.31	2.18	2.13	1.46
732	Light Heavy Duty Gas Trucks 1 (T4)	9.43	8.54	67.61	14.09	0.05	0.24	0.24	0.12
733	Light Heavy Duty Gas Trucks 2 (T5)	1.72	1.58	11.34	2.77	0.01	0.05	0.05	0.03
734	Medium Heavy Duty Gas Trucks (T6)	3.29	3.01	31.19	4.46	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	2.56	2.19	35.67	5.24	0.00	0.02	0.02	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.25	8.11	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.23	0.19	0.99	6.73	0.01	0.07	0.07	0.05
744	Medium Heavy Duty Diesel Truck (T6)	1.12	0.94	9.68	44.99	0.07	1.28	1.28	1.10
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	13.32	11.15	44.22	135.64	0.16	6.93	6.93	6.05
750	Motorcycles (MCY)	12.93	11.79	99.15	2.92	0.01	0.13	0.12	0.08
760	Diesel Urban Buses (UB)	0.44	0.37	2.23	10.43	0.01	0.19	0.19	0.17
762	Gas Urban Buses (UB)	0.52	0.42	4.37	0.75	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.32	0.27	3.35	4.00	0.00	0.15	0.15	0.13
776	Other Bus (OB)	0.44	0.40	4.81	2.72	0.01	0.06	0.06	0.05
780	Motor Homes (MH)	0.61	0.51	15.33	2.46	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		204.10	185.73	1802.95	379.27	2.22	24.66	24.31	17.33
Other Mobile Sources									
810	Aircraft	9.74	8.69	62.46	18.84	1.81	1.03	0.96	0.94
820	Trains	2.93	2.45	7.33	19.69	0.15	0.85	0.84	0.77
830	Ships and Commercial Boats	4.29	3.59	10.84	80.92	18.57	4.16	4.03	3.89
840	Recreational Boats	60.69	57.09	350.91	16.89	0.03	5.65	5.09	3.85
850	Off-Road Recreational Vehicles	9.53	9.17	19.33	0.16	0.05	0.06	0.06	0.04
860	Off-Road Equipment	88.72	80.21	729.51	171.76	0.18	10.86	10.68	9.55
870	Farm Equipment	1.78	1.55	9.67	7.44	0.01	0.45	0.45	0.41
890	Fuel Storage and Handling	13.14	13.10	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
Total Other Mobile Sources		190.81	175.84	1190.05	315.70	20.81	23.07	22.10	19.45
Total Stationary and Area Sources		476.07	255.44	112.51	74.91	16.16	517.98	262.88	62.93
Total On-Road Vehicles		204.10	185.73	1802.95	379.27	2.22	24.66	24.31	17.33
Total Other Mobile		190.81	175.84	1190.05	315.70	20.81	23.07	22.10	19.45
Total Anthropogenic		870.98	617.01	3105.51	769.88	39.19	565.71	309.29	99.71

TABLE B-5

2011 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.23	1.34	12.51	0.69	0.33	1.08	1.08	1.07
20	Cogeneration	0.78	0.09	0.62	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.11	1.97	10.46	9.15	1.43	1.37	1.36	1.35
52	Food and Agricultural Processing	0.19	0.10	0.82	0.82	0.01	0.11	0.11	0.11
60	Service and Commercial	8.78	1.44	11.01	11.62	0.66	1.56	1.55	1.55
99	Other (Fuel Combustion)	0.86	0.58	2.12	4.85	0.03	0.26	0.26	0.24
Total Fuel Combustion		36.76	7.05	51.83	27.31	2.47	6.34	6.24	6.18
Waste Disposal									
110	Sewage Treatment	0.61	0.34	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.99	0.11	0.31	0.70	0.41	0.60	0.39	0.38
130	Incineration	0.65	0.11	0.91	1.37	0.08	0.22	0.14	0.13
199	Other (Waste Disposal)	57.74	6.94	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		64.99	7.50	1.22	2.07	0.49	0.85	0.56	0.54
Cleaning and Surface Coatings									
210	Laundering	3.60	0.20	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	56.26	9.57	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	25.52	24.46	0.05	0.05	0.00	1.07	1.03	0.99
240	Printing	4.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.55	3.97	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.72	0.72	0.18	0.12	0.02	0.06	0.06	0.06
Total Cleaning and Surface Coatings		95.37	43.62	0.23	0.17	0.03	1.13	1.09	1.05
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.08	3.73	8.27	0.36	0.80	1.24	0.84	0.65
330	Petroleum Marketing	28.12	27.41	0.08	0.01	0.00	0.02	0.02	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		34.66	32.00	8.37	0.40	0.80	1.26	0.86	0.66

TABLE B-5
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	13.07	11.63	0.04	0.00	0.01	0.89	0.73	0.67
420	Food and Agriculture	3.09	2.90	0.00	0.01	0.00	0.75	0.25	0.05
430	Mineral Processes	0.44	0.38	0.29	0.05	0.00	5.88	3.26	1.21
440	Metal Processes	0.08	0.06	2.04	0.02	0.01	1.12	0.71	0.50
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	6.05	4.18	2.54
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.28	0.27
470	Electronics	0.13	0.10	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.08	6.71	0.55	0.17	0.00	0.51	0.33	0.25
Total Industrial Processes		24.00	21.91	2.93	0.25	0.05	15.53	9.76	5.49
Solvent Evaporation									
510	Consumer Products	122.75	104.48	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	28.28	27.59	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	2.03	2.02	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.27	1.17	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		154.33	135.26	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	3.65	1.56	17.93	15.29	0.30	3.00	2.92	2.87
620	Farming Operations	57.26	4.58	0.00	0.00	0.00	0.88	0.40	0.09
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	173.01	84.60	8.48
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	277.73	126.92	19.16
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.71	10.46	1.04
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	6.04	2.99	0.45
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	3.08	1.76	27.09	0.82	0.24	2.90	2.79	2.50
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.89	2.02	0.00	0.00	0.00	17.30	15.96	14.58
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		67.22	10.16	48.04	43.42	12.34	499.02	247.48	49.58

TABLE B-5
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	73.44	67.93	642.04	47.71	0.90	7.35	7.21	4.16
722	Light Duty Trucks 1 (T1)	14.46	13.38	138.53	10.69	0.17	1.19	1.17	0.71
723	Light Duty Trucks 2 (T2)	38.37	35.13	381.60	40.76	0.50	4.97	4.85	3.37
724	Medium Duty Trucks (T3)	21.05	19.00	216.68	24.62	0.32	2.27	2.22	1.54
732	Light Heavy Duty Gas Trucks 1 (T4)	9.10	8.25	63.08	13.72	0.05	0.25	0.24	0.12
733	Light Heavy Duty Gas Trucks 2 (T5)	1.64	1.51	10.29	2.70	0.01	0.05	0.05	0.03
734	Medium Heavy Duty Gas Trucks (T6)	3.01	2.76	28.81	4.22	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	2.35	2.00	32.22	4.86	0.00	0.02	0.02	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.27	7.57	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.22	0.19	0.99	6.27	0.01	0.07	0.07	0.05
744	Medium Heavy Duty Diesel Truck (T6)	1.10	0.92	9.63	41.17	0.08	1.25	1.25	1.07
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	12.71	10.64	42.69	127.42	0.16	6.54	6.54	5.68
750	Motorcycles (MCY)	12.70	11.52	92.67	2.92	0.01	0.13	0.12	0.08
760	Diesel Urban Buses (UB)	0.43	0.36	2.22	10.36	0.01	0.19	0.19	0.17
762	Gas Urban Buses (UB)	0.53	0.42	4.37	0.76	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.32	0.27	3.31	3.99	0.01	0.15	0.15	0.14
776	Other Bus (OB)	0.42	0.38	4.53	2.48	0.01	0.06	0.06	0.05
780	Motor Homes (MH)	0.55	0.46	13.38	2.28	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		192.62	175.31	1688.31	354.47	2.25	24.67	24.32	17.29
Other Mobile Sources									
810	Aircraft	10.10	9.01	64.17	19.62	1.88	1.05	0.98	0.96
820	Trains	2.96	2.47	7.48	21.13	0.02	0.84	0.83	0.76
830	Ships and Commercial Boats	4.25	3.56	11.04	82.27	19.35	4.22	4.09	3.94
840	Recreational Boats	59.16	55.71	350.03	16.90	0.03	5.97	5.37	4.07
850	Off-Road Recreational Vehicles	9.71	9.34	19.85	0.17	0.05	0.07	0.06	0.04
860	Off-Road Equipment	84.52	76.51	730.27	163.28	0.19	10.31	10.12	9.04
870	Farm Equipment	1.67	1.46	9.54	7.04	0.01	0.43	0.42	0.39
890	Fuel Storage and Handling	12.25	12.22	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
Total Other Mobile Sources		184.63	170.27	1192.38	310.41	21.53	22.88	21.88	19.21
Total Stationary and Area Sources		477.33	257.50	112.62	73.62	16.18	524.16	266.02	63.53
Total On-Road Vehicles		192.62	175.31	1688.31	354.47	2.25	24.67	24.32	17.29
Total Other Mobile		184.63	170.27	1192.38	310.41	21.53	22.88	21.88	19.21
Total Anthropogenic		854.58	603.08	2993.31	738.50	39.96	571.71	312.22	100.03

TABLE B-6

2014 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.45	1.39	12.94	0.71	0.34	1.12	1.11	1.11
20	Cogeneration	0.80	0.09	0.64	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.56	2.03	10.84	8.90	1.48	1.43	1.41	1.41
52	Food and Agricultural Processing	0.18	0.09	0.82	0.76	0.01	0.11	0.11	0.10
60	Service and Commercial	9.11	1.47	11.17	10.01	0.68	1.55	1.55	1.54
99	Other (Fuel Combustion)	0.78	0.49	1.95	4.29	0.03	0.23	0.23	0.21
Total Fuel Combustion		37.70	7.11	52.65	24.86	2.55	6.40	6.29	6.24
Waste Disposal									
110	Sewage Treatment	0.63	0.36	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	6.18	0.11	0.32	0.72	0.42	0.62	0.40	0.39
130	Incineration	0.67	0.11	0.92	1.38	0.08	0.22	0.14	0.13
199	Other (Waste Disposal)	59.80	7.19	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		67.28	7.77	1.24	2.10	0.50	0.87	0.58	0.55
Cleaning and Surface Coatings									
210	Laundering	3.74	0.20	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	57.61	9.82	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	26.57	25.45	0.06	0.05	0.00	1.14	1.09	1.05
240	Printing	4.81	4.80	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.79	4.18	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.75	0.75	0.18	0.13	0.03	0.06	0.06	0.06
Total Cleaning and Surface Coatings		98.26	45.20	0.24	0.18	0.03	1.20	1.16	1.11
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	28.82	28.10	0.08	0.01	0.00	0.02	0.02	0.01
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		35.05	32.44	7.02	0.16	0.60	1.20	0.82	0.63

TABLE B-6
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	13.79	12.28	0.04	0.00	0.01	0.93	0.76	0.69
420	Food and Agriculture	3.17	2.97	0.00	0.01	0.00	0.79	0.26	0.05
430	Mineral Processes	0.44	0.39	0.30	0.05	0.00	6.11	3.41	1.27
440	Metal Processes	0.08	0.06	2.20	0.02	0.01	1.17	0.74	0.53
450	Wood and Paper	0.09	0.09	0.00	0.00	0.00	6.33	4.38	2.65
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.29	0.28
470	Electronics	0.13	0.11	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.27	6.89	0.55	0.18	0.00	0.52	0.33	0.25
Total Industrial Processes		24.99	22.81	3.11	0.25	0.05	16.18	10.18	5.72
Solvent Evaporation									
510	Consumer Products	125.75	107.08	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	29.24	28.53	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.88	1.86	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.36	1.26	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		158.23	138.74	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	3.74	1.60	18.41	15.62	0.31	3.08	2.99	2.94
620	Farming Operations	52.20	4.18	0.00	0.00	0.00	0.80	0.36	0.08
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	186.91	91.40	9.16
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	281.74	128.76	19.44
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.67	10.45	1.04
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	5.59	2.78	0.42
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	3.08	1.76	27.09	0.82	0.24	2.90	2.79	2.50
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.00	2.10	0.00	0.00	0.00	17.97	16.58	15.15
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		62.36	9.88	48.52	43.75	12.35	517.11	256.55	51.14

TABLE B-6
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	57.50	52.88	499.21	35.61	0.92	7.64	7.49	4.37
722	Light Duty Trucks 1 (T1)	11.64	10.71	107.94	8.19	0.17	1.25	1.22	0.74
723	Light Duty Trucks 2 (T2)	34.99	31.90	329.77	33.21	0.52	5.40	5.28	3.73
724	Medium Duty Trucks (T3)	19.43	17.45	189.68	20.29	0.33	2.49	2.43	1.72
732	Light Heavy Duty Gas Trucks 1 (T4)	8.18	7.39	51.67	12.84	0.05	0.26	0.26	0.13
733	Light Heavy Duty Gas Trucks 2 (T5)	1.42	1.31	7.92	2.54	0.01	0.05	0.05	0.03
734	Medium Heavy Duty Gas Trucks (T6)	2.30	2.09	22.51	3.50	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	1.67	1.37	22.56	3.73	0.00	0.02	0.02	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.20	1.36	6.53	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.21	0.17	0.99	5.18	0.01	0.07	0.07	0.05
744	Medium Heavy Duty Diesel Truck (T6)	1.01	0.84	9.30	31.60	0.08	1.14	1.14	0.97
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	10.53	8.81	36.99	102.36	0.19	5.36	5.35	4.54
750	Motorcycles (MCY)	12.59	11.14	83.01	2.98	0.01	0.11	0.11	0.07
760	Diesel Urban Buses (UB)	0.41	0.35	2.11	9.70	0.01	0.18	0.18	0.16
762	Gas Urban Buses (UB)	0.55	0.42	4.32	0.79	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.31	0.25	2.98	3.96	0.01	0.16	0.16	0.14
776	Other Bus (OB)	0.35	0.32	3.78	1.92	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.38	0.30	8.44	1.82	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		163.71	147.91	1384.56	286.75	2.33	24.38	24.00	16.81
Other Mobile Sources									
810	Aircraft	11.19	9.99	69.30	21.95	2.08	1.11	1.03	1.01
820	Trains	3.00	2.50	7.99	22.75	0.02	0.85	0.84	0.77
830	Ships and Commercial Boats	4.18	3.50	11.72	87.45	22.01	4.46	4.31	4.17
840	Recreational Boats	55.99	52.87	352.43	17.13	0.04	6.99	6.29	4.76
850	Off-Road Recreational Vehicles	10.45	10.04	21.51	0.18	0.06	0.07	0.07	0.05
860	Off-Road Equipment	73.99	67.12	746.01	137.18	0.20	8.30	8.11	7.19
870	Farm Equipment	1.28	1.12	9.06	5.63	0.01	0.32	0.32	0.29
890	Fuel Storage and Handling	10.19	10.15	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
Total Other Mobile Sources		170.25	157.28	1218.01	292.29	24.40	22.10	20.97	18.24
Total Stationary and Area Sources		483.87	263.95	112.78	71.30	16.08	542.99	275.61	65.42
Total On-Road Vehicles		163.71	147.91	1384.56	286.75	2.33	24.38	24.00	16.81
Total Other Mobile		170.25	157.28	1218.01	292.29	24.40	22.10	20.97	18.24
Total Anthropogenic		817.83	569.14	2715.35	650.34	42.81	589.47	320.58	100.47

TABLE B-7

2017 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.76	1.45	13.55	0.75	0.35	1.17	1.17	1.16
20	Cogeneration	0.82	0.09	0.65	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.88	2.09	11.18	8.97	1.53	1.48	1.46	1.45
52	Food and Agricultural Processing	0.18	0.09	0.82	0.71	0.01	0.11	0.10	0.10
60	Service and Commercial	9.38	1.50	11.27	9.52	0.69	1.53	1.53	1.53
99	Other (Fuel Combustion)	0.72	0.43	1.83	3.84	0.03	0.20	0.20	0.19
Total Fuel Combustion		38.55	7.19	53.58	23.97	2.63	6.46	6.35	6.29
Waste Disposal									
110	Sewage Treatment	0.64	0.37	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	6.36	0.12	0.33	0.74	0.43	0.63	0.41	0.39
130	Incineration	0.69	0.11	0.94	1.40	0.08	0.22	0.15	0.14
199	Other (Waste Disposal)	61.82	7.43	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		69.51	8.02	1.27	2.14	0.51	0.89	0.59	0.56
Cleaning and Surface Coatings									
210	Laundering	3.86	0.21	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	59.35	10.13	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	27.55	26.39	0.06	0.05	0.00	1.20	1.15	1.11
240	Printing	4.94	4.93	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	5.01	4.37	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.77	0.77	0.19	0.14	0.03	0.07	0.06	0.06
Total Cleaning and Surface Coatings		101.48	46.80	0.25	0.19	0.03	1.27	1.22	1.17
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	29.58	28.87	0.09	0.01	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		35.82	33.21	7.03	0.16	0.60	1.20	0.82	0.63

TABLE B-7
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	14.49	12.91	0.04	0.00	0.01	0.98	0.79	0.72
420	Food and Agriculture	3.25	3.05	0.00	0.01	0.00	0.81	0.27	0.05
430	Mineral Processes	0.44	0.39	0.31	0.06	0.00	6.33	3.54	1.31
440	Metal Processes	0.08	0.06	2.33	0.02	0.01	1.21	0.77	0.55
450	Wood and Paper	0.09	0.09	0.00	0.00	0.00	6.63	4.59	2.78
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.31	0.30	0.29
470	Electronics	0.14	0.11	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.45	7.06	0.57	0.18	0.00	0.53	0.34	0.25
Total Industrial Processes		25.97	23.69	3.27	0.26	0.05	16.83	10.60	5.96
Solvent Evaporation									
510	Consumer Products	128.67	109.60	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	30.22	29.49	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.75	1.74	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.44	1.33	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		162.08	142.16	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	3.82	1.64	18.87	13.97	0.32	3.15	3.06	3.01
620	Farming Operations	48.40	3.87	0.00	0.00	0.00	0.73	0.33	0.07
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	198.99	97.31	9.75
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	285.63	130.53	19.71
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.64	10.43	1.04
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	5.18	2.60	0.39
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	3.08	1.75	27.08	0.82	0.24	2.90	2.79	2.50
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.10	2.16	0.00	0.00	0.00	18.51	17.08	15.60
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		58.74	9.66	48.97	42.10	12.36	533.18	264.57	52.48

TABLE B-7
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	47.06	43.46	395.14	27.05	0.94	7.90	7.75	4.56
722	Light Duty Trucks 1 (T1)	9.40	8.68	83.04	6.21	0.18	1.29	1.26	0.78
723	Light Duty Trucks 2 (T2)	32.18	29.54	285.00	27.02	0.53	5.79	5.65	4.05
724	Medium Duty Trucks (T3)	17.91	16.22	165.74	16.57	0.34	2.67	2.61	1.87
732	Light Heavy Duty Gas Trucks 1 (T4)	7.42	6.77	43.02	12.08	0.05	0.27	0.27	0.14
733	Light Heavy Duty Gas Trucks 2 (T5)	1.24	1.15	6.15	2.37	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	1.75	1.59	17.28	2.84	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	1.18	0.97	16.76	2.76	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.44	5.73	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.19	0.16	0.99	4.32	0.01	0.07	0.07	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.91	0.77	9.00	24.39	0.08	1.04	1.04	0.88
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	8.46	7.08	31.43	80.29	0.21	4.33	4.32	3.54
750	Motorcycles (MCY)	12.65	11.09	77.30	3.03	0.01	0.11	0.10	0.06
760	Diesel Urban Buses (UB)	0.39	0.33	2.00	9.10	0.01	0.17	0.17	0.15
762	Gas Urban Buses (UB)	0.57	0.43	4.09	0.80	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.31	0.25	2.83	3.94	0.01	0.17	0.17	0.15
776	Other Bus (OB)	0.31	0.28	3.17	1.56	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.25	0.20	5.00	1.47	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		142.42	129.18	1149.38	231.52	2.41	24.13	23.72	16.42
Other Mobile Sources									
810	Aircraft	12.27	10.96	74.43	24.29	2.27	1.16	1.08	1.06
820	Trains	3.05	2.55	8.56	24.20	0.02	0.86	0.86	0.79
830	Ships and Commercial Boats	4.27	3.58	12.53	94.77	25.11	4.83	4.66	4.51
840	Recreational Boats	54.10	51.23	360.71	17.59	0.04	8.16	7.35	5.56
850	Off-Road Recreational Vehicles	11.44	10.98	23.26	0.20	0.07	0.08	0.07	0.05
860	Off-Road Equipment	66.76	60.59	762.92	112.67	0.20	6.56	6.37	5.58
870	Farm Equipment	0.98	0.85	8.77	4.40	0.01	0.24	0.24	0.22
890	Fuel Storage and Handling	8.82	8.80	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
Total Other Mobile Sources		161.71	149.54	1251.18	278.11	27.73	21.89	20.63	17.78
Total Stationary and Area Sources		492.15	270.73	114.37	68.82	16.18	559.86	284.18	67.12
Total On-Road Vehicles		142.42	129.18	1149.38	231.52	2.41	24.13	23.72	16.42
Total Other Mobile		161.71	149.54	1251.18	278.11	27.73	21.89	20.63	17.78
Total Anthropogenic		796.28	549.45	2514.93	578.45	46.32	605.88	328.53	101.32

TABLE B-8

2020 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.12	1.53	14.28	0.79	0.37	1.23	1.23	1.23
20	Cogeneration	0.83	0.09	0.66	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	15.08	2.13	11.47	9.08	1.58	1.52	1.50	1.50
52	Food and Agricultural Processing	0.18	0.09	0.83	0.67	0.01	0.10	0.10	0.10
60	Service and Commercial	9.61	1.52	11.31	9.20	0.70	1.51	1.51	1.51
99	Other (Fuel Combustion)	0.67	0.37	1.73	3.44	0.04	0.18	0.18	0.17
Total Fuel Combustion		39.31	7.27	54.57	23.35	2.72	6.51	6.41	6.35
Waste Disposal									
110	Sewage Treatment	0.66	0.38	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	6.54	0.12	0.33	0.75	0.44	0.64	0.42	0.40
130	Incineration	0.71	0.12	0.96	1.43	0.08	0.23	0.15	0.14
199	Other (Waste Disposal)	63.80	7.66	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		71.71	8.28	1.29	2.18	0.52	0.91	0.60	0.58
Cleaning and Surface Coatings									
210	Laundering	3.96	0.21	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	61.30	10.47	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	28.50	27.30	0.06	0.05	0.00	1.26	1.21	1.16
240	Printing	5.08	5.07	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	5.22	4.55	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.80	0.80	0.19	0.14	0.03	0.07	0.07	0.06
Total Cleaning and Surface Coatings		104.86	48.41	0.25	0.20	0.03	1.33	1.27	1.23
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	30.41	29.69	0.10	0.01	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		36.65	34.03	7.04	0.16	0.60	1.20	0.82	0.63

TABLE B-8
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	15.18	13.53	0.04	0.00	0.01	1.02	0.83	0.75
420	Food and Agriculture	3.34	3.13	0.00	0.01	0.00	0.84	0.28	0.05
430	Mineral Processes	0.45	0.39	0.32	0.06	0.00	6.54	3.66	1.36
440	Metal Processes	0.08	0.07	2.44	0.02	0.01	1.25	0.79	0.56
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	6.95	4.81	2.91
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.32	0.31	0.30
470	Electronics	0.15	0.11	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.63	7.23	0.58	0.18	0.00	0.54	0.34	0.25
Total Industrial Processes		26.94	24.58	3.41	0.27	0.05	17.49	11.03	6.20
Solvent Evaporation									
510	Consumer Products	131.53	112.08	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	31.19	30.44	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.64	1.63	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.52	1.40	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		165.88	145.55	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	3.95	1.69	19.52	14.27	0.33	3.26	3.16	3.11
620	Farming Operations	45.51	3.64	0.00	0.00	0.00	0.67	0.30	0.07
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	210.13	102.75	10.30
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	289.63	132.36	19.98
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.61	10.42	1.03
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	4.81	2.43	0.36
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	3.08	1.75	27.07	0.82	0.24	2.90	2.79	2.50
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.18	2.22	0.00	0.00	0.00	19.01	17.53	16.02
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		56.06	9.54	49.61	42.40	12.37	548.47	272.18	53.78

TABLE B-8
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	39.57	36.36	318.19	20.28	0.95	8.12	7.97	4.70
722	Light Duty Trucks 1 (T1)	7.99	7.37	66.45	4.68	0.18	1.33	1.30	0.80
723	Light Duty Trucks 2 (T2)	29.88	27.33	248.31	21.48	0.55	6.08	5.94	4.29
724	Medium Duty Trucks (T3)	16.32	14.73	144.41	13.00	0.35	2.82	2.75	1.98
732	Light Heavy Duty Gas Trucks 1 (T4)	6.72	6.12	35.49	11.10	0.06	0.29	0.28	0.15
733	Light Heavy Duty Gas Trucks 2 (T5)	1.07	1.00	4.86	2.14	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	1.38	1.25	13.35	2.22	0.01	0.05	0.05	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	0.83	0.68	12.96	1.96	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.22	0.19	1.49	4.82	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.17	0.14	0.99	3.44	0.01	0.06	0.06	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.84	0.71	8.74	17.98	0.08	0.97	0.97	0.81
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	6.85	5.73	27.05	62.75	0.22	3.53	3.52	2.78
750	Motorcycles (MCY)	12.90	11.08	75.57	3.01	0.01	0.10	0.10	0.06
760	Diesel Urban Buses (UB)	0.36	0.30	1.79	7.79	0.01	0.16	0.16	0.14
762	Gas Urban Buses (UB)	0.59	0.42	3.77	0.80	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.30	0.24	2.56	3.79	0.01	0.18	0.18	0.16
776	Other Bus (OB)	0.27	0.24	2.63	1.22	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.17	0.13	2.75	1.14	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		126.44	114.02	971.34	183.61	2.47	23.98	23.56	16.10
Other Mobile Sources									
810	Aircraft	13.36	11.93	79.56	26.63	2.47	1.22	1.14	1.11
820	Trains	3.11	2.60	9.20	25.82	0.02	0.88	0.87	0.80
830	Ships and Commercial Boats	4.49	3.77	13.47	103.90	28.76	5.30	5.11	4.96
840	Recreational Boats	53.05	50.37	373.45	18.01	0.04	9.43	8.49	6.42
850	Off-Road Recreational Vehicles	12.65	12.14	25.14	0.21	0.08	0.09	0.08	0.06
860	Off-Road Equipment	63.22	57.41	787.64	93.78	0.21	5.22	5.02	4.34
870	Farm Equipment	0.75	0.65	8.65	3.37	0.01	0.17	0.17	0.15
890	Fuel Storage and Handling	7.88	7.86	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
Total Other Mobile Sources		158.52	146.73	1297.10	271.72	31.60	22.30	20.88	17.85
Total Stationary and Area Sources		501.41	277.66	116.17	68.56	16.29	575.94	292.34	68.80
Total On-Road Vehicles		126.44	114.02	971.34	183.61	2.47	23.98	23.56	16.10
Total Other Mobile		158.52	146.73	1297.10	271.72	31.60	22.30	20.88	17.85
Total Anthropogenic		786.37	538.41	2384.61	523.89	50.36	622.22	336.78	102.75

TABLE B-9

2023 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.13	1.53	14.29	0.79	0.37	1.23	1.23	1.23
20	Cogeneration	0.84	0.09	0.67	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	15.38	2.18	11.83	9.30	1.64	1.57	1.56	1.55
52	Food and Agricultural Processing	0.18	0.09	0.84	0.64	0.01	0.10	0.10	0.10
60	Service and Commercial	9.89	1.55	11.48	9.23	0.71	1.51	1.51	1.51
99	Other (Fuel Combustion)	0.69	0.37	1.75	3.45	0.04	0.18	0.18	0.17
Total Fuel Combustion		39.92	7.36	55.16	23.58	2.79	6.57	6.46	6.41
Waste Disposal									
110	Sewage Treatment	0.68	0.39	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	6.74	0.12	0.34	0.77	0.45	0.66	0.42	0.41
130	Incineration	0.74	0.12	0.99	1.46	0.08	0.23	0.16	0.15
199	Other (Waste Disposal)	65.57	7.88	0.00	0.00	0.00	0.04	0.03	0.03
Total Waste Disposal		73.72	8.51	1.33	2.23	0.53	0.93	0.62	0.59
Cleaning and Surface Coatings									
210	Laundering	4.08	0.21	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	63.43	10.85	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	29.56	28.31	0.07	0.05	0.00	1.32	1.27	1.22
240	Printing	5.23	5.23	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	5.46	4.76	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.82	0.82	0.20	0.15	0.03	0.07	0.07	0.07
Total Cleaning and Surface Coatings		108.58	50.18	0.26	0.21	0.03	1.39	1.34	1.29
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	31.24	30.51	0.10	0.01	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		37.48	34.85	7.04	0.16	0.60	1.20	0.82	0.63

TABLE B-9
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	15.97	14.23	0.05	0.00	0.01	1.07	0.86	0.78
420	Food and Agriculture	3.44	3.22	0.00	0.01	0.00	0.86	0.29	0.06
430	Mineral Processes	0.45	0.40	0.33	0.06	0.00	6.77	3.81	1.41
440	Metal Processes	0.08	0.07	2.57	0.02	0.01	1.30	0.82	0.59
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	7.30	5.05	3.06
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.33	0.32	0.31
470	Electronics	0.15	0.12	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.79	7.39	0.60	0.19	0.00	0.55	0.35	0.26
Total Industrial Processes		28.01	25.54	3.56	0.28	0.06	18.22	11.51	6.47
Solvent Evaporation									
510	Consumer Products	134.11	114.32	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	32.09	31.31	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.57	1.55	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.60	1.48	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		169.37	148.66	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	3.95	1.69	19.68	14.32	0.33	3.27	3.17	3.12
620	Farming Operations	43.39	3.47	0.00	0.00	0.00	0.61	0.28	0.06
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	222.17	108.64	10.89
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	293.63	134.19	20.26
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.58	10.41	1.03
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	4.51	2.29	0.34
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	3.08	1.75	27.07	0.82	0.24	2.90	2.79	2.50
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.27	2.29	0.00	0.00	0.00	19.54	18.03	16.47
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		54.03	9.44	49.77	42.45	12.37	564.66	280.24	55.08

TABLE B-9
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	33.92	31.29	264.66	16.64	0.96	8.25	8.09	4.79
722	Light Duty Trucks 1 (T1)	7.10	6.58	55.09	3.84	0.18	1.37	1.34	0.83
723	Light Duty Trucks 2 (T2)	28.16	25.90	220.77	18.45	0.57	6.35	6.20	4.49
724	Medium Duty Trucks (T3)	14.80	13.44	125.38	10.83	0.36	2.95	2.88	2.08
732	Light Heavy Duty Gas Trucks 1 (T4)	5.97	5.51	29.13	10.74	0.06	0.30	0.30	0.16
733	Light Heavy Duty Gas Trucks 2 (T5)	0.94	0.88	4.08	2.06	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	1.16	1.07	10.75	1.86	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	0.59	0.49	10.53	1.56	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.21	0.18	1.54	4.27	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.15	0.13	0.99	2.91	0.01	0.06	0.06	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.80	0.67	8.65	14.40	0.09	0.94	0.94	0.78
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	5.97	5.00	24.69	56.36	0.24	3.07	3.07	2.32
750	Motorcycles (MCY)	12.62	10.81	71.48	3.03	0.01	0.10	0.09	0.06
760	Diesel Urban Buses (UB)	0.35	0.29	1.75	7.72	0.01	0.15	0.15	0.14
762	Gas Urban Buses (UB)	0.61	0.43	3.74	0.84	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.28	0.23	2.35	3.83	0.01	0.18	0.18	0.16
776	Other Bus (OB)	0.23	0.21	2.15	1.02	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.12	0.09	1.60	0.96	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		113.99	103.19	839.34	161.32	2.54	24.06	23.62	16.03
Other Mobile Sources									
810	Aircraft	14.64	13.08	85.17	29.34	2.69	1.28	1.19	1.17
820	Trains	3.19	2.66	9.92	27.63	0.03	0.90	0.89	0.82
830	Ships and Commercial Boats	4.92	4.13	14.57	116.19	33.05	5.94	5.72	5.55
840	Recreational Boats	53.49	50.89	390.63	18.32	0.05	10.97	9.88	7.48
850	Off-Road Recreational Vehicles	13.98	13.42	26.80	0.23	0.08	0.10	0.09	0.07
860	Off-Road Equipment	62.04	56.38	819.55	81.08	0.22	4.42	4.22	3.59
870	Farm Equipment	0.62	0.54	8.69	2.58	0.01	0.12	0.12	0.11
890	Fuel Storage and Handling	7.17	7.15	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
Total Other Mobile Sources		160.05	148.25	1355.32	275.36	36.14	23.72	22.11	18.78
Total Stationary and Area Sources		511.11	284.54	117.12	68.91	16.38	593.00	301.02	70.50
Total On-Road Vehicles		113.99	103.19	839.34	161.32	2.54	24.06	23.62	16.03
Total Other Mobile		160.05	148.25	1355.32	275.36	36.14	23.72	22.11	18.78
Total Anthropogenic		785.15	535.98	2311.78	505.59	55.06	640.78	346.75	105.31

TABLE B-10

2030 Summer Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.15	1.53	14.32	0.79	0.37	1.23	1.23	1.23
20	Cogeneration	0.87	0.10	0.70	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	16.22	2.33	12.74	9.85	1.78	1.71	1.69	1.68
52	Food and Agricultural Processing	0.19	0.09	0.87	0.59	0.01	0.10	0.10	0.10
60	Service and Commercial	10.59	1.64	12.05	9.52	0.75	1.55	1.55	1.55
99	Other (Fuel Combustion)	0.73	0.38	1.82	3.46	0.04	0.18	0.18	0.17
Total Fuel Combustion		41.56	7.60	56.79	24.38	2.97	6.75	6.64	6.58
Waste Disposal									
110	Sewage Treatment	0.71	0.41	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	7.22	0.13	0.35	0.81	0.47	0.69	0.44	0.42
130	Incineration	0.79	0.13	1.04	1.52	0.08	0.25	0.17	0.16
199	Other (Waste Disposal)	69.47	8.35	0.00	0.00	0.00	0.04	0.04	0.04
Total Waste Disposal		78.19	9.02	1.40	2.34	0.55	0.97	0.65	0.62
Cleaning and Surface Coatings									
210	Laundering	4.35	0.22	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	68.18	11.70	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	32.09	30.72	0.08	0.06	0.00	1.48	1.42	1.37
240	Printing	5.58	5.57	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	6.02	5.26	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.89	0.89	0.21	0.17	0.04	0.08	0.08	0.07
Total Cleaning and Surface Coatings		117.11	54.37	0.28	0.23	0.04	1.56	1.50	1.44
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	33.18	32.44	0.12	0.01	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		39.42	36.79	7.06	0.16	0.60	1.20	0.82	0.63

TABLE B-10
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	17.88	15.95	0.05	0.00	0.01	1.19	0.95	0.86
420	Food and Agriculture	3.65	3.42	0.00	0.01	0.00	0.92	0.31	0.06
430	Mineral Processes	0.47	0.41	0.36	0.07	0.00	7.35	4.16	1.54
440	Metal Processes	0.09	0.07	2.87	0.02	0.01	1.41	0.89	0.63
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	8.14	5.63	3.41
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.03	0.36	0.35	0.33
470	Electronics	0.17	0.13	0.00	0.00	0.00	0.04	0.01	0.01
499	Other (Industrial Processes)	8.16	7.74	0.64	0.20	0.00	0.57	0.36	0.26
Total Industrial Processes		30.53	27.83	3.93	0.31	0.06	19.99	12.66	7.11
Solvent Evaporation									
510	Consumer Products	139.75	119.19	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	34.15	33.32	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.42	1.41	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.79	1.66	0.00	0.00	0.00	0.04	0.03	0.03
Total Solvent Evaporation		177.11	155.58	0.00	0.00	0.00	0.04	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	4.11	1.76	20.64	14.78	0.35	3.42	3.31	3.26
620	Farming Operations	40.29	3.22	0.00	0.00	0.00	0.50	0.23	0.05
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	251.43	122.95	12.32
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	302.95	138.45	20.90
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.53	10.38	1.03
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	3.88	2.01	0.30
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	3.07	1.75	27.06	0.82	0.24	2.90	2.79	2.50
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.49	2.44	0.00	0.00	0.00	20.85	19.23	17.57
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		51.30	9.41	50.72	42.91	12.39	603.91	299.79	58.34

TABLE B-10
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	24.79	22.98	195.52	11.40	1.00	8.58	8.41	4.98
722	Light Duty Trucks 1 (T1)	5.50	5.14	40.12	2.48	0.20	1.47	1.44	0.89
723	Light Duty Trucks 2 (T2)	24.73	22.92	182.50	13.01	0.62	6.91	6.74	4.88
724	Medium Duty Trucks (T3)	13.02	11.96	108.54	7.48	0.40	3.24	3.17	2.29
732	Light Heavy Duty Gas Trucks 1 (T4)	4.83	4.55	20.61	9.96	0.07	0.34	0.33	0.17
733	Light Heavy Duty Gas Trucks 2 (T5)	0.76	0.72	3.35	1.88	0.01	0.07	0.07	0.04
734	Medium Heavy Duty Gas Trucks (T6)	0.98	0.91	7.98	1.39	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	0.35	0.29	8.48	1.13	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.18	0.15	1.62	3.27	0.01	0.10	0.10	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.12	0.10	1.02	2.08	0.01	0.06	0.06	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.76	0.64	8.92	10.41	0.10	0.91	0.91	0.74
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	5.24	4.38	23.69	51.26	0.27	2.85	2.84	2.04
750	Motorcycles (MCY)	12.84	10.96	71.59	3.06	0.01	0.10	0.09	0.06
760	Diesel Urban Buses (UB)	0.28	0.24	1.34	5.73	0.01	0.13	0.13	0.11
762	Gas Urban Buses (UB)	0.29	0.22	3.35	0.85	0.00	0.02	0.02	0.01
770	School Buses (SB)	0.28	0.23	2.27	3.72	0.01	0.20	0.20	0.18
776	Other Bus (OB)	0.17	0.16	1.54	0.76	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.07	0.06	0.63	0.65	0.01	0.06	0.06	0.03
Total On-Road Motor Vehicles		95.21	86.62	683.09	130.51	2.74	25.15	24.68	16.58
Other Mobile Sources									
810	Aircraft	17.63	15.75	98.25	35.67	3.21	1.42	1.33	1.30
820	Trains	3.41	2.85	11.99	32.86	0.03	0.95	0.95	0.87
830	Ships and Commercial Boats	6.13	5.13	17.69	152.49	48.64	8.31	8.00	7.77
840	Recreational Boats	63.65	60.62	459.33	21.03	0.06	16.60	14.95	11.31
850	Off-Road Recreational Vehicles	17.72	17.01	31.39	0.27	0.11	0.12	0.11	0.08
860	Off-Road Equipment	63.61	57.88	881.39	68.05	0.25	3.45	3.24	2.68
870	Farm Equipment	0.46	0.40	8.83	1.52	0.01	0.05	0.05	0.05
890	Fuel Storage and Handling	6.19	6.17	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
Total Other Mobile Sources		178.78	165.81	1508.86	311.89	52.31	30.90	28.62	24.05
Total Stationary and Area Sources		535.22	300.60	120.18	70.33	16.61	634.42	322.09	74.75
Total On-Road Vehicles		95.21	86.62	683.09	130.51	2.74	25.15	24.68	16.58
Total Other Mobile		178.78	165.81	1508.86	311.89	52.31	30.90	28.62	24.05
Total Anthropogenic		809.21	553.03	2312.13	512.73	71.66	690.47	375.39	115.38

ATTACHMENT C

FINAL 2007 AQMP APPENDIX III

WINTER PLANNING EMISSIONS

BY MAJOR SOURCE CATEGORY

TABLE C-1

2002 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	8.06	1.74	16.23	1.31	0.45	1.41	1.41	1.41
20	Cogeneration	1.03	0.12	0.80	0.06	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.34	0.02	0.16	0.16	0.16
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	12.41	1.69	8.79	9.85	1.14	1.23	1.21	1.21
52	Food and Agricultural Processing	0.27	0.17	1.04	1.88	0.03	0.19	0.19	0.18
60	Service and Commercial	7.84	1.30	10.00	16.10	0.64	1.48	1.48	1.48
99	Other (Fuel Combustion)	0.96	0.71	2.40	5.55	0.03	0.31	0.31	0.29
Total Fuel Combustion		36.39	7.26	53.54	35.10	2.32	6.63	6.52	6.45
Waste Disposal									
110	Sewage Treatment	0.53	0.30	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.53	0.10	0.29	0.63	0.38	0.56	0.36	0.35
130	Incineration	0.55	0.09	0.86	1.29	0.08	0.19	0.12	0.11
199	Other (Waste Disposal)	59.61	7.15	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		66.21	7.64	1.14	1.91	0.46	0.78	0.51	0.48
Cleaning and Surface Coatings									
210	Laundering	3.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	63.17	19.54	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	29.99	28.87	0.03	0.03	0.00	0.75	0.72	0.70
240	Printing	6.27	6.27	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	3.95	3.44	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	1.39	1.39	0.16	0.09	0.02	0.11	0.11	0.10
Total Cleaning and Surface Coatings		107.94	59.68	0.19	0.12	0.02	0.86	0.83	0.80
Petroleum Production and Marketing									
310	Oil and Gas Production	4.47	2.50	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	6.49	4.68	8.27	0.36	6.96	1.64	1.08	0.87
330	Petroleum Marketing	28.78	27.80	0.90	0.03	0.00	0.04	0.04	0.04
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		39.75	34.99	9.19	0.42	6.96	1.68	1.12	0.91

TABLE C-1
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	14.07	12.40	0.04	0.00	0.01	0.69	0.58	0.53
420	Food and Agriculture	2.93	2.77	0.00	0.00	0.00	0.69	0.23	0.04
430	Mineral Processes	0.42	0.37	0.25	0.03	0.00	14.23	7.50	1.86
440	Metal Processes	0.07	0.05	1.34	0.01	0.02	0.88	0.56	0.39
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.19	3.59	2.18
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.28	0.27	0.25
470	Electronics	0.08	0.06	0.00	0.00	0.00	0.02	0.01	0.00
499	Other (Industrial Processes)	6.78	6.46	0.50	0.15	0.00	0.48	0.31	0.24
Total Industrial Processes		24.47	22.23	2.15	0.20	0.05	22.45	13.04	5.50
Solvent Evaporation									
510	Consumer Products	130.40	110.40	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	40.88	39.88	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.66	1.65	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.62	0.56	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		173.57	152.48	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	14.46	6.28	92.35	32.56	0.49	14.12	13.37	12.96
620	Farming Operations	123.37	9.87	0.00	0.00	0.00	2.25	1.02	0.23
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	101.38	49.57	4.97
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	267.97	122.46	18.49
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	22.67	13.35	1.33
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	3.04	1.64	0.25
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	0.99	0.57	6.92	0.30	0.01	0.92	0.89	0.82
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.57	1.80	0.00	0.00	0.00	15.41	14.22	13.00
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				29.40	11.70			
Total Miscellaneous Processes		141.73	18.76	102.29	62.34	12.20	428.21	216.96	52.46

TABLE C-1
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	204.74	190.09	1604.80	161.53	1.16	7.13	6.99	4.03
722	Light Duty Trucks 1 (T1)	34.85	32.40	329.00	31.73	0.27	1.22	1.20	0.68
723	Light Duty Trucks 2 (T2)	70.89	64.75	717.58	107.81	0.53	3.80	3.71	2.50
724	Medium Duty Trucks (T3)	36.24	32.86	398.11	56.79	0.32	1.58	1.55	1.01
732	Light Heavy Duty Gas Trucks 1 (T4)	21.42	19.50	202.78	28.89	0.07	0.26	0.26	0.14
733	Light Heavy Duty Gas Trucks 2 (T5)	3.40	3.13	30.83	4.30	0.01	0.05	0.05	0.02
734	Medium Heavy Duty Gas Trucks (T6)	9.11	8.45	78.61	8.54	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	5.06	4.51	72.02	10.45	0.01	0.04	0.04	0.02
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.02	0.02	0.08	0.67	0.00	0.01	0.01	0.01
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.22	0.19	0.83	8.89	0.04	0.08	0.08	0.06
744	Medium Heavy Duty Diesel Truck (T6)	1.28	1.07	10.15	75.93	0.57	1.60	1.60	1.41
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	14.48	12.12	50.44	156.76	1.00	8.74	8.73	7.79
750	Motorcycles (MCY)	10.61	10.04	73.01	1.94	0.00	0.09	0.08	0.06
760	Diesel Urban Buses (UB)	0.50	0.42	2.65	13.72	0.13	0.23	0.23	0.21
762	Gas Urban Buses (UB)	0.58	0.48	5.35	1.03	0.00	0.01	0.01	0.00
770	School Buses (SB)	0.39	0.34	4.73	4.50	0.04	0.14	0.14	0.13
776	Other Bus (OB)	0.78	0.72	8.19	3.84	0.02	0.06	0.06	0.05
780	Motor Homes (MH)	1.43	1.25	40.64	4.39	0.02	0.04	0.04	0.02
	On-Road Baseline Adjustment	0.00	0.00	0.00	-1.70	0.00	0.00	0.00	0.00
Total On-Road Motor Vehicles		416.00	382.34	3629.80	680.01	4.20	25.13	24.83	18.17
Other Mobile Sources									
810	Aircraft	7.16	6.39	45.99	13.24	1.29	0.82	0.77	0.75
820	Trains	3.01	2.51	6.31	37.91	1.24	0.93	0.92	0.84
830	Ships and Commercial Boats	4.30	3.60	8.80	64.29	23.45	4.58	4.44	4.28
840	Recreational Boats	23.81	22.65	75.60	2.96	0.01	0.89	0.80	0.61
850	Off-Road Recreational Vehicles	6.45	6.13	20.17	0.19	0.04	0.08	0.08	0.06
860	Off-Road Equipment	113.38	99.54	680.20	242.88	1.23	14.20	14.05	12.71
870	Farm Equipment	1.67	1.45	6.48	6.70	0.04	0.41	0.41	0.38
890	Fuel Storage and Handling	15.41	15.37	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
	Off-Road Baseline Adjustment	0.00	0.00	0.00	-0.97	0.00	0.00	0.00	0.00
Total Other Mobile Sources		175.19	157.64	843.55	367.20	27.30	21.91	21.47	19.63
Total Stationary and Area Sources		590.06	303.04	168.50	100.09	22.01	460.63	239.00	66.62
Total On-Road Vehicles		416.00	382.34	3629.80	680.01	4.20	25.13	24.83	18.17
Total Other Mobile		175.19	157.64	843.55	367.20	27.30	21.91	21.47	19.63
Total Anthropogenic		1181.25	843.02	4641.85	1147.30	53.51	507.67	285.30	104.42

TABLE C-2

2005 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.30	1.36	12.65	0.86	0.33	1.09	1.09	1.09
20	Cogeneration	1.05	0.12	0.81	0.06	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.24	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	12.70	1.75	9.23	9.63	1.22	1.31	1.29	1.28
52	Food and Agricultural Processing	0.25	0.15	0.97	1.63	0.01	0.16	0.16	0.16
60	Service and Commercial	8.13	1.34	10.26	15.17	0.62	1.49	1.49	1.49
99	Other (Fuel Combustion)	0.90	0.64	2.20	5.07	0.03	0.28	0.28	0.26
Total Fuel Combustion		35.13	6.90	50.41	32.65	2.22	6.32	6.21	6.15
Waste Disposal									
110	Sewage Treatment	0.56	0.32	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.68	0.10	0.29	0.64	0.39	0.57	0.37	0.36
130	Incineration	0.58	0.10	0.86	1.30	0.08	0.20	0.12	0.11
199	Other (Waste Disposal)	63.81	7.63	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		70.63	8.14	1.16	1.95	0.47	0.80	0.52	0.50
Cleaning and Surface Coatings									
210	Laundering	3.30	0.18	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	48.51	8.44	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	28.37	27.29	0.04	0.04	0.00	0.85	0.82	0.79
240	Printing	6.26	6.26	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	3.65	3.19	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.63	0.63	0.16	0.10	0.02	0.11	0.11	0.10
Total Cleaning and Surface Coatings		90.71	45.98	0.20	0.14	0.02	0.97	0.93	0.89
Petroleum Production and Marketing									
310	Oil and Gas Production	2.22	1.34	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.15	3.80	8.27	0.36	6.96	1.54	1.02	0.81
330	Petroleum Marketing	28.01	27.33	0.92	0.03	0.00	0.04	0.04	0.04
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		35.39	32.48	9.22	0.42	6.96	1.58	1.06	0.85

TABLE C-2
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	11.54	10.32	0.04	0.00	0.01	0.75	0.63	0.57
420	Food and Agriculture	2.92	2.76	0.00	0.00	0.00	0.69	0.23	0.04
430	Mineral Processes	0.42	0.37	0.26	0.03	0.00	15.41	8.15	2.01
440	Metal Processes	0.07	0.06	1.53	0.01	0.01	0.95	0.59	0.42
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.21	3.61	2.19
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.28	0.26
470	Electronics	0.10	0.08	0.00	0.00	0.00	0.02	0.01	0.00
499	Other (Industrial Processes)	7.12	6.77	0.51	0.16	0.00	0.48	0.31	0.24
Total Industrial Processes		22.29	20.47	2.36	0.21	0.05	23.81	13.80	5.74
Solvent Evaporation									
510	Consumer Products	118.71	100.70	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	32.60	31.84	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.59	1.58	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.69	0.62	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		153.60	134.75	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	14.57	6.33	94.13	30.89	0.48	14.32	13.55	13.13
620	Farming Operations	94.36	7.55	0.00	0.00	0.00	2.04	0.93	0.21
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	115.23	56.35	5.65
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	265.13	121.16	18.29
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	20.26	11.95	1.19
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	2.63	1.41	0.21
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	12.57	7.16	113.02	3.41	1.04	11.95	11.49	10.23
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.65	1.85	0.00	0.00	0.00	15.89	14.66	13.39
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				34.37	11.78			
Total Miscellaneous Processes		124.49	23.13	210.17	68.75	13.30	447.90	231.94	62.71

TABLE C-2
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	149.91	139.62	1184.39	111.36	0.88	7.33	7.18	4.11
722	Light Duty Trucks 1 (T1)	28.08	26.16	252.63	23.37	0.20	1.21	1.18	0.70
723	Light Duty Trucks 2 (T2)	61.12	56.21	599.88	85.31	0.49	4.70	4.59	3.08
724	Medium Duty Trucks (T3)	31.90	29.01	332.69	48.80	0.32	2.12	2.08	1.37
732	Light Heavy Duty Gas Trucks 1 (T4)	18.71	17.10	160.21	25.09	0.06	0.29	0.29	0.15
733	Light Heavy Duty Gas Trucks 2 (T5)	3.33	3.07	27.19	4.29	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	7.68	7.11	67.30	8.25	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	4.84	4.27	66.63	10.23	0.01	0.04	0.04	0.02
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.28	0.24	1.45	14.63	0.09	0.13	0.13	0.09
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.30	0.25	1.21	11.55	0.06	0.11	0.11	0.08
744	Medium Heavy Duty Diesel Truck (T6)	1.54	1.29	12.42	82.38	0.74	1.89	1.89	1.65
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	15.93	13.33	54.30	176.07	1.20	9.09	9.09	8.07
750	Motorcycles (MCY)	16.35	15.26	132.09	3.68	0.01	0.16	0.15	0.10
760	Diesel Urban Buses (UB)	0.46	0.39	2.37	12.33	0.12	0.21	0.21	0.19
762	Gas Urban Buses (UB)	0.53	0.44	4.73	0.86	0.00	0.01	0.01	0.00
770	School Buses (SB)	0.34	0.30	3.95	4.34	0.04	0.14	0.14	0.13
776	Other Bus (OB)	0.75	0.68	7.98	4.16	0.03	0.07	0.07	0.06
780	Motor Homes (MH)	1.09	0.95	28.96	3.83	0.02	0.05	0.05	0.03
	On-Road Baseline Adjustment	0.00	0.00	0.00	-9.79	0.00	N/A	N/A	-0.09
Total On-Road Motor Vehicles		343.14	315.68	2940.38	620.74	4.29	27.66	27.32	19.80
Other Mobile Sources									
810	Aircraft	8.14	7.26	52.14	15.36	1.49	0.89	0.83	0.81
820	Trains	3.06	2.55	6.65	32.26	1.33	0.94	0.94	0.86
830	Ships and Commercial Boats	4.37	3.67	9.69	73.33	30.98	5.55	5.37	5.18
840	Recreational Boats	25.67	24.62	77.92	3.84	0.01	0.98	0.89	0.67
850	Off-Road Recreational Vehicles	7.26	6.98	14.82	0.16	0.03	0.06	0.05	0.04
860	Off-Road Equipment	108.98	97.05	647.01	221.94	1.28	13.37	13.22	11.94
870	Farm Equipment	1.53	1.34	5.99	6.01	0.04	0.37	0.37	0.34
890	Fuel Storage and Handling	14.92	14.87	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
	Off-Road Baseline Adjustment	0.00	0.00	0.00	-1.36	0.00	N/A	N/A	-0.09
Total Other Mobile Sources		173.93	158.34	814.22	351.54	35.16	22.16	21.67	19.75
Total Stationary and Area Sources		532.24	271.85	273.52	104.12	23.02	481.40	254.48	76.86
Total On-Road Vehicles		343.14	315.68	2940.38	620.74	4.29	27.66	27.32	19.80
Total Other Mobile		173.93	158.34	814.22	351.54	35.16	22.16	21.67	19.75
Total Anthropogenic		1049.31	745.87	4028.12	1076.41	62.47	531.22	303.47	116.41

TABLE C-3

2008 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.88	1.70	15.86	1.03	0.41	1.37	1.36	1.36
20	Cogeneration	1.06	0.12	0.83	0.06	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.22	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	13.60	1.88	9.95	9.59	1.34	1.29	1.28	1.28
52	Food and Agricultural Processing	0.19	0.10	0.83	0.89	0.01	0.11	0.11	0.11
60	Service and Commercial	8.51	1.40	10.77	13.68	0.64	1.54	1.54	1.54
99	Other (Fuel Combustion)	0.82	0.55	1.99	4.49	0.03	0.25	0.25	0.23
Total Fuel Combustion		37.88	7.30	54.52	29.96	2.45	6.56	6.45	6.39
Waste Disposal									
110	Sewage Treatment	0.58	0.33	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.82	0.11	0.30	0.67	0.40	0.59	0.38	0.37
130	Incineration	0.62	0.10	0.89	1.34	0.08	0.21	0.13	0.12
199	Other (Waste Disposal)	59.22	7.11	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		66.25	7.65	1.19	2.01	0.48	0.83	0.54	0.52
Cleaning and Surface Coatings									
210	Laundering	3.45	0.19	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	52.54	9.00	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	24.24	23.24	0.04	0.04	0.00	0.97	0.93	0.90
240	Printing	4.55	4.55	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.15	3.62	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.68	0.68	0.17	0.11	0.02	0.06	0.06	0.06
Total Cleaning and Surface Coatings		89.60	41.27	0.22	0.16	0.02	1.03	0.99	0.95
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.09	3.74	8.27	0.36	1.11	1.34	0.90	0.70
330	Petroleum Marketing	27.75	27.06	0.97	0.03	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		34.31	31.65	9.27	0.42	1.12	1.36	0.92	0.72

TABLE C-3
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	12.12	10.81	0.04	0.00	0.01	0.83	0.68	0.62
420	Food and Agriculture	3.01	2.83	0.00	0.01	0.00	0.72	0.24	0.04
430	Mineral Processes	0.43	0.38	0.28	0.04	0.00	5.57	3.07	1.14
440	Metal Processes	0.07	0.06	1.80	0.02	0.01	1.05	0.66	0.46
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.65	3.91	2.37
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.29	0.28	0.27
470	Electronics	0.12	0.09	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	6.89	6.53	0.53	0.17	0.00	0.50	0.32	0.24
Total Industrial Processes		22.76	20.81	2.67	0.23	0.05	14.63	9.17	5.17
Solvent Evaporation									
510	Consumer Products	119.64	101.83	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	19.05	18.59	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.38	1.37	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.75	0.68	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		140.83	122.46	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	15.13	6.58	97.52	30.41	0.50	14.84	14.04	13.61
620	Farming Operations	70.58	5.65	0.00	0.00	0.00	1.86	0.84	0.19
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	126.60	61.91	6.20
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	261.20	119.37	18.02
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.18	10.13	1.01
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	2.51	1.36	0.20
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	12.56	7.16	113.00	3.40	1.04	11.94	11.49	10.23
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.77	1.94	0.00	0.00	0.00	16.61	15.32	14.00
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				29.56	11.80			
Total Miscellaneous Processes		101.38	21.57	213.54	63.45	13.34	453.19	234.90	63.87

TABLE C-3
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	100.43	92.96	818.91	75.56	0.81	7.05	6.91	3.96
722	Light Duty Trucks 1 (T1)	19.79	18.35	178.02	16.53	0.15	1.14	1.12	0.67
723	Light Duty Trucks 2 (T2)	45.86	41.99	437.79	60.08	0.45	4.60	4.50	3.07
724	Medium Duty Trucks (T3)	24.50	22.13	247.76	35.48	0.29	2.10	2.05	1.38
732	Light Heavy Duty Gas Trucks 1 (T4)	11.41	10.35	89.89	16.95	0.05	0.23	0.23	0.12
733	Light Heavy Duty Gas Trucks 2 (T5)	2.12	1.95	15.63	3.23	0.01	0.05	0.05	0.02
734	Medium Heavy Duty Gas Trucks (T6)	4.43	4.08	40.75	5.63	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	3.15	2.72	43.03	6.99	0.00	0.03	0.03	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.18	9.72	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.23	0.19	0.97	8.08	0.01	0.08	0.08	0.06
744	Medium Heavy Duty Diesel Truck (T6)	1.16	0.97	9.68	56.02	0.07	1.36	1.36	1.18
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	14.62	12.24	49.70	161.78	0.15	7.86	7.85	6.92
750	Motorcycles (MCY)	14.06	12.94	117.45	3.59	0.01	0.15	0.14	0.09
760	Diesel Urban Buses (UB)	0.45	0.37	2.27	11.78	0.01	0.20	0.20	0.17
762	Gas Urban Buses (UB)	0.53	0.43	4.63	0.89	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.33	0.28	3.51	4.38	0.00	0.15	0.15	0.13
776	Other Bus (OB)	0.57	0.51	6.31	3.58	0.01	0.07	0.07	0.05
780	Motor Homes (MH)	0.77	0.65	19.95	3.27	0.01	0.05	0.05	0.03
	On-Road Baseline Adjustment	N/A	-0.11	0.00	-15.29	0.00	N/A	N/A	-0.17
Total On-Road Motor Vehicles		244.64	223.19	2087.43	468.25	2.05	25.26	24.93	17.78
Other Mobile Sources									
810	Aircraft	9.07	8.10	58.29	17.42	1.68	0.97	0.91	0.89
820	Trains	2.97	2.48	7.06	28.95	0.14	0.86	0.85	0.78
830	Ships and Commercial Boats	4.31	3.61	10.35	76.95	20.10	4.18	4.05	3.90
840	Recreational Boats	24.97	24.03	77.32	4.31	0.01	1.15	1.03	0.78
850	Off-Road Recreational Vehicles	7.27	6.98	14.46	0.15	0.04	0.06	0.05	0.04
860	Off-Road Equipment	91.10	81.72	638.12	191.30	0.17	11.67	11.51	10.37
870	Farm Equipment	1.30	1.14	5.68	5.20	0.00	0.31	0.31	0.28
890	Fuel Storage and Handling	9.64	9.61	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
	Off-Road Baseline Adjustment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Other Mobile Sources		150.63	137.67	811.28	324.28	22.14	19.20	18.71	17.04
Total Stationary and Area Sources		493.01	252.71	281.41	96.23	17.46	477.62	252.99	77.64
Total On-Road Vehicles		244.64	223.19	2087.43	468.25	2.05	25.26	24.93	17.78
Total Other Mobile		150.63	137.67	811.28	324.28	22.14	19.20	18.71	17.04
Total Anthropogenic		888.28	613.57	3180.12	888.76	41.65	522.08	296.63	112.46

TABLE C-4

2010 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.22	1.34	12.47	0.69	0.33	1.08	1.07	1.07
20	Cogeneration	1.07	0.12	0.83	0.05	0.01	0.08	0.07	0.07
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.07	1.96	10.38	9.29	1.42	1.36	1.34	1.34
52	Food and Agricultural Processing	0.19	0.10	0.82	0.84	0.01	0.11	0.11	0.11
60	Service and Commercial	8.74	1.43	10.95	12.10	0.65	1.56	1.55	1.55
99	Other (Fuel Combustion)	0.76	0.49	1.85	4.03	0.03	0.23	0.23	0.21
Total Fuel Combustion		36.86	6.98	51.61	27.13	2.46	6.32	6.22	6.16
Waste Disposal									
110	Sewage Treatment	0.60	0.34	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.93	0.11	0.31	0.69	0.41	0.60	0.39	0.37
130	Incineration	0.65	0.11	0.90	1.36	0.08	0.21	0.14	0.13
199	Other (Waste Disposal)	57.05	6.86	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		64.23	7.42	1.21	2.06	0.49	0.85	0.56	0.53
Cleaning and Surface Coatings									
210	Laundering	3.55	0.20	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	55.42	9.49	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	25.17	24.13	0.05	0.05	0.00	1.05	1.01	0.97
240	Printing	4.66	4.65	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.48	3.91	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.72	0.72	0.18	0.12	0.02	0.06	0.06	0.06
Total Cleaning and Surface Coatings		94.00	43.09	0.23	0.17	0.02	1.11	1.07	1.03
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.08	3.73	8.27	0.36	0.80	1.24	0.84	0.65
330	Petroleum Marketing	27.89	27.18	1.01	0.03	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		34.43	31.76	9.30	0.42	0.81	1.27	0.86	0.67

TABLE C-4
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	12.83	11.42	0.04	0.00	0.01	0.88	0.72	0.66
420	Food and Agriculture	3.07	2.88	0.00	0.01	0.00	0.74	0.25	0.05
430	Mineral Processes	0.44	0.38	0.29	0.04	0.00	5.80	3.22	1.20
440	Metal Processes	0.08	0.06	1.98	0.02	0.01	1.11	0.70	0.49
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	5.95	4.12	2.50
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.28	0.27
470	Electronics	0.13	0.10	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.02	6.66	0.55	0.17	0.00	0.51	0.33	0.25
Total Industrial Processes		23.68	21.61	2.87	0.24	0.05	15.32	9.62	5.42
Solvent Evaporation									
510	Consumer Products	121.81	103.67	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	19.46	18.99	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.33	1.31	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.79	0.71	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		143.38	124.68	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	15.39	6.69	99.39	27.80	0.51	15.11	14.29	13.86
620	Farming Operations	59.33	4.75	0.00	0.00	0.00	1.75	0.79	0.18
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	134.31	65.68	6.58
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	263.56	120.45	18.19
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.13	10.10	1.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	2.44	1.33	0.20
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	12.56	7.16	113.00	3.40	1.04	11.94	11.49	10.23
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.86	2.00	0.00	0.00	0.00	17.09	15.77	14.41
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.82	11.80			
Total Miscellaneous Processes		90.48	20.84	215.41	59.10	13.35	463.78	240.34	65.06

TABLE C-4
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	81.92	75.95	682.17	59.95	0.82	7.21	7.07	4.06
722	Light Duty Trucks 1 (T1)	16.29	15.12	146.77	13.28	0.15	1.17	1.14	0.69
723	Light Duty Trucks 2 (T2)	41.67	38.34	386.91	49.79	0.46	4.78	4.67	3.21
724	Medium Duty Trucks (T3)	22.48	20.40	220.85	29.81	0.29	2.18	2.13	1.46
732	Light Heavy Duty Gas Trucks 1 (T4)	10.32	9.41	76.79	15.43	0.05	0.24	0.24	0.12
733	Light Heavy Duty Gas Trucks 2 (T5)	1.90	1.76	12.94	3.02	0.01	0.05	0.05	0.03
734	Medium Heavy Duty Gas Trucks (T6)	3.69	3.40	35.26	4.96	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	2.74	2.36	37.46	5.99	0.00	0.02	0.02	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.25	8.60	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.23	0.19	0.99	7.13	0.01	0.07	0.07	0.05
744	Medium Heavy Duty Diesel Truck (T6)	1.12	0.94	9.68	48.05	0.07	1.28	1.28	1.10
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	13.47	11.28	46.62	143.13	0.16	6.98	6.98	6.09
750	Motorcycles (MCY)	13.17	11.99	104.32	3.41	0.01	0.13	0.12	0.08
760	Diesel Urban Buses (UB)	0.44	0.37	2.23	11.16	0.01	0.19	0.19	0.17
762	Gas Urban Buses (UB)	0.52	0.41	4.43	0.87	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.33	0.28	3.44	4.26	0.00	0.15	0.15	0.13
776	Other Bus (OB)	0.49	0.44	5.50	2.94	0.01	0.06	0.06	0.05
780	Motor Homes (MH)	0.60	0.51	15.29	2.78	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		211.61	193.33	1792.89	414.55	2.07	24.71	24.36	17.38
Other Mobile Sources									
810	Aircraft	9.74	8.69	62.41	18.84	1.81	1.03	0.96	0.94
820	Trains	2.93	2.45	7.33	19.69	0.15	0.85	0.84	0.77
830	Ships and Commercial Boats	4.29	3.59	10.84	80.92	18.57	4.16	4.03	3.89
840	Recreational Boats	24.46	23.60	76.24	4.28	0.01	1.28	1.15	0.87
850	Off-Road Recreational Vehicles	7.44	7.13	14.98	0.15	0.04	0.06	0.06	0.04
860	Off-Road Equipment	82.02	73.93	635.62	172.49	0.18	10.59	10.43	9.37
870	Farm Equipment	1.19	1.04	5.55	4.78	0.00	0.29	0.29	0.26
890	Fuel Storage and Handling	8.05	8.02	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
Total Other Mobile Sources		140.12	128.46	812.97	301.15	20.77	18.25	17.75	16.14
Total Stationary and Area Sources		487.06	256.38	280.63	89.12	17.18	488.67	258.69	78.89
Total On-Road Vehicles		211.61	193.33	1792.89	414.55	2.07	24.71	24.36	17.38
Total Other Mobile		140.12	128.46	812.97	301.15	20.77	18.25	17.75	16.14
Total Anthropogenic		838.79	578.17	2886.49	804.82	40.02	531.63	300.80	112.41

TABLE C-5

2011 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.23	1.34	12.51	0.69	0.33	1.08	1.08	1.07
20	Cogeneration	0.78	0.09	0.62	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.11	1.97	10.46	9.15	1.43	1.37	1.36	1.35
52	Food and Agricultural Processing	0.19	0.10	0.82	0.82	0.01	0.11	0.11	0.11
60	Service and Commercial	8.78	1.44	11.01	11.62	0.66	1.56	1.55	1.55
99	Other (Fuel Combustion)	0.74	0.47	1.81	3.88	0.03	0.22	0.22	0.21
Total Fuel Combustion		36.65	6.94	51.52	26.34	2.47	6.30	6.20	6.14
Waste Disposal									
110	Sewage Treatment	0.61	0.34	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	5.99	0.11	0.31	0.70	0.41	0.60	0.39	0.38
130	Incineration	0.65	0.11	0.91	1.37	0.08	0.22	0.14	0.13
199	Other (Waste Disposal)	57.74	6.94	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		64.99	7.50	1.22	2.07	0.49	0.85	0.56	0.54
Cleaning and Surface Coatings									
210	Laundering	3.60	0.20	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	55.84	9.57	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	25.52	24.46	0.05	0.05	0.00	1.07	1.03	0.99
240	Printing	4.69	4.69	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.55	3.97	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.72	0.72	0.18	0.12	0.02	0.06	0.06	0.06
Total Cleaning and Surface Coatings		94.94	43.61	0.23	0.17	0.03	1.13	1.09	1.05
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	5.08	3.73	8.27	0.36	0.80	1.24	0.84	0.65
330	Petroleum Marketing	28.12	27.41	1.03	0.03	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		34.67	32.00	9.32	0.42	0.81	1.27	0.86	0.67

TABLE C-5
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	13.07	11.63	0.04	0.00	0.01	0.89	0.73	0.67
420	Food and Agriculture	3.09	2.90	0.00	0.01	0.00	0.75	0.25	0.05
430	Mineral Processes	0.44	0.38	0.29	0.05	0.00	5.88	3.26	1.21
440	Metal Processes	0.08	0.06	2.04	0.02	0.01	1.12	0.71	0.50
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	6.05	4.18	2.54
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.28	0.27
470	Electronics	0.13	0.10	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.08	6.71	0.55	0.17	0.00	0.51	0.33	0.25
Total Industrial Processes		24.00	21.91	2.93	0.25	0.05	15.53	9.76	5.49
Solvent Evaporation									
510	Consumer Products	122.75	104.48	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	19.68	19.21	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.30	1.29	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.81	0.73	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		144.54	125.71	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	15.53	6.75	100.44	28.06	0.51	15.26	14.44	13.99
620	Farming Operations	57.26	4.58	0.00	0.00	0.00	1.70	0.77	0.17
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	137.97	67.47	6.76
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	264.83	121.03	18.27
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.12	10.09	1.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	2.41	1.31	0.20
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	12.56	7.16	112.99	3.40	1.04	11.94	11.49	10.23
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	2.89	2.02	0.00	0.00	0.00	17.30	15.96	14.58
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		88.58	20.75	216.45	58.77	13.35	468.98	243.00	65.61

TABLE C-5
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	74.63	69.21	626.99	54.33	0.83	7.35	7.21	4.16
722	Light Duty Trucks 1 (T1)	15.16	14.08	135.51	12.16	0.15	1.19	1.17	0.71
723	Light Duty Trucks 2 (T2)	40.30	37.14	369.17	46.56	0.46	4.97	4.85	3.37
724	Medium Duty Trucks (T3)	21.97	19.98	212.20	28.11	0.29	2.27	2.22	1.54
732	Light Heavy Duty Gas Trucks 1 (T4)	9.96	9.09	71.81	14.98	0.05	0.25	0.24	0.12
733	Light Heavy Duty Gas Trucks 2 (T5)	1.81	1.68	11.78	2.94	0.01	0.05	0.05	0.03
734	Medium Heavy Duty Gas Trucks (T6)	3.38	3.11	32.75	4.68	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	2.50	2.15	33.93	5.55	0.00	0.02	0.02	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.27	8.02	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.22	0.19	0.99	6.64	0.01	0.07	0.07	0.05
744	Medium Heavy Duty Diesel Truck (T6)	1.10	0.92	9.63	43.97	0.08	1.25	1.25	1.07
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	12.87	10.77	45.12	134.34	0.16	6.59	6.58	5.72
750	Motorcycles (MCY)	12.88	11.66	97.66	3.41	0.01	0.13	0.12	0.08
760	Diesel Urban Buses (UB)	0.43	0.36	2.22	11.08	0.01	0.19	0.19	0.17
762	Gas Urban Buses (UB)	0.52	0.42	4.43	0.87	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.33	0.28	3.39	4.25	0.01	0.15	0.15	0.14
776	Other Bus (OB)	0.46	0.41	5.18	2.68	0.01	0.06	0.06	0.05
780	Motor Homes (MH)	0.54	0.45	13.30	2.57	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		199.29	182.09	1677.32	387.13	2.10	24.72	24.36	17.33
Other Mobile Sources									
810	Aircraft	10.10	9.01	64.12	19.62	1.88	1.05	0.98	0.96
820	Trains	2.96	2.47	7.48	21.13	0.02	0.84	0.83	0.76
830	Ships and Commercial Boats	4.25	3.56	11.04	82.27	19.35	4.22	4.09	3.94
840	Recreational Boats	24.33	23.51	76.02	4.28	0.01	1.35	1.22	0.92
850	Off-Road Recreational Vehicles	7.57	7.25	15.36	0.15	0.04	0.06	0.06	0.04
860	Off-Road Equipment	78.03	70.44	636.59	163.97	0.18	10.04	9.88	8.86
870	Farm Equipment	1.12	0.98	5.47	4.52	0.00	0.27	0.27	0.25
890	Fuel Storage and Handling	7.44	7.42	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
Total Other Mobile Sources		135.80	124.64	816.09	295.95	21.48	17.84	17.32	15.74
Total Stationary and Area Sources		488.37	258.42	281.67	88.02	17.20	494.08	261.49	79.52
Total On-Road Vehicles		199.29	182.09	1677.32	387.13	2.10	24.72	24.36	17.33
Total Other Mobile		135.80	124.64	816.09	295.95	21.48	17.84	17.32	15.74
Total Anthropogenic		823.46	565.15	2775.08	771.10	40.78	536.64	303.17	112.59

TABLE C-6

2014 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.45	1.39	12.94	0.71	0.34	1.12	1.11	1.11
20	Cogeneration	0.80	0.09	0.64	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.56	2.03	10.84	8.90	1.48	1.43	1.41	1.41
52	Food and Agricultural Processing	0.18	0.09	0.82	0.76	0.01	0.11	0.11	0.10
60	Service and Commercial	9.11	1.47	11.17	10.01	0.68	1.55	1.55	1.54
99	Other (Fuel Combustion)	0.68	0.40	1.68	3.44	0.03	0.20	0.20	0.19
Total Fuel Combustion		37.61	7.02	52.38	24.00	2.55	6.37	6.26	6.21
Waste Disposal									
110	Sewage Treatment	0.63	0.36	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	6.18	0.11	0.32	0.72	0.42	0.62	0.40	0.39
130	Incineration	0.67	0.11	0.92	1.38	0.08	0.22	0.14	0.13
199	Other (Waste Disposal)	59.80	7.19	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		67.28	7.77	1.24	2.10	0.50	0.87	0.58	0.55
Cleaning and Surface Coatings									
210	Laundering	3.74	0.20	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	57.20	9.82	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	26.57	25.45	0.06	0.05	0.00	1.14	1.09	1.05
240	Printing	4.80	4.79	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	4.79	4.18	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.75	0.75	0.18	0.13	0.03	0.06	0.06	0.06
Total Cleaning and Surface Coatings		97.83	45.19	0.24	0.18	0.03	1.20	1.16	1.11
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	28.82	28.11	1.08	0.03	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		35.05	32.45	8.02	0.18	0.60	1.21	0.83	0.64

TABLE C-6
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	13.79	12.28	0.04	0.00	0.01	0.93	0.76	0.69
420	Food and Agriculture	3.17	2.97	0.00	0.01	0.00	0.79	0.26	0.05
430	Mineral Processes	0.44	0.38	0.30	0.05	0.00	6.11	3.41	1.27
440	Metal Processes	0.08	0.06	2.20	0.02	0.01	1.17	0.74	0.53
450	Wood and Paper	0.09	0.09	0.00	0.00	0.00	6.33	4.38	2.65
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.30	0.29	0.28
470	Electronics	0.13	0.11	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.27	6.89	0.55	0.18	0.00	0.52	0.33	0.25
Total Industrial Processes		24.99	22.80	3.11	0.25	0.05	16.18	10.18	5.72
Solvent Evaporation									
510	Consumer Products	125.75	107.08	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	20.35	19.86	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.24	1.23	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.86	0.78	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		148.22	128.95	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	15.97	6.94	103.59	28.77	0.53	15.70	14.86	14.40
620	Farming Operations	52.20	4.18	0.00	0.00	0.00	1.55	0.70	0.16
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	149.06	72.89	7.30
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	268.65	122.77	18.54
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.07	10.07	1.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	2.32	1.27	0.19
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	12.56	7.16	112.99	3.40	1.04	11.94	11.49	10.23
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.00	2.10	0.00	0.00	0.00	17.97	16.58	15.15
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		84.07	20.62	219.60	59.48	13.37	484.71	251.07	67.38

TABLE C-6
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	57.78	53.28	485.85	40.52	0.85	7.64	7.49	4.37
722	Light Duty Trucks 1 (T1)	12.15	11.24	104.87	9.31	0.16	1.25	1.22	0.74
723	Light Duty Trucks 2 (T2)	36.61	33.62	318.07	37.91	0.48	5.40	5.28	3.73
724	Medium Duty Trucks (T3)	20.23	18.31	185.04	23.15	0.30	2.49	2.43	1.72
732	Light Heavy Duty Gas Trucks 1 (T4)	8.98	8.17	59.27	13.93	0.05	0.26	0.26	0.13
733	Light Heavy Duty Gas Trucks 2 (T5)	1.58	1.46	9.18	2.75	0.01	0.05	0.05	0.03
734	Medium Heavy Duty Gas Trucks (T6)	2.56	2.34	26.03	3.85	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	1.76	1.46	24.04	4.24	0.00	0.02	0.02	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.20	1.36	6.91	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.21	0.17	0.99	5.49	0.01	0.07	0.07	0.05
744	Medium Heavy Duty Diesel Truck (T6)	1.01	0.84	9.30	33.73	0.08	1.14	1.14	0.97
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	10.68	8.94	39.54	107.49	0.19	5.40	5.39	4.57
750	Motorcycles (MCY)	12.60	11.14	87.36	3.47	0.01	0.11	0.11	0.07
760	Diesel Urban Buses (UB)	0.41	0.35	2.11	10.38	0.01	0.18	0.18	0.16
762	Gas Urban Buses (UB)	0.55	0.42	4.37	0.92	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.32	0.26	3.05	4.21	0.01	0.16	0.16	0.14
776	Other Bus (OB)	0.38	0.35	4.34	2.07	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.37	0.29	8.32	2.05	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		168.41	152.84	1373.09	312.38	2.18	24.41	24.03	16.85
Other Mobile Sources									
810	Aircraft	11.19	9.99	69.25	21.95	2.08	1.11	1.03	1.01
820	Trains	3.00	2.50	7.99	22.75	0.02	0.85	0.84	0.77
830	Ships and Commercial Boats	4.18	3.50	11.72	87.45	22.01	4.46	4.31	4.17
840	Recreational Boats	24.33	23.58	76.47	4.33	0.01	1.58	1.42	1.08
850	Off-Road Recreational Vehicles	8.07	7.72	16.52	0.17	0.05	0.07	0.06	0.05
860	Off-Road Equipment	67.95	61.49	651.69	137.71	0.19	8.02	7.86	7.00
870	Farm Equipment	0.86	0.76	5.18	3.62	0.00	0.21	0.21	0.19
890	Fuel Storage and Handling	6.05	6.03	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
Total Other Mobile Sources		125.61	115.56	838.81	277.99	24.35	16.29	15.74	14.26
Total Stationary and Area Sources		495.05	264.80	284.59	86.19	17.10	510.56	270.10	81.63
Total On-Road Vehicles		168.41	152.84	1373.09	312.38	2.18	24.41	24.03	16.85
Total Other Mobile		125.61	115.56	838.81	277.99	24.35	16.29	15.74	14.26
Total Anthropogenic		789.07	533.20	2496.49	676.56	43.63	551.26	309.87	112.74

TABLE C-7

2017 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	6.76	1.45	13.55	0.75	0.35	1.17	1.17	1.16
20	Cogeneration	0.82	0.09	0.65	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	14.88	2.09	11.18	8.97	1.53	1.48	1.46	1.45
52	Food and Agricultural Processing	0.18	0.09	0.82	0.71	0.01	0.11	0.10	0.10
60	Service and Commercial	9.38	1.50	11.27	9.52	0.69	1.53	1.53	1.53
99	Other (Fuel Combustion)	0.64	0.35	1.59	3.08	0.03	0.18	0.18	0.17
Total Fuel Combustion		38.46	7.11	53.34	23.21	2.63	6.43	6.33	6.27
Waste Disposal									
110	Sewage Treatment	0.64	0.37	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	6.36	0.12	0.33	0.74	0.43	0.63	0.41	0.39
130	Incineration	0.69	0.11	0.94	1.40	0.08	0.22	0.15	0.14
199	Other (Waste Disposal)	61.82	7.43	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		69.51	8.02	1.27	2.14	0.51	0.89	0.59	0.56
Cleaning and Surface Coatings									
210	Laundering	3.86	0.21	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	58.93	10.14	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	27.55	26.39	0.06	0.05	0.00	1.20	1.15	1.11
240	Printing	4.93	4.92	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	5.01	4.37	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.77	0.77	0.19	0.14	0.03	0.07	0.06	0.06
Total Cleaning and Surface Coatings		101.04	46.80	0.25	0.19	0.03	1.27	1.22	1.17
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	29.59	28.87	1.13	0.03	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		35.82	33.21	8.07	0.18	0.60	1.21	0.83	0.64

TABLE C-7
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	14.49	12.91	0.04	0.00	0.01	0.98	0.79	0.72
420	Food and Agriculture	3.25	3.05	0.00	0.01	0.00	0.81	0.27	0.05
430	Mineral Processes	0.44	0.39	0.31	0.06	0.00	6.33	3.54	1.31
440	Metal Processes	0.08	0.06	2.33	0.02	0.01	1.21	0.77	0.55
450	Wood and Paper	0.09	0.09	0.00	0.00	0.00	6.63	4.59	2.78
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.31	0.30	0.29
470	Electronics	0.14	0.11	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.45	7.06	0.57	0.18	0.00	0.53	0.34	0.25
Total Industrial Processes		25.97	23.69	3.27	0.26	0.05	16.83	10.60	5.96
Solvent Evaporation									
510	Consumer Products	128.67	109.60	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	21.04	20.53	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.20	1.18	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.91	0.83	0.00	0.00	0.00	0.02	0.02	0.02
Total Solvent Evaporation		151.81	132.14	0.00	0.00	0.00	0.02	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	16.40	7.13	106.76	27.47	0.54	16.15	15.28	14.81
620	Farming Operations	48.40	3.87	0.00	0.00	0.00	1.41	0.64	0.14
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	158.69	77.60	7.78
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	272.35	124.47	18.79
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	17.03	10.05	1.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	2.24	1.24	0.19
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	12.56	7.16	112.98	3.40	1.04	11.94	11.48	10.23
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.10	2.16	0.00	0.00	0.00	18.51	17.08	15.60
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		80.80	20.56	222.76	58.18	13.38	498.77	258.28	68.95

TABLE C-7
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	46.88	43.40	382.67	30.79	0.86	7.90	7.75	4.56
722	Light Duty Trucks 1 (T1)	9.76	9.07	79.89	7.05	0.16	1.29	1.26	0.78
723	Light Duty Trucks 2 (T2)	33.46	30.91	273.62	30.82	0.49	5.79	5.65	4.05
724	Medium Duty Trucks (T3)	18.56	16.92	160.89	18.88	0.31	2.67	2.61	1.87
732	Light Heavy Duty Gas Trucks 1 (T4)	8.17	7.50	49.66	13.03	0.05	0.27	0.27	0.14
733	Light Heavy Duty Gas Trucks 2 (T5)	1.38	1.29	7.21	2.54	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	1.94	1.78	20.38	3.11	0.01	0.04	0.04	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	1.24	1.04	18.03	3.13	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.23	0.19	1.44	6.06	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.19	0.16	0.99	4.58	0.01	0.07	0.07	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.91	0.77	9.00	26.03	0.08	1.04	1.04	0.88
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	8.60	7.20	34.06	83.88	0.21	4.35	4.35	3.56
750	Motorcycles (MCY)	12.55	10.98	81.32	3.52	0.01	0.11	0.10	0.06
760	Diesel Urban Buses (UB)	0.39	0.33	2.00	9.73	0.01	0.17	0.17	0.15
762	Gas Urban Buses (UB)	0.57	0.43	4.12	0.92	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.32	0.26	2.88	4.19	0.01	0.17	0.17	0.15
776	Other Bus (OB)	0.33	0.30	3.66	1.67	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.24	0.19	4.90	1.64	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		145.73	132.72	1136.72	251.59	2.24	24.15	23.75	16.44
Other Mobile Sources									
810	Aircraft	12.27	10.96	74.38	24.29	2.27	1.16	1.08	1.06
820	Trains	3.05	2.55	8.56	24.20	0.02	0.86	0.86	0.79
830	Ships and Commercial Boats	4.27	3.58	12.53	94.77	25.11	4.83	4.66	4.51
840	Recreational Boats	24.73	24.03	78.20	4.44	0.01	1.85	1.66	1.26
850	Off-Road Recreational Vehicles	8.75	8.37	17.75	0.19	0.05	0.07	0.06	0.05
860	Off-Road Equipment	60.80	55.03	666.54	112.96	0.20	6.29	6.12	5.40
870	Farm Equipment	0.66	0.58	5.01	2.82	0.00	0.15	0.15	0.14
890	Fuel Storage and Handling	5.19	5.17	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
Total Other Mobile Sources		119.72	110.27	862.96	263.67	27.67	15.21	14.61	13.21
Total Stationary and Area Sources		503.41	271.53	288.96	84.16	17.20	525.42	277.87	83.57
Total On-Road Vehicles		145.73	132.72	1136.72	251.59	2.24	24.15	23.75	16.44
Total Other Mobile		119.72	110.27	862.96	263.67	27.67	15.21	14.61	13.21
Total Anthropogenic		768.86	514.52	2288.64	599.42	47.11	564.78	316.23	113.22

TABLE C-8

2020 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.12	1.53	14.28	0.79	0.37	1.23	1.23	1.23
20	Cogeneration	0.83	0.09	0.66	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	15.08	2.13	11.47	9.08	1.58	1.52	1.50	1.50
52	Food and Agricultural Processing	0.18	0.09	0.83	0.67	0.01	0.10	0.10	0.10
60	Service and Commercial	9.61	1.52	11.31	9.20	0.70	1.51	1.51	1.51
99	Other (Fuel Combustion)	0.60	0.31	1.51	2.76	0.04	0.16	0.16	0.15
Total Fuel Combustion		39.24	7.21	54.36	22.67	2.72	6.49	6.39	6.33
Waste Disposal									
110	Sewage Treatment	0.66	0.38	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	6.54	0.12	0.33	0.75	0.44	0.64	0.42	0.40
130	Incineration	0.71	0.12	0.96	1.43	0.08	0.23	0.15	0.14
199	Other (Waste Disposal)	63.80	7.66	0.00	0.00	0.00	0.03	0.03	0.03
Total Waste Disposal		71.71	8.28	1.29	2.18	0.52	0.91	0.60	0.58
Cleaning and Surface Coatings									
210	Laundering	3.96	0.21	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	60.86	10.48	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	28.50	27.30	0.06	0.05	0.00	1.26	1.21	1.16
240	Printing	5.07	5.06	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	5.22	4.55	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.80	0.80	0.19	0.14	0.03	0.07	0.07	0.06
Total Cleaning and Surface Coatings		104.41	48.40	0.25	0.20	0.03	1.33	1.27	1.23
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	30.42	29.69	1.18	0.04	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		36.65	34.04	8.11	0.18	0.60	1.21	0.83	0.64

TABLE C-8
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	15.18	13.53	0.04	0.00	0.01	1.02	0.83	0.75
420	Food and Agriculture	3.34	3.13	0.00	0.01	0.00	0.84	0.28	0.05
430	Mineral Processes	0.45	0.39	0.32	0.06	0.00	6.54	3.66	1.36
440	Metal Processes	0.08	0.07	2.44	0.02	0.01	1.25	0.79	0.56
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	6.95	4.81	2.91
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.32	0.31	0.30
470	Electronics	0.15	0.11	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.63	7.23	0.58	0.18	0.00	0.54	0.34	0.25
Total Industrial Processes		26.94	24.58	3.41	0.27	0.05	17.49	11.03	6.20
Solvent Evaporation									
510	Consumer Products	131.53	112.08	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	21.71	21.19	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.16	1.14	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	0.96	0.87	0.00	0.00	0.00	0.03	0.02	0.02
Total Solvent Evaporation		155.36	135.28	0.00	0.00	0.00	0.03	0.02	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	16.88	7.34	110.07	28.01	0.56	16.63	15.73	15.25
620	Farming Operations	45.51	3.64	0.00	0.00	0.00	1.29	0.58	0.13
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	167.57	81.94	8.21
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	276.17	126.21	19.06
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	16.99	10.03	1.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	2.17	1.20	0.18
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	12.56	7.16	112.97	3.40	1.04	11.94	11.48	10.23
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.18	2.22	0.00	0.00	0.00	19.01	17.53	16.02
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		78.47	20.60	226.06	58.72	13.40	512.22	265.14	70.49

TABLE C-8
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	39.27	36.20	306.43	23.08	0.87	8.12	7.97	4.70
722	Light Duty Trucks 1 (T1)	8.29	7.69	63.45	5.30	0.16	1.33	1.30	0.80
723	Light Duty Trucks 2 (T2)	30.86	28.42	237.24	24.50	0.51	6.08	5.94	4.29
724	Medium Duty Trucks (T3)	16.81	15.28	139.35	14.80	0.32	2.82	2.75	1.98
732	Light Heavy Duty Gas Trucks 1 (T4)	7.41	6.80	41.39	11.92	0.06	0.29	0.28	0.15
733	Light Heavy Duty Gas Trucks 2 (T5)	1.20	1.12	5.77	2.28	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	1.52	1.39	16.06	2.42	0.01	0.05	0.05	0.02
736	Heavy Heavy Duty Gas Trucks (HHDGT)	0.88	0.73	14.02	2.22	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.22	0.19	1.49	5.10	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.17	0.14	0.99	3.64	0.01	0.06	0.06	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.84	0.71	8.74	19.18	0.08	0.97	0.97	0.81
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	6.98	5.85	29.74	65.18	0.22	3.55	3.54	2.79
750	Motorcycles (MCY)	12.73	10.90	79.40	3.50	0.01	0.10	0.10	0.06
760	Diesel Urban Buses (UB)	0.36	0.30	1.79	8.34	0.01	0.16	0.16	0.14
762	Gas Urban Buses (UB)	0.58	0.42	3.76	0.93	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.31	0.25	2.58	4.03	0.01	0.18	0.18	0.16
776	Other Bus (OB)	0.29	0.26	3.05	1.31	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.16	0.12	2.69	1.27	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		128.88	116.76	957.94	198.99	2.31	24.00	23.58	16.12
Other Mobile Sources									
810	Aircraft	13.36	11.93	79.51	26.63	2.47	1.22	1.14	1.11
820	Trains	3.11	2.60	9.20	25.82	0.02	0.88	0.87	0.80
830	Ships and Commercial Boats	4.49	3.77	13.47	103.90	28.76	5.30	5.11	4.96
840	Recreational Boats	25.43	24.77	80.90	4.54	0.01	2.13	1.92	1.45
850	Off-Road Recreational Vehicles	9.62	9.21	19.15	0.21	0.06	0.08	0.07	0.05
860	Off-Road Equipment	56.93	51.53	688.19	93.91	0.21	4.95	4.78	4.17
870	Farm Equipment	0.50	0.44	4.93	2.16	0.00	0.11	0.11	0.10
890	Fuel Storage and Handling	4.63	4.61	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
Total Other Mobile Sources		118.07	108.86	895.34	257.16	31.54	14.67	14.00	12.64
Total Stationary and Area Sources		512.78	278.39	293.48	84.22	17.32	539.68	285.28	85.49
Total On-Road Vehicles		128.88	116.76	957.94	198.99	2.31	24.00	23.58	16.12
Total Other Mobile		118.07	108.86	895.34	257.16	31.54	14.67	14.00	12.64
Total Anthropogenic		759.73	504.01	2146.76	540.37	51.17	578.35	322.86	114.25

TABLE C-9

2023 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.13	1.53	14.29	0.79	0.37	1.23	1.23	1.23
20	Cogeneration	0.84	0.09	0.67	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	15.38	2.18	11.83	9.30	1.64	1.57	1.56	1.55
52	Food and Agricultural Processing	0.18	0.09	0.84	0.64	0.01	0.10	0.10	0.10
60	Service and Commercial	9.89	1.55	11.48	9.23	0.71	1.51	1.51	1.51
99	Other (Fuel Combustion)	0.62	0.31	1.54	2.77	0.04	0.16	0.16	0.15
Total Fuel Combustion		39.85	7.30	54.95	22.90	2.79	6.55	6.44	6.39
Waste Disposal									
110	Sewage Treatment	0.68	0.39	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	6.74	0.12	0.34	0.77	0.45	0.66	0.42	0.41
130	Incineration	0.74	0.12	0.99	1.46	0.08	0.23	0.16	0.15
199	Other (Waste Disposal)	65.57	7.88	0.00	0.00	0.00	0.04	0.03	0.03
Total Waste Disposal		73.72	8.51	1.33	2.23	0.53	0.93	0.62	0.59
Cleaning and Surface Coatings									
210	Laundering	4.08	0.21	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	62.98	10.86	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	29.56	28.30	0.07	0.05	0.00	1.32	1.27	1.22
240	Printing	5.22	5.22	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	5.46	4.76	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.82	0.82	0.20	0.15	0.03	0.07	0.07	0.07
Total Cleaning and Surface Coatings		108.12	50.18	0.26	0.21	0.03	1.39	1.34	1.29
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	31.24	30.51	1.22	0.04	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		37.48	34.86	8.16	0.19	0.60	1.21	0.83	0.64

TABLE C-9
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	15.97	14.23	0.05	0.00	0.01	1.07	0.86	0.78
420	Food and Agriculture	3.44	3.22	0.00	0.01	0.00	0.86	0.29	0.06
430	Mineral Processes	0.45	0.40	0.33	0.06	0.00	6.77	3.81	1.41
440	Metal Processes	0.08	0.07	2.57	0.02	0.01	1.30	0.82	0.59
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	7.30	5.05	3.06
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.02	0.33	0.32	0.31
470	Electronics	0.15	0.12	0.00	0.00	0.00	0.03	0.01	0.01
499	Other (Industrial Processes)	7.79	7.39	0.60	0.19	0.00	0.55	0.35	0.26
Total Industrial Processes		28.01	25.54	3.56	0.28	0.06	18.22	11.51	6.47
Solvent Evaporation									
510	Consumer Products	134.11	114.32	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	22.34	21.80	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.13	1.12	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.01	0.92	0.00	0.00	0.00	0.03	0.03	0.02
Total Solvent Evaporation		158.59	138.15	0.00	0.00	0.00	0.03	0.03	0.02
Miscellaneous Processes									
610	Residential Fuel Combustion	17.20	7.48	112.79	28.32	0.57	17.00	16.08	15.58
620	Farming Operations	43.39	3.47	0.00	0.00	0.00	1.18	0.54	0.12
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	177.18	86.64	8.68
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	279.98	127.95	19.32
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	16.95	10.02	1.00
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	2.11	1.18	0.18
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	12.56	7.16	112.96	3.40	1.04	11.94	11.48	10.23
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.27	2.29	0.00	0.00	0.00	19.54	18.03	16.47
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		76.76	20.64	228.77	59.03	13.41	526.33	272.36	71.99

TABLE C-9
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	33.68	31.17	253.10	18.94	0.88	8.25	8.09	4.79
722	Light Duty Trucks 1 (T1)	7.37	6.88	52.24	4.35	0.17	1.37	1.34	0.83
723	Light Duty Trucks 2 (T2)	28.92	26.77	209.76	21.02	0.52	6.35	6.20	4.49
724	Medium Duty Trucks (T3)	15.15	13.85	119.88	12.32	0.33	2.95	2.88	2.08
732	Light Heavy Duty Gas Trucks 1 (T4)	6.62	6.14	34.28	11.49	0.06	0.30	0.30	0.16
733	Light Heavy Duty Gas Trucks 2 (T5)	1.05	0.98	4.90	2.19	0.01	0.06	0.06	0.03
734	Medium Heavy Duty Gas Trucks (T6)	1.28	1.18	13.04	2.02	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	0.63	0.52	11.37	1.76	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.21	0.18	1.54	4.52	0.01	0.09	0.09	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.15	0.13	0.99	3.08	0.01	0.06	0.06	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.80	0.67	8.65	15.35	0.09	0.94	0.94	0.78
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	6.10	5.11	27.55	58.20	0.24	3.09	3.08	2.33
750	Motorcycles (MCY)	12.41	10.60	75.22	3.52	0.01	0.10	0.09	0.06
760	Diesel Urban Buses (UB)	0.35	0.29	1.75	8.26	0.01	0.15	0.15	0.14
762	Gas Urban Buses (UB)	0.60	0.43	3.73	0.97	0.00	0.01	0.01	0.01
770	School Buses (SB)	0.28	0.23	2.37	4.07	0.01	0.18	0.18	0.16
776	Other Bus (OB)	0.25	0.22	2.50	1.09	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.11	0.09	1.56	1.06	0.01	0.05	0.05	0.03
Total On-Road Motor Vehicles		115.97	105.45	824.43	174.19	2.37	24.07	23.63	16.05
Other Mobile Sources									
810	Aircraft	14.64	13.08	85.12	29.34	2.69	1.28	1.19	1.17
820	Trains	3.19	2.66	9.92	27.63	0.03	0.90	0.89	0.82
830	Ships and Commercial Boats	4.92	4.13	14.57	116.19	33.05	5.94	5.72	5.55
840	Recreational Boats	26.58	25.94	84.58	4.61	0.01	2.48	2.24	1.69
850	Off-Road Recreational Vehicles	10.61	10.16	20.49	0.23	0.06	0.09	0.08	0.06
860	Off-Road Equipment	55.34	50.11	716.39	81.04	0.22	4.13	3.95	3.40
870	Farm Equipment	0.42	0.37	4.94	1.66	0.00	0.08	0.08	0.07
890	Fuel Storage and Handling	4.20	4.18	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
Total Other Mobile Sources		119.90	110.63	936.01	260.69	36.07	14.88	14.15	12.75
Total Stationary and Area Sources		522.53	285.18	297.03	84.84	17.42	554.66	293.13	87.39
Total On-Road Vehicles		115.97	105.45	824.43	174.19	2.37	24.07	23.63	16.05
Total Other Mobile		119.90	110.63	936.01	260.69	36.07	14.88	14.15	12.75
Total Anthropogenic		758.40	501.26	2057.47	519.72	55.86	593.61	330.91	116.19

TABLE C-10

2030 Winter Planning Emissions by Source Category in South Coast Air Basin (Tons/Day)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Fuel Combustion									
10	Electric Utilities	7.15	1.53	14.32	0.79	0.37	1.23	1.23	1.23
20	Cogeneration	0.87	0.10	0.70	0.04	0.01	0.05	0.05	0.05
30	Oil and Gas Production (combustion)	2.24	0.23	0.67	0.14	0.01	0.15	0.15	0.15
40	Petroleum Refining (Combustion)	3.58	1.31	13.62	0.00	0.00	1.76	1.69	1.66
50	Manufacturing and Industrial	16.22	2.33	12.74	9.85	1.78	1.71	1.69	1.68
52	Food and Agricultural Processing	0.19	0.09	0.87	0.59	0.01	0.10	0.10	0.10
60	Service and Commercial	10.59	1.64	12.05	9.52	0.75	1.55	1.55	1.55
99	Other (Fuel Combustion)	0.66	0.31	1.61	2.78	0.04	0.16	0.16	0.15
Total Fuel Combustion		41.49	7.54	56.57	23.71	2.97	6.73	6.62	6.56
Waste Disposal									
110	Sewage Treatment	0.71	0.41	0.00	0.00	0.00	0.00	0.00	0.00
120	Landfills	7.22	0.13	0.35	0.81	0.47	0.69	0.44	0.42
130	Incineration	0.79	0.13	1.04	1.52	0.08	0.25	0.17	0.16
199	Other (Waste Disposal)	69.47	8.35	0.00	0.00	0.00	0.04	0.04	0.04
Total Waste Disposal		78.19	9.02	1.40	2.34	0.55	0.97	0.65	0.62
Cleaning and Surface Coatings									
210	Laundering	4.35	0.22	0.00	0.00	0.00	0.00	0.00	0.00
220	Degreasing	67.72	11.72	0.00	0.00	0.00	0.00	0.00	0.00
230	Coatings and Related Processes	32.09	30.72	0.08	0.06	0.00	1.48	1.42	1.37
240	Printing	5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00
250	Adhesives and Sealants	6.02	5.26	0.00	0.00	0.00	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	0.89	0.89	0.21	0.17	0.04	0.08	0.08	0.07
Total Cleaning and Surface Coatings		116.64	54.37	0.28	0.23	0.04	1.56	1.50	1.44
Petroleum Production and Marketing									
310	Oil and Gas Production	1.46	0.85	0.02	0.04	0.00	0.00	0.00	0.00
320	Petroleum Refining	4.77	3.48	6.92	0.11	0.60	1.18	0.80	0.61
330	Petroleum Marketing	33.18	32.44	1.34	0.04	0.00	0.02	0.02	0.02
399	Other (Petroleum Production and Marketing)	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total Petroleum Production and Marketing		39.42	36.79	8.28	0.19	0.60	1.21	0.83	0.64

TABLE C-10
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
Industrial Processes									
410	Chemical	17.88	15.95	0.05	0.00	0.01	1.19	0.95	0.86
420	Food and Agriculture	3.65	3.42	0.00	0.01	0.00	0.92	0.31	0.06
430	Mineral Processes	0.46	0.41	0.36	0.07	0.00	7.35	4.16	1.54
440	Metal Processes	0.09	0.07	2.87	0.02	0.01	1.41	0.89	0.63
450	Wood and Paper	0.10	0.10	0.00	0.00	0.00	8.14	5.63	3.41
460	Glass and Related Products	0.02	0.01	0.02	0.00	0.03	0.36	0.35	0.33
470	Electronics	0.17	0.13	0.00	0.00	0.00	0.04	0.01	0.01
499	Other (Industrial Processes)	8.16	7.74	0.64	0.20	0.00	0.57	0.36	0.26
Total Industrial Processes		30.53	27.83	3.93	0.31	0.06	19.99	12.66	7.11
Solvent Evaporation									
510	Consumer Products	139.75	119.19	0.00	0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent	23.77	23.19	0.00	0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers	1.09	1.08	0.00	0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing	1.13	1.03	0.00	0.00	0.00	0.03	0.03	0.03
Total Solvent Evaporation		165.75	144.49	0.00	0.00	0.00	0.03	0.03	0.03
Miscellaneous Processes									
610	Residential Fuel Combustion	18.12	7.88	119.67	29.35	0.60	17.97	16.99	16.47
620	Farming Operations	40.29	3.22	0.00	0.00	0.00	0.96	0.44	0.10
630	Construction and Demolition	0.00	0.00	0.00	0.00	0.00	200.52	98.05	9.83
640	Paved Road Dust	0.00	0.00	0.00	0.00	0.00	288.86	132.01	19.93
645	Unpaved Road Dust	0.00	0.00	0.00	0.00	0.00	16.88	9.99	0.99
650	Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.00	1.99	1.12	0.17
660	Fires	0.34	0.24	3.02	0.08	0.00	0.45	0.44	0.41
670	Waste Burning and Disposal	12.55	7.16	112.95	3.40	1.04	11.94	11.48	10.23
680	Utility Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
690	Cooking	3.49	2.44	0.00	0.00	0.00	20.85	19.23	17.57
699	Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOX/SOX RECLAIM				27.23	11.80			
Total Miscellaneous Processes		74.79	20.94	235.64	60.06	13.44	560.42	289.75	75.70

TABLE C-10
(Continued)

CODE	Source Category	TOG	VOC	CO	NOx	SOx	TSP	PM10	PM2.5
On-Road Motor Vehicles									
710	Light Duty Passenger Auto (LDA)	25.02	23.30	184.12	12.96	0.91	8.58	8.41	4.98
722	Light Duty Trucks 1 (T1)	5.73	5.39	37.48	2.81	0.18	1.47	1.44	0.89
723	Light Duty Trucks 2 (T2)	25.10	23.38	171.51	14.80	0.57	6.91	6.74	4.88
724	Medium Duty Trucks (T3)	13.13	12.13	102.49	8.49	0.36	3.24	3.17	2.29
732	Light Heavy Duty Gas Trucks 1 (T4)	5.39	5.09	24.78	10.57	0.07	0.34	0.33	0.17
733	Light Heavy Duty Gas Trucks 2 (T5)	0.85	0.80	4.10	1.99	0.01	0.07	0.07	0.04
734	Medium Heavy Duty Gas Trucks (T6)	1.08	1.01	9.76	1.49	0.01	0.05	0.05	0.03
736	Heavy Heavy Duty Gas Trucks (HHDGT)	0.37	0.31	9.04	1.28	0.00	0.01	0.01	0.01
742	Light Heavy Duty Diesel Trucks 1 (T4)	0.18	0.15	1.62	3.46	0.01	0.10	0.10	0.06
743	Light Heavy Duty Diesel Trucks 2 (T5)	0.12	0.10	1.02	2.20	0.01	0.06	0.06	0.04
744	Medium Heavy Duty Diesel Truck (T6)	0.76	0.64	8.92	11.08	0.10	0.91	0.91	0.74
746	Heavy Heavy Duty Diesel Trucks (HHDDT)	5.39	4.51	26.96	52.48	0.27	2.85	2.85	2.05
750	Motorcycles (MCY)	12.59	10.72	75.25	3.55	0.01	0.10	0.09	0.06
760	Diesel Urban Buses (UB)	0.28	0.24	1.34	6.13	0.01	0.13	0.13	0.11
762	Gas Urban Buses (UB)	0.30	0.23	3.37	0.97	0.00	0.02	0.02	0.01
770	School Buses (SB)	0.28	0.23	2.29	3.94	0.01	0.20	0.20	0.18
776	Other Bus (OB)	0.19	0.17	1.77	0.80	0.01	0.05	0.05	0.04
780	Motor Homes (MH)	0.06	0.05	0.63	0.72	0.01	0.06	0.06	0.03
Total On-Road Motor Vehicles		96.85	88.47	666.46	139.71	2.55	25.16	24.69	16.59
Other Mobile Sources									
810	Aircraft	17.63	15.75	98.20	35.67	3.21	1.42	1.33	1.30
820	Trains	3.41	2.85	11.99	32.86	0.03	0.95	0.95	0.87
830	Ships and Commercial Boats	6.13	5.13	17.69	152.49	48.64	8.31	8.00	7.77
840	Recreational Boats	32.05	31.30	99.47	5.26	0.01	3.76	3.38	2.56
850	Off-Road Recreational Vehicles	13.46	12.88	24.32	0.29	0.08	0.11	0.10	0.07
860	Off-Road Equipment	56.01	50.74	768.80	67.93	0.24	3.12	2.95	2.46
870	Farm Equipment	0.31	0.27	5.00	0.98	0.00	0.03	0.03	0.03
890	Fuel Storage and Handling	3.59	3.58	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
Total Other Mobile Sources		132.59	122.51	1025.46	295.48	52.22	17.69	16.73	15.06
Total Stationary and Area Sources		546.81	300.98	306.10	86.84	17.66	590.91	312.04	92.10
Total On-Road Vehicles		96.85	88.47	666.46	139.71	2.55	25.16	24.69	16.59
Total Other Mobile		132.59	122.51	1025.46	295.48	52.22	17.69	16.73	15.06
Total Anthropogenic		776.25	511.96	1998.02	522.03	72.43	633.76	353.46	123.75

ATTACHMENT D

FINAL 2007 AQMP APPENDIX III

TOP 300 VOC AND NOX PRODUCERS IN 2002

TABLE D
Top 300 VOC and NOx Stationary Sources in 2002

TOP 300 SCAB VOC EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	ROG
1	800030	CHEVRON PRODUCTS COMPANY	EL SEGUNDO	837
2	800089	EXXONMOBIL OIL CORPORATION	TORRANCE	676
3	800370	EQUILON ENTERPRISES, LLC DBA SOPUS	WILMINGTON	506
4	131003	BP WEST COAST PRODUCTS LLC	CARSON	429
5	24060	LACO BATHWARE	ANAHEIM	278
6	3968	TABC, INC.	LONG BEACH	278
7	800363	CONOCOPHILLIPS COMPANY	WILMINGTON	238
8	3721	DART CONTAINER CORPORATION OF CALIFORNIA	CORONA	195
9	800026	ULTRAMAR INC	WILMINGTON	174
10	800057	KINDER MORGAN LIQUIDS TERMINALS, LLC	ORANGE	172
11	16642	ANHEUSER-BUSCH, INC.	VAN NUYS	164
12	800240	INLAND PAPERBOARD AND PACKAGING, INC.	ONTARIO	150
13	800362	CONOCOPHILLIPS COMPANY	CARSON	138
14	800372	EQUILON ENTERPRISES LLC - SHELL OIL PROD	CARSON	128
15	800183	PARAMOUNT PETROLEUM CORPORATION	PARAMOUNT	119
16	800074	LA CITY, DWP HAYNES STEAM PLANT	LONG BEACH	118
17	52517	REXAM BEVERAGE CAN COMAPNY	CHICAGO	115
18	115394	AES ALAMITOS, LLC	LONG BEACH	115
19	25318	PREMIER INDUSTRIES INC; INSULFOAM	TACOMA	113
20	14855	MILLER BREWING COMPANY	IRWINDALE	112
21	134018	INDUSTRIAL CONTAINER SERVICES-CA LLC	MONTEBELLO	103
22	94872	METAL CONTAINER CORPORATION	MIRA LOMA	92
23	70021	XERXES CORPORATION (A DELAWARE CORP)	MINNEAPOLIS	90
24	119907	BERRY PETROLEUM COMPANY	BAKERSFIELD	87
25	6262	THE HON COMPANY	SOUTH GATE	86
26	112963	SANYO SOLAR (USA) L.L.C.	CARSON	84
27	560	CATALINA YACHTS, INC.	WOODLAND HILLS	75
28	3585	RR DONNELLEY	TORRANCE	70
29	800330	THUMS LONG BEACH COMPANY	LONG BEACH	69
30	65382	SFPP, L.P.	ORANGE	67
31	800075	LOS ANGELES DEPARTMENT OF WATER & POWER	LOS ANGELES	65
32	44276	VITATECH INTERNATIONAL, INC.	TUSTIN	62
33	800128	SOUTHERN CALIFORNIA GAS COMPANY	NORTHRIDGE	62
34	2825	FIRMENICH (MCP FOODS INC.)	ANAHEIM	61
35	124619	IMPRESS USA INC.	TERMINAL ISLAND	60
36	2044	GB MANUFACTURING, INC.	POMONA	56
37	58202	NATURALIFE ECO VITE LABS, INC	TORRANCE	55
38	115663	EL SEGUNDO POWER, LLC	EL SEGUNDO	54
39	7949	CUSTOM FIBREGLASS MFG. CO	LONG BEACH	54
40	119940	BUILDING MATERIALS MANUFACTURING CORP.	FONTANA	53
41	7089	JEFFERSON SMURFIT CORPORATION	IRVINE	51
42	800278	SFPP, L.P.	ORANGE	51
43	124725	FORTUNE FASHIONS	VERNON	50
44	37881	VERTIS, INC.	BALTIMORE	50
45	4477	SOUTHERN CALIFORNIA EDISON	ROSEMEAD	48
46	110577	ARMORCAST PRODUCTS COMPANY	NORTH HOLLYWOOD	48
47	88228	VORTEX WHIRLPOOL SYSTEMS, INC	PERRIS	47

TOP 300 SCAB NOX EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	NOX
1	800030	CHEVRON PRODUCTS COMPANY	EL SEGUNDO	1023
2	800181	CALIFORNIA PORTLAND CEMENT	COLTON	975
3	800370	EQUILON ENTERPRISES, LLC DBA SOPUS	WILMINGTON	858
4	800089	EXXONMOBIL OIL CORPORATION	TORRANCE	792
5	131003	BP WEST COAST PRODUCTS LLC	CARSON	711
6	800363	CONOCOPHILLIPS COMPANY	WILMINGTON	651
7	800362	CONOCOPHILLIPS COMPANY	CARSON	367
8	4477	SOUTHERN CALIFORNIA EDISON	ROSEMEAD	319
9	44577	CITY OF LONG BEACH	LONG BEACH	316
10	131249	BP WILMINGTON CALCINER	WILMINGTON	306
11	800026	ULTRAMAR INC	WILMINGTON	268
12	800074	LA CITY, DWP HAYNES STEAM PLANT	LONG BEACH	217
13	95557	COLMAC ENERGY INC	MECCA	195
14	104012	AERA ENERGY LLC	HUNTINGTON BEACH	188
15	800128	SOUTHERN CALIFORNIA GAS COMPANY	NORTHRIDGE	160
16	115394	AES ALAMITOS, LLC	LONG BEACH	156
17	46268	CALIFORNIA STEEL INDUSTRIES, INC.	FONTANA	154
18	43201	SNOW SUMMIT INC	BIG BEAR LAKE	148
19	7427	OWENS-BROCKWAY GLASS CONTAINER INC	VERNON	139
20	25070	LA COUNTY SANITATION DISTRICTS	WHITTIER	138
21	18931	TAMCO	RANCHO CUCAMONGA	119
22	115315	RELIANT ENERGY ETIWANDA, LLC	RANCHO CUCAMONGA	115
23	37336	LA COUNTY SANITATION DISTRICTS	WHITTIER	113
24	800263	U.S. GOVT, DEPT OF NAVY	SAN DIEGO	113
25	43536	8309 TUJUNGA AVENUE CORPORATION	CITY OF INDUSTRY	105
26	800236	LOS ANGELES COUNTY SANITATION DISTRICTS	WHITTIER	98
27	800183	PARAMOUNT PETROLEUM CORPORATION	PARAMOUNT	96
28	20604	RALPHS GROCERY CO.	LOS ANGELES	82
29	800240	INLAND PAPERBOARD AND PACKAGING, INC.	ONTARIO	79
30	12912	LIBBEY GLASS INC.	INDUSTRY	78
31	800182	TXI RIVERSIDE CEMENT COMPANY	RIVERSIDE	73
32	115663	EL SEGUNDO POWER, LLC	EL SEGUNDO	70
33	82727	SMURFIT NEWSPRINT CORPORATION	POMONA	68
34	43537	8309 TUJUNGA AVENUE CORPORATION	CITY OF INDUSTRY	67
35	119907	BERRY PETROLEUM COMPANY	BAKERSFIELD	67
36	29110	ORANGE COUNTY SANTATION DISTRICT	HUNTINGTON BEACH	66
37	124838	EXIDE TECHNOLOGIES	LOS ANGELES	62
38	11435	PQ CORPORATION	SOUTH GATE	62
39	21887	KIMBERLY CLARK WORLDWIDE INC.	FULLERTON	60
40	106797	SAINT-GOBAIN CONTAINERS	MUNCIE	57
41	800335	CITY OF L.A., DEPT. OF AIRPORTS - EMD	LOS ANGELES	56
42	117247	EQUILON ENTERPRIESE, LLC DBA SOPUS, SRP	WILMINGTON	53
43	5973	SOUTHERN CALIFORNIA GAS COMPANY	VALENCIA	52
44	800170	LOS ANGELES DEPARTMENT OF WATER & POWER	WILMINGTON	51
45	115389	AES HUNTINGTON BEACH, LLC	HUNTINGTON BEACH	51
46	40196	GUARDIAN INDUSTRIES	FULLERTON	50
47	17301	ORANGE COUNTY SANITATION DISTRICT	FOUNTAIN VALLEY	49

TABLE D
Top 300 VOC and NOx Stationary Sources in 2002

TOP 300 SCAB VOC EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	ROG
48	5973	SOUTHERN CALIFORNIA GAS COMPANY	VALENCIA	46
49	115130	VERTIS, INC.	BALTIMORE	46
50	29110	ORANGE COUNTY SANTATION DISTRICT	HUNTINGTON BEACH	45
51	14492	JOHNSON LAMINATING & COATING INC.	CARSON	44
52	8936	FLEETWOOD MOTOR HOMES #47	RIVERSIDE	44
53	12660	GOLDSHIELD FIBERGLASS, INC.	RIVERSIDE	44
54	115962	BEST ROOFING COMPANY	GARDENA	43
55	114138	RIPON COGENERATION, INC.	POMONA	41
56	8547	QUEMETCO, INC. AN RSR CORPORATION	CITY OF INDUSTRY	41
57	111814	CONOCOPHILLIPS COMPANY	LONG BEACH	41
58	21474	PACTIV CORPORATION	LA MIRADA	41
59	17301	ORANGE COUNTY SANITATION DISTRICT	FOUNTAIN VALLEY	40
60	112712	CREATIVE IDEAS	CORONA	40
61	13397	JOHN BOYD DESIGNS	LOS ANGELES	40
62	22373	JEFFERSON SMURFIT CORPORATION (U.S.)	LOS ANGELES	40
63	800038	DOUGLAS PRODUCTS DIVISION	LONG BEACH	39
64	800393	VALERO WILMINGTON ASPHALT PLANT	WILMINGTON	38
65	117785	BALL METAL BEVERAGE CONTAINER CORP.	BROOMFIELD	37
66	96013	FURNITURE TRADITIONS INC.	ORANGE	36
67	18294	NORTHROP GRUMMAN SYSTEMS CORPORATION	EL SEGUNDO	36
68	59335	AKZO NOBEL COATING	ORANGE	35
69	64350	IVY HILL CORP	VERNON	35
70	22092	WESTERN TUBE & CONDUIT CORPORATION	LONG BEACH	35
71	800264	EDGINGTON OIL COMPANY	LONG BEACH	35
72	800052	ARCO TERMINAL SERVICES CORPORATION	LONG BEACH	35
73	800171	EXXONMOBIL OIL CORPORATION	VERNON	34
74	8582	SOUTHERN CALIFORNIA GAS COMPANY-PDR	PLAYA DEL REY	34
75	110924	WESTWAY TERMINAL CO.	SAN PEDRO	33
76	114034	KINCAID & DECKER INC, DBA WOODMART WINDO	VAN NUYS	33
77	8918	MCCONNELL CABINETS, INC	CITY OF INDUSTRY	33
78	101656	AIR PRODUCTS AND CHEMICALS, INC.	WILMINGTON	33
79	133987	PLAINS EXPLORATION & PRODUCTION COMPANY	LOS ANGELES	33
80	119465	US FERTILIZER	LOS ANGELES	33
81	123970	SUNDANCE SPAS INC.	CHINO	32
82	43605	FP INTERNATIONAL, INC.	REDWOOD CITY	32
83	12362	ACCESS BUSINESS GROUP	BUENA PARK	31
84	6815	AIR INDUSTRIES CORPORATION	GARDEN GROVE	31
85	69612	LITHOGRAPHIX, INC	LOS ANGELES	31
86	57892	LIFE-LIKE PRODUCTS INC.	VERNON	31
87	77014	SARA LEE FRESH, INC.	VERNON	31
88	800396	BP WEST COAST PROD., ARCO VINVALE	SOUTH GATE	30
89	7713	DELUXE PACKAGES	SANTA FE SPRINGS	30
90	62851	PENN LITHOGRAPHICS, JSJ PRINTING CORP.	CERRITOS	29
91	800198	ULTRAMAR INC	WILMINGTON	29
92	800236	LOS ANGELES COUNTY SANITATION DISTRICTS	WHITTIER	28
93	800037	DEMENNO/KERDOON	COMPTON	28
94	35302	OWENS CORNING	COMPTON	28

TOP 300 SCAB NOX EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	NOX
48	108701	SAINT-GOBAIN CONTAINERS, INC.	EL MONTE	49
49	550	LA CO., INTERNAL SERVICE DEPT	LOS ANGELES	49
50	800075	LOS ANGELES DEPARTMENT OF WATER & POWER	LOS ANGELES	46
51	115314	LONG BEACH GENERATION LLC	EL SEGUNDO	45
52	800327	GLENDALE CITY, PUBLIC SERVICE DEPT.	GLENDALE	45
53	18452	UNIVERSITY OF CALIFORNIA, LOS ANGELES	LOS ANGELES	44
54	25016	CASTAIC CLAY MANUFACTURING COMPANY, INC.	CASTAIC	43
55	113518	BPP, LP/RPM, LLC	RIDGEWOOD	39
56	800189	DISNEYLAND RESORT	ANAHEIM	39
57	113873	MM WEST COVINA LLC	WEST COVINA	38
58	25638	CITY OF BURBANK, BURBANK WATER AND POWER	BURBANK	38
59	118406	CARSON COGENERATION COMPANY	CARSON	38
60	51620	WHEELABRATOR NORWALK ENERGY COMPANY	NORWALK	37
61	800168	PASADENA CITY, DWP (EIS USE)	PASADENA	37
62	800234	LOMA LINDA UNIVERSITY	LOMA LINDA	35
63	115536	AES REDONDO BEACH, LLC	REDONDO BEACH	33
64	61160	GE ENGINE SERVICES, INC.	ONTARIO	32
65	22373	JEFFERSON SMURFIT CORPORATION (U.S.)	LOS ANGELES	32
66	114801	RHODIA INC.	LONG BEACH	31
67	47781	OLS ENERGY - CHINO	CHINO	30
68	113240	BLACK HILLS ONTARIO LLC	WHEELING	28
69	8582	SOUTHERN CALIFORNIA GAS COMPANY-PDR	PLAYA DEL REY	28
70	129497	THUMS LONG BEACH COMPANY	LONG BEACH	28
71	101656	AIR PRODUCTS AND CHEMICALS, INC.	WILMINGTON	27
72	58949	LOS ANGELES SHERIFF'S DEPARTMENT	ALHAMBRA	27
73	135216	CHINO BASIN DESALTER AUTHORITY	MIRA LOMA	27
74	17953	PACIFIC CLAY PRODUCTS INC	LAKE ELSINORE	26
75	50310	WASTE MANAGEMENT DISPOSAL	SUN VALLEY	26
76	126498	STEELSCAPE	RANCHO CUCAMONGA	26
77	16639	SHULTZ STEEL COMPANY	SOUTH GATE	25
78	50418	ORANGE COUNTY, IWMD, OLINDA	SANTA ANA	25
79	1073	US TILE COMPANY	CORONA	25
80	800264	EDGINGTON OIL COMPANY	LONG BEACH	24
81	42514	LA COUNTY SANITATION DISTRICTS	WHITTIER	24
82	14855	MILLER BREWING COMPANY	IRWINDALE	24
83	800038	DOUGLAS PRODUCTS DIVISION	LONG BEACH	23
84	16642	ANHEUSER-BUSCH, INC.	VAN NUYS	22
85	111412	FOUNDATION PILE, INC	FONTANA	22
86	4242	SAN DIEGO GAS AND ELECTRIC	MORENO VALLEY	22
87	68122	TIDELANDS OIL PRODUCTION CO.	LONG BEACH	21
88	94872	METAL CONTAINER CORPORATION	MIRA LOMA	21
89	49111	BROWNING-FERRIS INDUSTRIES/CA INC #0649	SYLMAR	20
90	8547	QUEMETCO, INC. AN RSR CORPORATION	CITY OF INDUSTRY	20
91	62013	WASHINGTON GROUP	HIGHLAND	20
92	42633	LA COUNTY SANITATION DISTRICTS	WHITTIER	20
93	800193	LA CITY, DWP VALLEY GENERATING STATION	LOS ANGELES	19
94	15558	NELCO PRODUCTS INCORPORATED	FULLERTON	19

TABLE D
Top 300 VOC and NOx Stationary Sources in 2002

TOP 300 SCAB VOC EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	ROG
95	47056	MYERS CONTAINER CORP,IMACC CORP DIV	EMERYVILLE	28
96	113873	MM WEST COVINA LLC	WEST COVINA	27
97	132828	CHEVRON USA	BAKERSFIELD	26
98	47144	JONATHAN LOUIS INTERNATIONAL	GARDENA	26
99	59970	STANDARD PAPER BOX CORP.	VERNON	26
100	84273	SICOR PHARMACEUTICALS, INC.	IRVINE	26
101	109105	OAKLEY CORPORATION	FOOTHILL RANCH	26
102	800369	SHELL OIL PRODUCTS US	CARSON	25
103	53729	TREND OFFSET PRINTING SERVICES, INC.	LOS ALAMITOS	25
104	106810	INTERSTATE BRANDS CORPORATION	POMONA	25
105	800079	PETRO DIAMOND TERMINAL CO	IRVINE	25
106	102216	INNOVATION FIBERGLASS	NUEVO	25
107	19184	WINTERS INDUSTRIAL CLEANING INC	PICO RIVERA	25
108	118121	BERT-CO INDUSRIES	LOS ANGELES	24
109	46268	CALIFORNIA STEEL INDUSTRIES, INC.	FONTANA	24
110	800365	CONOCOPHILLIPS COMPANY	LONG BEACH	24
111	115536	AES REDONDO BEACH, LLC	REDONDO BEACH	24
112	800022	CALNEV PIPELINE L.L.C.	ORANGE	24
113	116931	EQUILON ENTER. LLC,SHELL OIL PRODUCTS US	CARSON	23
114	67004	EAGLE ROOFING PROD DIV/BURLINGAME IND.	RIALTO	23
115	59225	AMERICH CORPORATION	NORTH HOLLYWOOD	23
116	121724	GRAPHIC PACKAGING CORPORATION	GARDEN GROVE	23
117	82260	SAFARILAND LTD	ONTARIO	23
118	87659	GOLDEN WEST HOMES	PERRIS	22
119	14146	MACGREGOR YACHT CORPORATION	COSTA MESA	22
120	126498	STEELSCAPE	RANCHO CUCAMONGA	22
121	800113	ROHR, INC., A SUBSID. OF GOODRICH CORP.	RIVERSIDE	22
122	104017	AERA ENERGY LLC	HUNTINGTON BEACH	21
123	76915	ST. JAMES OIL CORPORATION	LAGUNA HILLS	21
124	87806	GLOBAL OIL PRODUCTION, LLC	WILMINGTON	21
125	74310	WESTERN HOMES CORP	CORONA	21
126	800286	ARCO TERMINAL SERVICES CORPORATION	LONG BEACH	21
127	18452	UNIVERSITY OF CALIFORNIA, LOS ANGELES	LOS ANGELES	21
128	122295	FALCON FOAM, A DIVISION OF ATLAS ROOFING	LOS ANGELES	21
129	131370	JACUZZI WHIRLPOOL BATH	CHINO	21
130	21089	SHERWOOD SHUTTER CORPORATION	SANTA ANA	21
131	6296	MEADWESTVACO PACKAGING SYSTEMS LLC	BUENA PARK	20
132	800335	CITY OF L.A., DEPT. OF AIRPORTS - EMD	LOS ANGELES	20
133	2846	VISTA PAINT CORPORATION	FULLERTON	20
134	126258	APPLIANCE ENAMELING & SERVICE	UPLAND	20
135	89710	ROYAL CABINETS	UPLAND	20
136	104872	GAYLORD KUSTOM CABS	LONG BEACH	20
137	100844	MEDALLION CALIFORNIA PROPERTIES COMPANY	NEWHALL	20
138	800279	SFPP, L.P.	ORANGE	20
139	800397	BP WEST COAST PROD., COLTON TERMINAL	BLOOMINGTON	20
140	800327	GLENDALE CITY, PUBLIC SERVICE DEPT.	GLENDALE	20
141	107648	WORKFLOW DIRECT	SANTA ANA	20

TOP 300 SCAB NOX EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	NOX
95	45448	GAS RECOVERY SYSTEMS, INC. COYOTE CANYON	LIVERMORE	19
96	800080	LUNDAY-THAGARD COMPANY	SOUTH GATE	18
97	16477	GROVER MFG CORP	MONTEBELLO	18
98	117785	BALL METAL BEVERAGE CONTAINER CORP.	BROOMFIELD	18
99	2083	SUPERIOR INDUSTRIES INTERNATIONAL, INC.	VAN NUYS	17
100	71380	ONYX INDUSTRIAL SERVICES, INC.	SIGNAL HILL	17
101	109169	PATRIOT RESOURCES CORPORATION	PORTERVILLE	17
102	114138	RIPON COGENERATION, INC.	POMONA	17
103	12428	NATIONAL GYPSUM CO.	LONG BEACH	16
104	69646	ORANGE COUNTY, IWMD, FRB	SANTA ANA	16
105	110982	COMMONWEALTH ALUM - CARSON ROLLING MILL	LONG BEACH	16
106	11034	SEMPRA ENERGY SOLUTIONS/CENTRAL PLANTS	LOS ANGELES	16
107	22911	CARLTON FORGE WORKS	PARAMOUNT	16
108	3968	TABC, INC.	LONG BEACH	16
109	14495	VISTA METALS CORP	FONTANA	15
110	68042	CORONA ENERGY PARTNERS, LTD	CORONA	15
111	16389	CEDARS-SINAI MEDICAL CENTER	LOS ANGELES	15
112	15504	SCHLOSSER FORGE COMPANY	RANCHO CUCAMONGA	15
113	16978	CLOUGHERTY PACKING CO, FARMER JOHN MEATS	LOS ANGELES	15
114	800088	3M	ST. PAUL	15
115	62862	IMPERIAL IRRIGATION DISTRICT/COACHELLA	IMPERIAL	15
116	9961	RIVERSIDE CITY, WATER QUALITY CONTROL	RIVERSIDE	15
117	123087	INDALEX WEST	CITY OF INDUSTRY	14
118	660	AMERIGAS PROPANE L.P.	SAN PEDRO	14
119	68118	TIDELANDS OIL PRODUCTION CO.	LONG BEACH	14
120	43436	TIMCO	FONTANA	14
121	45953	HAYES LEMMERZ INTERNATIONAL, INC.	LA MIRADA	14
122	3093	LA CO., OLIVE VIEW MEDICAL CENTER	SYLMAR	14
123	68996	GARRETT ENGINE BOOSTING SYSTEMS	TORRANCE	14
124	9755	UNITED AIRLINES INC	LOS ANGELES	13
125	16338	KAISER ALUMINUM & CHEMICAL CORP	COMMERCE	13
126	45527	AMERICAN RACING EQUIPMENT INC	RANCHO DOMIGUEZ	13
127	800288	UNIV CAL IRVINE	IRVINE	13
128	800244	THE CLAREMONT COLLEGES	CLAREMONT	13
129	101369	VINTAGE PETROLEUM , INC.	VENTURA	13
130	44656	ROMAN EMPIRE FURNITURE PARTS MFG INC	LOS ANGELES	13
131	9163	INLAND EMPIRE UTILITIES AGENCY	CHINO HILLS	13
132	70744	CITY OF LOS ANGELES	LOS ANGELES	13
133	20197	LAC / USC MEDICAL CENTER	LOS ANGELES	13
134	83102	LIGHT METALS, INC.	CITY OF INDUSTRY	13
135	105190	FOUR TEAMS OIL PRODUCTION & EXPLORATION	LAKEWOOD	13
136	800265	UNIV OF SO CAL (EIS & NSR USE ONLY)	LOS ANGELES	13
137	47496	R & R METAL PAINTING & FINISHES	WHITTIER	13
138	131850	SHAW DIVESIFIED SERVICES	SANTA FE SPRINGS	12
139	22364	ITT Industries, Cannon	SANTA ANA	12
140	3950	CROWN CORK & SEAL COMPANY (USA)	LA MIRADA	12
141	42630	PRAXAIR, INC.	ONTARIO	12

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Top 300 VOC and NOx Stationary Sources in 2002

TOP 300 SCAB VOC EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	ROG
142	1379	COLORGRAPHICS, INC.	LOS ANGELES	19
143	136148	E/M COATING SERVICES	NORTH HOLLYWOOD	19
144	800092	EXXONMOBIL OIL CORPORATION	CERRITOS	19
145	8309	CAMBRO MANUFACTURING COMPANY	HUNTINGTON BEACH	19
146	54087	PLASTICS RESEARCH CORPORATION	SANTA FE SPRINGS	19
147	800272	CHEMOIL TERMINALS CORP	LONG BEACH	19
148	118314	ANTHONY INTERNATIONAL	SYLMAR	19
149	14469	ADVANCED SPA DESIGN	ANAHEIM	19
150	68122	TIDELANDS OIL PRODUCTION CO.	LONG BEACH	19
151	35135	HR TEXTRON INC.	SANTA CLARITA	19
152	45086	SIGNAL HILL PETROLEUM, INC.	LONG BEACH	19
153	29011	FLEETWOOD HOMES OF CALIFORNIA INC. #08	RIVERSIDE	18
154	7450	SANDBERG FURNITURE	LOS ANGELES	18
155	800367	IPS CORPORATION	CARSON/GARDENA	18
156	25501	FABRI-COTE,DIV A & S GLASS FABRICS CO IN	LOS ANGELES	18
157	104004	MICROMETALS INC	ANAHEIM	18
158	73281	QUEBECOR WORLD - GEORGE RICE & SONS	LOS ANGELES	18
159	89248	OLD COUNTRY MILLWORK, INC	LOS ANGELES	18
160	47459	JACUZZI WHIRLPOOL BATH	CHINO	18
161	32840	ROYAL TRUCK BODY INC	PARAMOUNT	17
162	124723	GREKA AM INC	PLACENTIA	17
163	120087	BREITBURN ENERGY COMPANY, LLC	LOS ANGELES	17
164	25171	EASTON SPORTS, INC.	VAN NUYS	17
165	43536	8309 TUJUNGA AVENUE CORPORATION	CITY OF INDUSTRY	17
166	108732	MCCONNELL CABINETS, INC.	CITY OF INDUSTRY	17
167	110256	APPLIED GRAPHICS TECHNOLOGIES	LOS ANGELES	17
168	51620	WHEELABRATOR NORWALK ENERGY COMPANY	NORWALK	17
169	93702	KCA ELECTRONICS, INC.	ANAHEIM	17
170	108711	SOUTHWEST MILL & LUMBER INC.	SUN VALLEY	16
171	23487	ROYAL PAPER BOX COMPANY	MONTEBELLO	16
172	60342	UNITED STATES CAN CO	COMMERCE	16
173	19766	FREMARC DESIGNS	CITY OF INDUSTRY	16
174	800214	LA CITY, HYPERION TREATMENT PLANT	PLAYA DEL REY	16
175	82657	QUEST DIAGNOSTICS INC.	SAN JUAN CAPISTRANO	16
176	133083	FIBERNETICS MOLDED PRODUCTS, INC	COMPTON	16
177	35482	SINCLAIR PRINTING COMPANY	LOS ANGELES	16
178	103570	PARKINSON ENTERPRISES INC	FULLERTON	16
179	1744	KIRKHILL-TA CO., KIRKHILL RUBBER CO.	BREA	16
180	53214	THE ORMAN GRUBB COMPANY	ANAHEIM	16
181	2083	SUPERIOR INDUSTRIES INTERNATIONAL, INC.	VAN NUYS	16
182	108658	DUAL GRAPHICS, INC	BREA	16
183	124528	GRAPHIC PRESS INC.	LOS ANGELES	16
184	68118	TIDELANDS OIL PRODUCTION CO.	LONG BEACH	16
185	17437	PARAMOUNT PICTURES	LOS ANGELES	16
186	3525	PAUL R. BRILES, INC.	GARDENA	16
187	111415	VAN CAN COMPANY	FONTANA	15
188	24450	TREND MANOR FURNITURE MFG CO INC	INDUSTRY	15

TOP 300 SCAB NOX EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	NOX
142	3671	EISENHOWER MEDICAL CENTER	RANCHO MIRAGE	12
143	118379	ARROWHEAD REGIONAL MEDICAL CENTER	COLTON	12
144	106325	HARBOR COGENERATION COMPANY	WILMINGTON	12
145	346	RECOT, INC. (DBA FRITO-LAY, INC.)	RANCHO CUCAMONGA	12
146	16575	SEMPRA ENERGY SOLUTIONS/CENTRAL PLANTS	LOS ANGELES	12
147	3585	RR DONNELLEY	TORRANCE	11
148	11301	SAN BERNARDINO MUNICIPAL WATER DEPT	SAN BERNARDINO	11
149	94072	TRIO PETROLEUM INC	BAKERSFIELD	11
150	11887	JET PROPULSION LABORATORY	PASADENA	11
151	800016	BAKER COMMODITIES, INC	VERNON	10
152	74413	REDLANDS CITY (CALIFORNIA STREET LANDFIL	REDLANDS	10
153	70860	CONNOLLY-PACIFIC CO.	LONG BEACH	10
154	24520	LA COUNTY SANITATION DISTRICTS	WHITTIER	10
155	800353	HUNTINGTON MEMORIAL HOSPITAL	PASADENA	10
156	113465	BFI WASTE SYS OF NA/AZUSA GAS SYS OPR	AZUSA	10
157	94677	YORBA LINDA WATER DISTRICT	YORBA LINDA	10
158	15164	HIGGINS BRICK COMPANY	CHINO HILLS	10
159	52517	REXAM BEVERAGE CAN COMAPNY	CHICAGO	10
160	105903	PRIME WHEEL	GARDENA	10
161	65382	SFPP, L.P.	ORANGE	10
162	70110	S.R. BRAY CORP	ANAHEIM	10
163	14966	US GOV'T, VA MEDICAL CENTER, WEST LA	LOS ANGELES	10
164	119219	REPUBLIC SERVICES OF CALIFORNIA, LLC	VALENCIA	9
165	101461	ORTIZ ENTERPRISES, INC.	IRVINE	9
166	83508	THE TERMO COMPANY	LONG BEACH	9
167	70410	LOS ANGELES DEPARTMENT OF WATER & POWER	LOS ANGELES	9
168	35302	OWENS CORNING	COMPTON	9
169	10966	WEBER METALS INC	PARAMOUNT	9
170	18294	NORTHROP GRUMMAN SYSTEMS CORPORATION	EL SEGUNDO	9
171	110146	ECOLOGY CONTROL INDUSTRIES INC.	TORRANCE	9
172	18695	US GYPSUM CO	SANTA FE SPRINGS	9
173	136516	BLACKSAND ENERGY, INC.	BREA	9
174	56940	CITY OF ANAHEIM/COMB TURBINE GEN STATION	ANAHEIM	9
175	800312	LA COUNTY HARBOR - MEDICAL CENTER	TORRANCE	8
176	52743	ORANGE COUNTY, IWMD, SANTIAGO	SANTA ANA	8
177	72402	EL TORO MATERIALS CO	EL TORO	8
178	800387	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	8
179	117290	B BRAUN MEDICAL INC.	IRVINE	8
180	63180	DARLING INTERNATIONAL, INC.	LOS ANGELES	8
181	113674	WASTE MANAGEMENT, INC.	CORONA	8
182	127299	WILDFLOWER ENERGY LP/INDIGO ENERGY FACIL	NORTH PALM SPRINGS	8
183	37603	SGL TECHNIC INC., POLYCARBON DIVISION	VALENCIA	8
184	3721	DART CONTAINER CORPORATION OF CALIFORNIA	CORONA	8
185	117638	LONG BEACH OIL DEVELOPMENT CO., BURNS	GLENDALE	8
186	800066	HITCO CARBON COMPOSITES, INC.	GARDENA	8
187	18455	ROYALTY CARPET MILLS, INC.	IRVINE	8
188	54402	SIERRA ALUMINUM COMPANY	RIVERSIDE	8

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Top 300 VOC and NOx Stationary Sources in 2002

TOP 300 SCAB VOC EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	ROG
189	800189	DISNEYLAND RESORT	ANAHEIM	15
190	115389	AES HUNTINGTON BEACH, LLC	HUNTINGTON BEACH	15
191	21887	KIMBERLY CLARK WORLDWIDE INC.	FULLERTON	15
192	100500	ATLANTIC/PACIFIC SHUTTER CO. INC	DOMINGUEZ HILLS	15
193	800003	HONEYWELL	TORRANCE	15
194	70026	ARVATO SERVICES, INC. (BERTELSMANN)	VALENCIA	15
195	42922	CMC PRINTED BAG COMPANY	WHITTIER	15
196	103609	ST. JUDE MEDICAL CRMD	SYLMAR	15
197	101977	SIGNAL HILL PETROLEUM	LONG BEACH	15
198	72351	CAJOLEBEN, INC., GALASSO'S BAKERY, DBA	MIRA LOMA	15
199	110175	APW	ANAHEIM	15
200	107323	U.S. TOOLING AND SPAS, INC.	ONTARIO	15
201	117225	SHELL OIL PRODUCTS US	CARSON	14
202	17743	PACIFIC SANDBLASTING CO., INC.	EL MONTE	14
203	3029	MATCHMASTER DYEING & FINISHING INC.	LOS ANGELES	14
204	124575	ADVANCE FOAM PLASTICS, INC.	AZUSA	14
205	71848	ANDERSON PRINTING	HOLLYWOOD	14
206	47708	HELLMAN PROPERTIES LLC	SEAL BEACH	14
207	62355	BLACKHAWK FURNITURE, INC.	RIVERSIDE	14
208	98493	G.S. CREATIONS, INC.	CORONA	14
209	800387	CALIFORNIA INSTITUTE OF TECHNOLOGY	PASADENA	14
210	330	HOLGA INC	VAN NUYS	14
211	44577	CITY OF LONG BEACH	LONG BEACH	14
212	107278	BEACH BILLIARDS & SUPPLY INC., BEACH MFG	GARDEN GROVE	14
213	10452	ARCO TERMINAL SERVICES CORPORATION	LONG BEACH	13
214	127568	ENGINEERED POLYMER SOLUTION	MONTEBELLO	13
215	78376	THERMAL DYNAMICS CORP.	ONTARIO	13
216	13011	M.C. GILL CORPORATION	EL MONTE	13
217	74529	KF FIBERGLASS, INC.	DOWNEY	13
218	110982	COMMONWEALTH ALUM - CARSON ROLLING MILL	LONG BEACH	13
219	102447	ROYAL OAK MFG CORP	UPLAND	13
220	1962	WEYERHAEUSER COMPANY	ANAHEIM	13
221	54219	MRD MARBLE INC, FLAIR CO DBA	ONTARIO	13
222	800267	DV INDUSTRIES INC.	LYNWOOD	13
223	16697	JBL, INC	NORTHRIDGE	13
224	800080	LUNDAY-THAGARD COMPANY	SOUTH GATE	12
225	15522	AEROSOL SERVICES CO., INC.	CITY OF INDUSTRY	12
226	60277	VERIZON INFORMATION SERVICES	LOS ANGELES	12
227	800263	U.S. GOVT, DEPT OF NAVY	SAN DIEGO	12
228	117319	EQUILON ENTERPRISES, LLC DBA SHELL OIL P	LONG BEACH	12
229	115314	LONG BEACH GENERATION LLC	EL SEGUNDO	12
230	113518	BPP, LP/RPM, LLC	RIDGEWOOD	12
231	22364	ITT INDUSTRIES, CANNON	SANTA ANA	12
232	22139	BP WEST COAST PRODUCTS LLC	LONG BEACH	12
233	117290	B BRAUN MEDICAL INC.	IRVINE	12
234	5078	FRIEDMAN BAG CO INC, POLYETHYLENE DIV	LOS ANGELES	12
235	74408	ARMTEC DEFENSE PRODUCTS CO.	COACHELLA	12

TOP 300 SCAB NOX EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	NOX
189	800408	NORTHROP GRUMMAN - MANHATTAN BEACH	REDONDO BEACH	8
190	800393	VALERO WILMINGTON ASPHALT PLANT	WILMINGTON	8
191	108931	CITY OF LOS ANGELES BUREAU OF SANITATION	LOS ANGELES	8
192	3704	ALL AMERICAN ASPHALT	CORONA	8
193	800212	POMONA VALLEY COMM HOSP (EIS USE)	POMONA	8
194	6384	LA CO, RANCHO LOS AMIGOS NRC	DOWNEY	8
195	56427	TANDEM INDUSTRIES	FONTANA	8
196	44844	GOLDEN CHEESE COMPANY OF CALIFORNIA	CORONA	8
197	115563	METAL COATERS OF CALIFORNIA	RANCHO CUCAMONGA	7
198	136	PRESS FORGE CO.	PARAMOUNT	7
199	12185	UNITED STATES GYPSUM COMPANY	SOUTH GATE	7
200	69439	NORTHWEST AIRLINES, INC.	MINNEAPOLIS	7
201	45746	PABCO PAPER	VERNON	7
202	69081	BAXTER HEALTHCARE CORP., BIOSCIENCE DIV	LOS ANGELES	7
203	11218	COUNTY OF ORANGE - CENTRAL UTILITY	SANTA ANA	7
204	7371	COUNTY OF SAN BERNARDINO SOLID WASTE MAN	SAN BERNARDINO	7
205	50299	COUNTY OF SAN BERNARDINO SOLID WASTE MAN	SAN BERNARDINO	7
206	3029	MATCHMASTER DYEING & FINISHING INC.	LOS ANGELES	7
207	79175	B P JOHN HAULING	MURRIETA	7
208	11732	KAISER HOSPITAL	FONTANA	7
209	4396	LITTLE COMPANY OF MARY HOSPITAL	TORRANCE	7
210	100844	MEDALLION CALIFORNIA PROPERTIES COMPANY	NEWHALL	7
211	800289	ALLERGAN INC	IRVINE	7
212	31843	PEPPERDINE UNIVERSITY	MALIBU	7
213	127468	GRANITE CONSTRUCTION COMPANY	INDIO	7
214	100400	ULTRA WHEEL COMPANY	BUENA PARK	7
215	11674	TRI-ALLOY GROUP LLC	MONTCLAIR	7
216	62731	PRIME WHEEL CORPORATION	HARBOR CITY	7
217	19390	BLUE DIAMOND MATERIALS	ANAHEIM	7
218	70997	ANNING-JOHNSON CO	CITY OF INDUSTRY	7
219	800057	KINDER MORGAN LIQUIDS TERMINALS, LLC	ORANGE	7
220	131732	NEWPORT FAB, LLC	NEWPORT BEACH	7
221	62851	PENN LITHOGRAPHICS, JSJ PRINTING CORP.	CERRITOS	7
222	800037	DEMENNO/KERDOON	COMPTON	7
223	17415	CITY OF SOUTH PASADENA	SOUTH PASADENA	7
224	70296	EASTERN MUNICIPAL WATER DISTRICT	PERRIS	6
225	3417	AIR PRODUCTS AND CHEMICALS, INC.	CARSON	6
226	129810	CITY OF RIVERSIDE, PUBLIC UTILITIES DEPT	RIVERSIDE	6
227	14213	LONG BEACH MEMORIAL MEDICAL CENTER	LONG BEACH	6
228	83557	LA PALMA CITY, DEPT OF PUBLIC WORKS	LA PALMA	6
229	71687	POWER SYSTEMS ASSOCIATES	LOS ANGELES	6
230	14229	LORBER INDUSTRIES OF CALIFORNIA	GARDENA	6
231	7417	EASTERN MUNICIPAL WATER DISTRICT	PERRIS	6
232	56	UNIVERSITY SO CALIFORNIA,HEALTH SCIENCES	LOS ANGELES	6
233	1537	FORGED METALS, INC.	FONTANA	6
234	12372	MISSION CLAY PRODUCTS	CORONA	6
235	118442	GOLDEN BEAR ARBORISTS - TGLC	MONROVIA	6

TABLE D
Top 300 VOC and NOx Stationary Sources in 2002

TOP 300 SCAB VOC EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	ROG
236	40034	BENTLEY MILLS, INC.	INDUSTRY	12
237	10245	TERMINAL ISLAND TREATMENT PLANT	TERMINAL ISLAND	12
238	23444	MID CITIES PAPER BOX	BELL GARDENS	12
239	18378	GRUBER SYSTEMS, INC.	VALENCIA	12
240	102268	PREPRODUCTION PLASTICS, INC.	CORONA	12
241	42543	GERON FURNITURE, INC	CARSON	11
242	85052	MODULAR STRUCTURES INTERNATIONAL, INC.	RIVERSIDE	11
243	117339	HYDROSEAL POLYMERS, INC.	RIVERSIDE	11
244	105903	PRIME WHEEL	GARDENA	11
245	46	PROFESSIONAL REFINISHING ORGANIZATION	LOS ANGELES	11
246	134931	ALCOA GLOBAL FASTENERS	FULLERTON	11
247	98268	MCM CONSTRUCTION INC	NORTH HIGHLANDS	11
248	10510	GREGG INDUSTRIES, INC.	EL MONTE	11
249	100145	HARBOR PEST CONTROL INC.	SAN DIEGO	11
250	40841	THE DOT PRINTER	IRVINE	11
251	98159	BREITBURN ENERGY COMPANY, LLC	LOS ANGELES	11
252	81751	MODTECH, INC.	PERRIS	11
253	800091	EXXONMOBIL OIL CORPORATION	ANAHEIM	11
254	37076	INSYNC MEDIA INC	INGLEWOOD	11
255	81752	MODTECH INC.	PERRIS	11
256	12280	FLEETWOOD TRAVEL TRAILERS OF CA, INC.	RIALTO	11
257	58563	MERCURY PLASTICS, INC.	INDUSTRY	11
258	800312	LA COUNTY HARBOR - MEDICAL CENTER	TORRANCE	11
259	23401	HOOD MFG INC	SANTA ANA	11
260	61962	HARBOR DEPARTMENT, CITY OF LOS ANGELES	WILMINGTON	11
261	56756	METROMEDIA TECHNOLOGIES - LA	GLENDALE	11
262	106897	AG-FUME SERVICES INC.	DOWNEY	11
263	96037	TEXTURED DESIGN	ANAHEIM	11
264	35189	CITY OF NEWPORT BEACH	NEWPORT BEACH	11
265	133353	BROWNWOOD FURNITURE, INC.	RANCHO CUCAMONGA	11
266	71704	INLAND LITHO, INC.	ANAHEIM	11
267	104012	AERA ENERGY LLC	HUNTINGTON BEACH	11
268	119939	UNITED RUBIDOUX, INC.	CORONA	11
269	134590	FLEISCHMANN'S VINEGAR CO, INC	MONTEBELLO	11
270	100718	HILLS CABINET MFG INC	INDIO	11
271	47643	EXECUTIVE OFFICE CONCEPTS	COMPTON	11
272	76978	AVALON SHUTTERS, INC.	SAN BERNARDINO	11
273	13920	SAINT JOSEPH HOSPITAL	ORANGE	11
274	40915	FREUND BAKING COMPANY	GLENDALE	11
275	800197	JENSEN INDUSTRIES INC.	VERNON	11
276	122528	PATINA V, A DEVISION OF NORLINE, INC.	CITY OF INDUSTRY	11
277	49327	THE CREATIVE PRESS	ANAHEIM	11
278	123350	COLORGRAPHICS, INC.	LOS ANGELES	11
279	98557	DOUBLE "D" ENTERPRISES INC.	RIVERSIDE	11
280	128819	AURORA MODULAR INDUSTRIES, INC.	MORENO VALLEY	10
281	103016	FRESH START BAKERIES, INC	CITY OF INDUSTRY	10
282	80066	COATINGS RESOURCE CORPORATION	HUNTINGTON BEACH	10

TOP 300 SCAB NOX EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	NOX
236	19167	RJ NOBLE	ORANGE	6
237	94657	ONE STOP LANDSCAPE SUPPLY	REDLANDS	6
238	800409	NORTHROP GRUMMAN SPACE TECHNOLOGY	REDONDO BEACH	6
239	124589	BREITBURN ENERGY COMPANY, LLC	LOS ANGELES	6
240	11716	FONTANA PAPER MILLS, INC.	FONTANA	6
241	50092	MARUHACHI CERAMICS OF AMERICA, INC.	CORONA	6
242	800202	UNIVERSAL CITY STUDIOS, LLC	UNIVERSAL CITY	6
243	6324	ST. BERNARDINE MEDICAL CENTER	SAN BERNARDINO	6
244	99777	COMMUNITY RECYCLING & RESOURCE RECOVERY	SUN VALLEY	6
245	8220	PROVIDENCE SAINT JOSEPH MEDICAL CENTER	BURBANK	6
246	3496	FAIRVIEW DEVELOPMENTAL CENTER	COSTA MESA	6
247	132626	KRAFT FOODS NORTH AMERICA/ NABISCO DIV.	BUENA PARK	6
248	83738	U.S. DYEING & FINISHING, INC.	GARDEN GROVE	6
249	22607	CALIFORNIA DAIRIES, INC.	ARTESIA	6
250	109914	THERMAL REMEDIATION SOLUTIONS, LLC	IRWINDALE	6
251	2619	LA County King/Drew Medical Center	LOS ANGELES	6
252	119920	PECHINEY CAST PLATE, INC.	VERNON	6
253	132068	BIMBO BAKERIES USA, INC.	MONTEBELLO	6
254	800209	BKK CORP	WEST COVINA	6
255	800214	LA CITY, HYPERION TREATMENT PLANT	PLAYA DEL REY	6
256	61722	RICOH ELECTRONICS, INC.	TUSTIN	6
257	77259	LBTH, INC./SEPULVEDA LEASE	VENTURA	6
258	12182	PARK LA BREA	LOS ANGELES	6
259	5679	US GOVT, VETERANS ADMINISTRATION MED CTR	LOS ANGELES	6
260	800113	ROHR, INC., A SUBSID. OF GOODRICH CORP.	RIVERSIDE	6
261	12129	BEVERLY HOSPITAL	MONTEBELLO	6
262	74408	ARMTEC DEFENSE PRODUCTS CO.	COACHELLA	6
263	115130	VERTIS, INC.	BALTIMORE	6
264	127381	ALLIANCE COLTON, LLC	COLTON	6
265	132189	CITY OF SANTA FE SPRINGS	SANTA FE SPRINGS	6
266	53729	TREND OFFSET PRINTING SERVICES, INC.	LOS ALAMITOS	6
267	127380	ALLIANCE COLTON, LLC	COLTON	5
268	62597	AMERICAN EAGLE WHEEL CORPORATION	CHINO	5
269	77014	SARA LEE FRESH, INC.	VERNON	5
270	104015	AERA ENERGY LLC	HUNTINGTON BEACH	5
271	23589	INTERNATIONAL EXTRUSION CORP	ALHAMBRA	5
272	116403	CR TRANSFER, INC.	STANTON	5
273	111027	AMERICAN REMEDIAL TECHNOLOGIES	LYNWOOD	5
274	119134	ITW CIP STAMPINGS	SANTA FE SPRINGS	5
275	107794	CLIFFSTAR CORPORATION/FONTANA	FONTANA	5
276	119665	CONDON JOHNSON & ASSOCIATES INC	OAKLAND	5
277	21598	ANGELICA TEXTILE SERVICES	ORANGE	5
278	23194	CITY OF HOPE MEDICAL CENTER	DUARTE	5
279	800150	US GOVT, AF DEPT, MARCH AIR RESERVE BASE	MARCH ARB	5
280	126536	CONSOLIDATED FOUNDRIES-POMONA	POMONA	5
281	133046	PRECISION SPECIALTY METALS INC	LOS ANGELES	5
282	124619	IMPRESS USA INC.	TERMINAL ISLAND	5

TABLE D
Top 300 VOC and NOx Stationary Sources in 2002

TOP 300 SCAB VOC EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	ROG
283	63464	IMPRESS COMMUNICATIONS, INC.	CANOGA PARK	10
284	20197	LAC / USC MEDICAL CENTER	LOS ANGELES	10
285	119735	SIGLA FURNITURE CORP	LOS ANGELES	10
286	16389	CEDARS-SINAI MEDICAL CENTER	LOS ANGELES	10
287	131784	PLOI AND COMPANY	CHINO	10
288	20504	ZIEMAN MFG CO	WHITTIER	10
289	103746	HARRINGTON & SONS INC	LAKE ELSINORE	10
290	40095	LONZA INC.	LOS ANGELES	10
291	55000	KYOWA AMERICA CORPORATION	COSTA MESA	10
292	115315	"RELIANT ENERGY ETIWANDA, LLC"	RANCHO CUCAMONGA	10
293	16575	SEMPRA ENERGY SOLUTIONS/CENTRAL PLANTS	LOS ANGELES	10
294	12155	ARMSTRONG WORLD INDUSTRIES, INC.	SOUTH GATE	10
295	39855	NAKANO FOODS, INC.	CUCAMONGA	10
296	12876	FOAM FABRICATORS INC.	COMPTON	10
297	98158	BREITBURN ENERGY COMPANY	LOS ANGELES	10
298	98531	INVESTMENT ENTERPRISES INC GREAT WESTERN	VAN NUYS	10
299	124589	BREITBURN ENERGY COMPANY, LLC	LOS ANGELES	10
300	59237	AMERICAN SECURITY PRODUCTS COMPANY	FONTANA	10

TOP 300 SCAB NOX EMISSION PRODUCERS IN 2002 (T/Y)

	FACID	FNAME	FCITY	NOX
283	110997	COMMONWEALTH AL - TORRANCE COIL COATING	TORRANCE	5
284	110096	SWISSTEX CALIFORNIA, INC	LOS ANGELES	5
285	59618	PACIFIC CONTINENTAL TEXTILES, INC.	RANCHO DOMINGUEZ	5
286	49387	UNIV CAL, RIVERSIDE	RIVERSIDE	5
287	1703	EASTERN MUNICIPAL WATER DISTRICT	PERRIS	5
288	50300	PARALLEL PRODUCTS	RANCHO CUCAMONGA	5
289	1824	BUDDY BAR CASTING	SOUTH GATE	5
290	123774	HERAEUS METAL PROCESSING, INC.	SANTA FE SPRINGS	5
291	11604	STREMICKS HERITAGE FOODS	SANTA ANA	5
292	61226	THE RITZ-CARLTON, MARINA DEL REY	MARINA DEL REY	5
293	9053	CENTRAL PLANTS, INC.\BUNKER HILL	LOS ANGELES	5
294	45471	OGLEBAY NORTON INDUSTRIAL SANDS, INC.	SAN JUAN CAPISTRANO	5
295	43270	TUTOR-SALIBA CORPORATION	SYLMAR	5
296	94967	MESA CONSOLIDATED WATER DISTRICT	COSTA MESA	5
297	4565	CALIFORNIA STATE UNIVERSITY, NORTHRIDGE	NORTHRIDGE	5
298	130211	PAPER PAK INDUSTRIES, INC.	LA VERNE	5
299	2912	HOLLIDAY ROCK, INC.	UPLAND	5
300	19305	ASTRO ALUMINUM TREATING	SOUTH GATE	5

ATTACHMENT E

FINAL 2007 AQMP APPENDIX III

ON-ROAD EMISSIONS

BY VEHICLE CATEGORY

Table E-1
2002 Annual Average Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks - Gasoline Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
Vehicles	183458.	5192940.	33276.	5409670.	95867.	2517750.	37492.	2651110.	30123.	934265.	23833.	988221.	20779.	92732.	113512.	104412.	217924.	5595.	166230.	9438760.
VMT/1000	3201.	184182.	804.	188187.	2272.	101461.	1561.	105294.	747.	38616.	1076.	40439.	220.	2474.	2694.	10365.	13059.	612.	1139.	348730.
Trips	815024.	32950600.	195714.	33961300.	434618.	16080300.	236822.	16751700.	311860.	10292400.	275154.	10879400.	370778.	1223950.	1594730.	1951290.	3546020.	22380.	332428.	65493200.
Reactive Organic Gas Emissions																				
Run Exh	20.53	37.89	0.20	58.63	14.88	22.68	0.17	37.73	5.53	15.85	0.23	21.62	1.61	3.22	4.83	12.67	17.49	0.91	4.92	141.30
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.23	0.00	0.24	0.02	0.06	0.08	1.13	1.21	0.00	0.00	1.44
Start Ex	4.31	36.70	0.00	41.01	2.31	17.95	0.00	20.26	2.14	14.23	0.00	16.37	4.64	2.62	7.27	0.00	7.27	0.03	1.01	85.94
Total Ex	24.84	74.59	0.20	99.64	17.19	40.63	0.17	57.99	7.68	30.30	0.23	38.22	6.27	5.91	12.18	13.79	25.97	0.95	5.93	228.69
Diurnal	1.14	6.55	0.00	7.68	0.58	2.60	0.00	3.18	0.05	0.92	0.00	0.97	0.01	0.02	0.03	0.00	0.03	0.00	0.45	12.31
Hot Soak	2.69	8.83	0.00	11.52	1.45	3.35	0.00	4.81	0.28	1.65	0.00	1.93	0.20	0.06	0.26	0.00	0.26	0.00	0.41	18.93
Running	16.17	37.73	0.00	53.90	5.70	16.91	0.00	22.61	1.07	10.78	0.00	11.85	1.85	0.80	2.64	0.00	2.64	0.02	2.53	93.54
Resting	0.75	3.14	0.00	3.89	0.39	1.25	0.00	1.64	0.03	0.47	0.00	0.50	0.00	0.01	0.01	0.00	0.01	0.00	0.25	6.31
Total	45.60	130.84	0.20	176.64	25.31	64.75	0.17	90.22	9.11	44.12	0.23	53.47	8.33	6.80	15.12	13.79	28.92	0.97	9.57	359.78
Carbon Monoxide Emissions																				
Run Exh	266.82	952.70	0.81	1220.33	189.60	649.58	1.15	840.32	113.53	322.72	1.01	437.27	47.82	67.00	114.81	56.65	171.46	7.49	69.39	2746.26
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.39	0.02	1.46	0.12	0.38	0.50	3.49	3.99	0.00	0.00	5.44
Start Ex	26.39	381.69	0.00	408.08	14.34	205.27	0.00	219.61	17.08	179.25	0.00	196.32	42.74	43.30	86.04	0.00	86.04	0.49	3.43	913.97
Total Ex	293.22	1334.39	0.81	1628.41	203.94	854.85	1.15	1059.93	130.65	503.36	1.03	635.05	90.67	110.68	201.35	60.13	261.48	7.98	72.81	3665.67
Oxides of Nitrogen Emissions																				
Run Exh	15.54	106.67	1.32	123.53	11.00	96.46	2.58	110.04	5.33	58.01	9.19	72.53	1.44	14.65	16.09	219.70	235.78	13.73	1.63	557.23
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.07	0.00	0.00	0.01	6.01	6.01	0.00	0.00	6.08
Start Ex	1.28	22.40	0.00	23.69	0.68	16.13	0.00	16.81	0.50	18.33	0.00	18.83	0.72	5.10	5.82	0.00	5.82	0.05	0.12	65.32
Total Ex	16.82	129.08	1.32	147.21	11.68	112.60	2.58	126.85	5.83	76.36	9.25	91.43	2.16	19.76	21.92	225.70	247.62	13.77	1.75	628.63
Carbon Dioxide Emissions (000)																				
Run Exh	1.89	82.90	0.33	85.12	1.33	54.57	0.60	56.50	0.56	28.91	0.62	30.09	0.16	1.83	1.99	19.41	21.40	1.62	0.15	194.89
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.01	0.02	0.42	0.43	0.00	0.00	0.48
Start Ex	0.18	2.76	0.00	2.94	0.10	1.60	0.00	1.70	0.08	0.89	0.00	0.97	0.08	0.05	0.13	0.00	0.13	0.00	0.02	5.75
Total Ex	2.07	85.67	0.33	88.06	1.42	56.17	0.60	58.19	0.63	29.85	0.63	31.11	0.25	1.89	2.14	19.83	21.97	1.62	0.17	201.12
PM2.5 Emissions																				
Run Exh	0.09	2.04	0.15	2.29	0.07	1.97	0.11	2.15	0.02	0.74	0.07	0.83	0.00	0.02	0.03	8.93	8.95	0.21	0.05	14.47
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.20
Start Ex	0.01	0.21	0.00	0.21	0.00	0.17	0.00	0.18	0.00	0.07	0.00	0.08	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.48
Total Ex	0.10	2.25	0.15	2.50	0.07	2.14	0.11	2.32	0.02	0.82	0.08	0.91	0.01	0.03	0.03	9.13	9.16	0.21	0.05	15.15
TireWear	0.01	0.41	0.00	0.41	0.01	0.22	0.00	0.23	0.00	0.09	0.00	0.10	0.00	0.01	0.01	0.07	0.08	0.00	0.00	0.83
BrakeWr	0.02	1.09	0.00	1.12	0.01	0.60	0.01	0.62	0.00	0.23	0.01	0.24	0.00	0.02	0.02	0.10	0.12	0.00	0.00	2.11
Total	0.13	3.75	0.16	4.03	0.09	2.97	0.12	3.18	0.03	1.14	0.09	1.25	0.01	0.05	0.06	9.30	9.36	0.21	0.06	18.09
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.03	1.13	0.03	1.19	0.02	0.74	0.05	0.81	0.01	0.39	0.05	0.46	0.01	0.03	0.03	1.64	1.67	0.13	0.00	4.26
Fuel Consumption (000 gallons)																				
Gasoline	267.36	9011.72	0.00	9279.08	184.30	5902.34	0.00	6086.63	88.50	3147.13	0.00	3235.64	42.08	213.36	255.44	0.00	255.44	12.32	30.73	18899.84
Diesel	0.00	0.00	29.36	29.36	0.00	0.00	54.04	54.04	0.00	0.00	56.37	56.37	0.00	0.00	0.00	1784.64	1784.64	136.31	0.00	2060.72

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-2
2002 Summer Planning Emissions in Tons Per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks – Gasoline Trucks			Heavy Duty Trucks –			
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
Vehicles	183458.	5192940.	33276.	5409670.	95867.	2517750.	37492.	2651110.	30123.	934265.	23833.	988221.	20779.	92732.	113512.	104412.	217924.	5595.	166230.	9438760.
VMT/1000	3201.	184182.	804.	188187.	2272.	101461.	1561.	105294.	747.	38616.	1076.	40439.	220.	2474.	2694.	10365.	13059.	612.	1139.	348730.
Trips	815024.	32950600.	195714.	33961300.	434618.	16080300.	236822.	16751700.	311860.	10292400.	275154.	10879400.	370778.	1223950.	1594730.	1951290.	3546020.	22380.	332428.	65493200.
Reactive Organic Gas Emissions																				
Run Exh	19.45	40.69	0.20	60.33	13.95	24.20	0.17	38.32	5.19	16.69	0.23	22.11	1.49	3.33	4.82	12.67	17.48	0.93	4.60	143.78
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.23	0.00	0.24	0.02	0.06	0.08	1.06	1.14	0.00	0.00	1.38
Start Ex	3.68	30.47	0.00	34.16	1.97	14.90	0.00	16.87	1.80	11.86	0.00	13.65	3.82	2.22	6.05	0.00	6.05	0.03	0.86	71.61
Total Ex	23.13	71.16	0.20	94.49	15.92	39.09	0.17	55.19	7.00	28.77	0.23	36.00	5.33	5.61	10.94	13.73	24.67	0.96	5.46	216.77
Diurnal	1.93	10.72	0.00	12.64	0.99	4.26	0.00	5.25	0.08	1.51	0.00	1.59	0.02	0.04	0.05	0.00	0.05	0.00	0.74	20.27
Hot Soak	2.77	10.02	0.00	12.78	1.49	3.80	0.00	5.29	0.29	1.81	0.00	2.10	0.20	0.07	0.27	0.00	0.27	0.00	0.43	20.87
Running	15.59	35.76	0.00	51.35	5.47	15.72	0.00	21.19	1.04	10.25	0.00	11.29	1.80	0.78	2.58	0.00	2.58	0.02	2.43	88.86
Resting	1.44	5.72	0.00	7.15	0.74	2.32	0.00	3.06	0.06	0.87	0.00	0.93	0.01	0.01	0.02	0.00	0.02	0.00	0.48	11.64
Total	44.85	133.37	0.20	178.42	24.62	65.19	0.17	89.98	8.46	43.21	0.23	51.90	7.36	6.51	13.87	13.73	27.59	0.98	9.54	358.42
Carbon Monoxide Emissions																				
Run Exh	261.40	1051.34	0.81	1313.55	181.88	709.41	1.15	892.44	109.00	345.03	1.01	455.05	44.67	69.00	113.67	56.65	170.32	7.52	64.98	2903.85
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.39	0.02	1.46	0.12	0.38	0.50	2.61	3.11	0.00	0.00	4.57
Start Ex	26.10	290.92	0.00	317.02	14.18	156.49	0.00	170.67	17.23	135.88	0.00	153.12	43.77	33.21	76.98	0.00	76.98	0.41	3.23	721.43
Total Ex	287.50	1342.26	0.81	1630.56	196.07	865.90	1.15	1063.11	126.28	482.31	1.03	609.62	88.55	102.60	191.15	59.26	250.41	7.93	68.21	3629.85
Oxides of Nitrogen Emissions																				
Run Exh	14.99	102.00	1.31	118.30	10.52	91.97	2.57	105.06	5.10	55.46	9.20	69.76	1.36	14.05	15.42	219.78	235.20	13.66	1.54	543.53
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.07	0.00	0.00	0.01	6.19	6.19	0.00	0.00	6.27
Start Ex	1.20	20.61	0.00	21.81	0.64	14.84	0.00	15.48	0.47	17.33	0.00	17.80	0.68	4.89	5.57	0.00	5.57	0.04	0.11	60.80
Total Ex	16.19	122.60	1.31	140.11	11.16	106.81	2.57	120.54	5.57	72.81	9.26	87.63	2.04	18.94	20.99	225.97	246.96	13.70	1.65	610.60
Carbon Dioxide Emissions (000)																				
Run Exh	1.93	87.79	0.33	90.05	1.35	57.72	0.60	59.66	0.56	30.29	0.62	31.48	0.16	1.83	1.99	19.41	21.40	1.62	0.15	204.37
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.01	0.02	0.44	0.45	0.00	0.00	0.51
Start Ex	0.18	2.76	0.00	2.94	0.10	1.60	0.00	1.70	0.08	0.89	0.00	0.97	0.08	0.05	0.13	0.00	0.13	0.00	0.02	5.75
Total Ex	2.11	90.56	0.33	93.00	1.44	59.32	0.60	61.36	0.64	31.23	0.63	32.50	0.25	1.89	2.14	19.85	21.99	1.62	0.17	210.63
PM2.5 Emissions																				
Run Exh	0.09	2.04	0.15	2.29	0.07	1.97	0.11	2.15	0.02	0.74	0.07	0.83	0.00	0.02	0.03	8.93	8.95	0.21	0.05	14.47
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.17
Start Ex	0.01	0.21	0.00	0.21	0.00	0.17	0.00	0.18	0.00	0.07	0.00	0.08	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.48
Total Ex	0.10	2.25	0.15	2.50	0.07	2.14	0.11	2.32	0.02	0.82	0.08	0.91	0.01	0.03	0.03	9.10	9.13	0.21	0.05	15.12
TireWear	0.01	0.41	0.00	0.41	0.01	0.22	0.00	0.23	0.00	0.09	0.00	0.10	0.00	0.01	0.01	0.07	0.08	0.00	0.00	0.83
BrakeWr	0.02	1.09	0.00	1.12	0.01	0.60	0.01	0.62	0.00	0.23	0.01	0.24	0.00	0.02	0.02	0.10	0.12	0.00	0.00	2.11
Total	0.13	3.75	0.16	4.03	0.09	2.97	0.12	3.18	0.03	1.14	0.09	1.25	0.01	0.05	0.06	9.27	9.33	0.21	0.06	18.06
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.03	1.19	0.03	1.25	0.02	0.78	0.05	0.85	0.01	0.41	0.05	0.47	0.01	0.03	0.03	1.64	1.67	0.13	0.00	4.38
Fuel Consumption (000 gallons)																				
Gasoline	270.20	9512.46	0.00	9782.66	184.30	6226.22	0.00	6410.53	88.20	3284.84	0.00	3373.04	41.43	211.97	253.40	0.00	253.40	12.32	29.84	19861.78
Diesel	0.00	0.00	29.36	29.36	0.00	0.00	54.04	54.04	0.00	0.00	56.37	56.37	0.00	0.00	0.00	1786.55	1786.55	136.31	0.00	2062.63

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-3
2002 Winter Planning Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	183458.	5192940.	33276.	5409670.	95867.	2517750.	37492.	2651110.	30123.	934265.	23833.	988221.	20779.	92732.	113512.	104412.	217924.	5595.	166230.	9438760.
VMT/1000	3201.	184182.	804.	188187.	2272.	101461.	1561.	105294.	747.	38616.	1076.	40439.	220.	2474.	2694.	10365.	13059.	612.	1139.	348730.
Trips	815024.	32950600.	195714.	33961300.	434618.	16080300.	236822.	16751700.	311860.	10292400.	275154.	10879400.	370778.	1223950.	1594730.	1951290.	3546020.	22380.	332428.	65493200.
Reactive Organic Gas Emissions																				
Run Exh	20.57	37.05	0.20	57.82	14.96	22.24	0.17	37.36	5.56	15.64	0.23	21.43	1.63	3.20	4.83	12.67	17.50	0.91	4.96	139.99
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.23	0.00	0.24	0.02	0.06	0.08	1.22	1.30	0.00	0.00	1.54
Start Ex	4.35	37.26	0.00	41.62	2.33	18.23	0.00	20.56	2.15	14.42	0.00	16.58	4.66	2.64	7.30	0.00	7.30	0.03	1.02	87.10
Total Ex	24.92	74.32	0.20	99.44	17.29	40.47	0.17	57.92	7.72	30.28	0.23	38.24	6.31	5.90	12.21	13.88	26.10	0.94	5.98	228.62
Diurnal	1.46	8.25	0.00	9.71	0.75	3.29	0.00	4.04	0.06	1.17	0.00	1.23	0.02	0.03	0.05	0.00	0.05	0.00	0.58	15.61
Hot Soak	3.72	11.46	0.00	15.18	2.01	4.40	0.00	6.41	0.39	2.16	0.00	2.55	0.27	0.08	0.35	0.00	0.35	0.01	0.57	25.06
Running	17.72	43.05	0.00	60.77	6.29	20.13	0.00	26.42	1.15	12.20	0.00	13.34	1.95	0.85	2.79	0.00	2.79	0.02	2.79	106.15
Resting	0.66	2.77	0.00	3.43	0.34	1.10	0.00	1.44	0.03	0.41	0.00	0.44	0.00	0.01	0.01	0.00	0.01	0.00	0.22	5.55
Total	48.48	139.84	0.20	188.53	26.68	69.39	0.17	96.24	9.34	46.23	0.23	55.80	8.55	6.87	15.42	13.88	29.30	0.97	10.15	380.99
Carbon Monoxide Emissions																				
Run Exh	264.16	916.97	0.81	1181.94	189.13	628.08	1.15	818.36	113.27	315.14	1.01	429.42	48.53	66.58	115.10	56.65	171.75	7.48	69.86	2678.81
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	1.39	0.02	1.46	0.12	0.38	0.50	4.71	5.21	0.00	0.00	6.67
Start Ex	26.52	391.30	0.00	417.82	14.41	210.48	0.00	224.89	17.09	182.63	0.00	199.72	42.63	43.57	86.20	0.00	86.20	0.50	3.44	932.57
Total Ex	290.68	1308.27	0.81	1599.76	203.54	838.56	1.15	1043.25	130.40	499.16	1.03	630.60	91.27	110.54	201.81	61.36	263.17	7.98	73.30	3618.05
Oxides of Nitrogen Emissions																				
Run Exh	17.31	118.54	1.40	137.25	12.28	107.30	2.75	122.33	5.95	64.71	9.77	80.42	1.63	16.56	18.19	234.58	252.77	14.69	1.83	609.29
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.07	0.00	0.00	0.01	5.75	5.75	0.00	0.00	5.83
Start Ex	1.29	22.64	0.00	23.93	0.68	16.30	0.00	16.99	0.50	18.44	0.00	18.95	0.72	5.12	5.84	0.00	5.84	0.05	0.12	65.87
Total Ex	18.59	141.18	1.40	161.18	12.97	123.60	2.75	139.32	6.45	83.16	9.83	99.44	2.35	21.68	24.03	240.33	264.36	14.74	1.94	680.99
Carbon Dioxide Emissions (000)																				
Run Exh	1.87	80.76	0.33	82.96	1.32	53.19	0.60	55.11	0.55	28.31	0.62	29.48	0.16	1.83	1.99	19.41	21.40	1.62	0.15	190.73
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.01	0.02	0.39	0.40	0.00	0.00	0.45
Start Ex	0.18	2.76	0.00	2.94	0.10	1.60	0.00	1.70	0.08	0.89	0.00	0.97	0.08	0.05	0.13	0.00	0.13	0.00	0.02	5.75
Total Ex	2.05	83.52	0.33	85.90	1.42	54.79	0.60	56.81	0.63	29.24	0.63	30.50	0.25	1.89	2.14	19.80	21.94	1.62	0.17	196.94
PM2.5 Emissions																				
Run Exh	0.09	2.04	0.15	2.29	0.07	1.97	0.11	2.15	0.02	0.74	0.07	0.83	0.00	0.02	0.03	8.93	8.95	0.21	0.05	14.47
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24	0.00	0.00	0.24
Start Ex	0.01	0.21	0.00	0.21	0.00	0.17	0.00	0.18	0.00	0.07	0.00	0.08	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.48
Total Ex	0.10	2.25	0.15	2.50	0.07	2.14	0.11	2.32	0.02	0.82	0.08	0.91	0.01	0.03	0.03	9.17	9.20	0.21	0.05	15.19
TireWear	0.01	0.41	0.00	0.41	0.01	0.22	0.00	0.23	0.00	0.09	0.00	0.10	0.00	0.01	0.01	0.07	0.08	0.00	0.00	0.83
BrakeWr	0.02	1.09	0.00	1.12	0.01	0.60	0.01	0.62	0.00	0.23	0.01	0.24	0.00	0.02	0.02	0.10	0.12	0.00	0.00	2.11
Total	0.13	3.75	0.16	4.03	0.09	2.97	0.12	3.18	0.03	1.14	0.09	1.25	0.01	0.05	0.06	9.34	9.40	0.21	0.06	18.13
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.03	1.10	0.03	1.16	0.02	0.72	0.05	0.79	0.01	0.39	0.05	0.45	0.01	0.03	0.03	1.64	1.67	0.13	0.00	4.20
Fuel Consumption (000 gallons)																				
Gasoline	265.14	8788.10	0.00	9053.24	183.56	5758.56	0.00	5942.12	88.21	3084.55	0.00	3172.76	42.19	213.34	255.53	0.00	255.53	12.32	30.83	18466.81
Diesel	0.00	0.00	29.36	29.36	0.00	0.00	54.04	54.04	0.00	0.00	56.37	56.37	0.00	0.00	0.00	1781.96	1781.96	136.31	0.00	2058.04

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-4
2005 Annual Average Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks - Gasoline Trucks			Heavy Duty Trucks - Diesel Trucks	Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	154277.	5398750.	25648.	5578680.	77109.	2976130.	38640.	3091880.	22364.	1228010.	59681.	1310060.	15951.	95052.	111003.	143769.	254772.	5640.	278506.	10519500.
VMT/1000	2551.	193623.	601.	196775.	1773.	118492.	1454.	121719.	529.	51112.	3274.	54916.	158.	2620.	2778.	14755.	17533.	618.	2206.	393767.
Trips	646668.	34259600.	147390.	35053600.	329461.	18981800.	242187.	19553500.	231367.	12797900.	719405.	13748700.	291239.	1375580.	1666820.	2589990.	4256810.	22560.	556957.	73192100.
Reactive Organic Gas Emissions																				
Run Exh	17.34	22.05	0.14	39.52	12.36	15.71	0.15	28.22	3.87	12.28	0.53	16.67	1.15	3.09	4.24	17.76	22.00	0.84	9.15	116.41
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.26	0.01	0.27	0.01	0.07	0.09	1.44	1.52	0.00	0.00	1.79
Start Ex	3.60	26.57	0.00	30.17	1.84	14.90	0.00	16.74	1.57	13.34	0.00	14.92	3.62	2.75	6.37	0.00	6.37	0.03	1.57	69.79
Total Ex	20.93	48.62	0.14	69.69	14.20	30.62	0.15	44.96	5.44	25.88	0.54	31.86	4.78	5.91	10.69	19.20	29.89	0.87	10.72	187.99
Diurnal	1.05	5.95	0.00	7.00	0.52	2.73	0.00	3.25	0.05	0.99	0.00	1.04	0.01	0.02	0.03	0.00	0.03	0.00	0.69	12.00
Hot Soak	2.17	7.12	0.00	9.29	1.11	3.19	0.00	4.30	0.22	1.51	0.00	1.74	0.16	0.06	0.21	0.00	0.21	0.00	0.43	15.97
Running	13.02	25.47	0.00	38.49	4.41	16.57	0.00	20.97	0.88	10.94	0.00	11.82	1.48	0.80	2.28	0.00	2.28	0.02	2.55	76.14
Resting	0.73	3.33	0.00	4.06	0.36	1.58	0.00	1.95	0.03	0.59	0.00	0.63	0.00	0.01	0.01	0.00	0.01	0.00	0.41	7.05
Total	37.90	90.49	0.14	128.53	20.61	54.68	0.15	75.43	6.63	39.92	0.54	47.08	6.43	6.80	13.23	19.20	32.43	0.90	14.79	299.16
Carbon Monoxide Emissions																				
Run Exh	215.21	683.51	0.58	899.31	148.31	527.38	1.04	676.73	73.13	274.50	2.77	350.41	34.14	58.87	93.01	76.17	169.18	6.65	126.11	2228.38
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.58	0.05	1.67	0.09	0.43	0.52	4.91	5.43	0.00	0.00	7.10
Start Ex	21.38	281.81	0.00	303.18	11.01	176.55	0.00	187.56	11.99	160.61	0.00	172.60	33.86	44.54	78.39	0.00	78.39	0.43	5.76	747.93
Total Ex	236.59	965.31	0.58	1202.49	159.32	703.92	1.04	864.28	85.16	436.69	2.83	524.68	68.08	103.84	171.92	81.09	253.01	7.08	131.87	2983.42
Oxides of Nitrogen Emissions																				
Run Exh	12.20	69.29	0.97	82.47	8.40	72.47	2.39	83.27	3.36	48.63	24.69	76.68	1.01	13.71	14.72	287.56	302.27	12.27	3.12	560.08
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.17	0.00	0.00	0.01	9.64	9.64	0.00	0.00	9.82
Start Ex	1.00	18.33	0.00	19.33	0.51	15.28	0.00	15.79	0.32	19.33	0.00	19.65	0.55	5.46	6.01	0.00	6.01	0.04	0.19	61.02
Total Ex	13.20	87.63	0.97	101.80	8.91	87.76	2.39	99.06	3.69	67.97	24.84	96.50	1.56	19.18	20.74	297.20	317.93	12.31	3.31	630.92
Carbon Dioxide Emissions (000)																				
Run Exh	1.51	85.71	0.24	87.46	1.04	64.02	0.56	65.62	0.39	37.96	1.87	40.22	0.12	1.92	2.03	27.84	29.88	1.57	0.29	225.04
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.06	0.00	0.01	0.02	0.62	0.64	0.00	0.00	0.70
Start Ex	0.14	2.80	0.00	2.94	0.07	1.89	0.00	1.96	0.06	1.16	0.00	1.21	0.06	0.06	0.12	0.00	0.12	0.00	0.03	6.27
Total Ex	1.65	88.52	0.24	90.41	1.11	65.91	0.56	67.57	0.44	39.17	1.88	41.49	0.18	1.99	2.17	28.47	30.64	1.57	0.33	232.01
PM2.5 Emissions																				
Run Exh	0.07	2.12	0.10	2.30	0.05	2.43	0.09	2.58	0.01	0.99	0.15	1.16	0.00	0.02	0.03	11.60	11.63	0.19	0.09	17.93
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24	0.00	0.00	0.24
Start Ex	0.01	0.21	0.00	0.21	0.00	0.20	0.00	0.21	0.00	0.09	0.00	0.09	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.53
Total Ex	0.08	2.33	0.10	2.51	0.05	2.63	0.09	2.78	0.02	1.09	0.15	1.26	0.00	0.03	0.03	11.84	11.87	0.19	0.09	18.70
TireWear	0.01	0.43	0.00	0.43	0.00	0.26	0.00	0.27	0.00	0.12	0.01	0.13	0.00	0.01	0.01	0.11	0.12	0.00	0.00	0.96
BrakeWr	0.02	1.15	0.00	1.17	0.01	0.70	0.01	0.72	0.00	0.30	0.02	0.33	0.00	0.02	0.02	0.15	0.17	0.00	0.01	2.40
Total	0.10	3.90	0.11	4.11	0.07	3.60	0.11	3.77	0.02	1.51	0.18	1.72	0.01	0.06	0.06	12.10	12.16	0.19	0.10	22.05
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.02	0.87	0.02	0.91	0.01	0.64	0.05	0.70	0.01	0.38	0.16	0.54	0.00	0.02	0.02	2.36	2.38	0.12	0.01	4.66
Fuel Consumption (000 gallons)																				
Gasoline	213.60	9235.04	0.00	9448.63	143.78	6871.88	0.00	7015.66	60.88	4089.69	0.00	4150.57	31.23	222.14	253.37	0.00	253.37	13.79	58.13	20940.15
Diesel	0.00	0.00	21.79	21.79	0.00	0.00	50.26	50.26	0.00	0.00	169.03	169.03	0.00	0.00	0.00	2562.11	2562.11	130.19	0.00	2933.39

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-5
2005 Summer Planning Emissions in Tons Per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks – Gasoline Trucks			Heavy Duty Trucks – Diesel Trucks	Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	154277.	5398750.	25648.	5578680.	77109.	2976130.	38640.	3091880.	22364.	1228010.	59681.	1310060.	15951.	95052.	111003.	143769.	254772.	5640.	278506.	10519500.
VMT/1000	2551.	193623.	601.	196775.	1773.	118492.	1454.	121719.	529.	51112.	3274.	54916.	158.	2620.	2778.	14755.	17533.	618.	2206.	393767.
Trips	646668.	34259600.	147390.	35053600.	329461.	18981800.	242187.	19553500.	231367.	12797900.	719405.	13748700.	291239.	1375580.	1666820.	2589990.	4256810.	22560.	556957.	73192100.
Reactive Organic Gas Emissions																				
Run Exh	16.43	23.75	0.14	40.32	11.60	16.82	0.15	28.56	3.63	12.98	0.53	17.14	1.06	3.19	4.25	17.76	22.02	0.85	8.57	117.47
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.26	0.01	0.27	0.01	0.07	0.09	1.35	1.44	0.00	0.00	1.71
Start Ex	3.08	22.08	0.00	25.16	1.57	12.38	0.00	13.96	1.32	11.19	0.00	12.51	2.98	2.35	5.34	0.00	5.34	0.03	1.33	58.32
Total Ex	19.51	45.83	0.14	65.48	13.17	29.20	0.15	42.52	4.95	24.43	0.54	29.92	4.06	5.62	9.67	19.12	28.79	0.88	9.90	177.49
Diurnal	1.80	10.09	0.00	11.89	0.90	4.62	0.00	5.52	0.08	1.68	0.00	1.76	0.02	0.04	0.05	0.00	0.05	0.00	1.19	20.41
Hot Soak	2.24	8.33	0.00	10.57	1.15	3.72	0.00	4.87	0.23	1.73	0.00	1.96	0.16	0.06	0.22	0.00	0.22	0.00	0.47	18.09
Running	12.58	24.20	0.00	36.78	4.25	15.51	0.00	19.76	0.87	10.49	0.00	11.36	1.46	0.79	2.25	0.00	2.25	0.02	2.44	72.61
Resting	1.41	6.47	0.00	7.88	0.71	3.10	0.00	3.80	0.07	1.16	0.00	1.22	0.01	0.01	0.02	0.00	0.02	0.00	0.84	13.76
Total	37.54	94.91	0.14	132.59	20.17	56.15	0.15	76.47	6.20	39.48	0.54	46.22	5.70	6.52	12.22	19.12	31.34	0.90	14.84	302.36
Carbon Monoxide Emissions																				
Run Exh	211.15	758.16	0.58	969.90	142.46	579.64	1.04	723.14	70.28	296.10	2.77	369.15	31.95	60.54	92.49	76.17	168.66	6.66	118.34	2355.86
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.58	0.05	1.67	0.09	0.43	0.52	3.67	4.19	0.00	0.00	5.86
Start Ex	21.16	214.42	0.00	235.58	10.90	134.41	0.00	145.31	12.14	122.29	0.00	134.43	34.70	34.51	69.21	0.00	69.21	0.36	5.36	590.24
Total Ex	232.31	972.58	0.58	1205.48	153.36	714.05	1.04	868.45	82.45	419.96	2.83	505.24	66.74	95.48	162.21	79.84	242.06	7.03	123.70	2951.95
Oxides of Nitrogen Emissions																				
Run Exh	11.77	66.38	0.97	79.12	8.04	69.24	2.39	79.66	3.22	46.57	24.72	74.51	0.95	13.16	14.11	287.66	301.77	12.21	2.95	550.22
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.17	0.00	0.00	0.01	9.94	9.95	0.00	0.00	10.12
Start Ex	0.94	16.86	0.00	17.80	0.47	14.06	0.00	14.53	0.30	18.26	0.00	18.57	0.52	5.23	5.75	0.00	5.75	0.04	0.18	56.87
Total Ex	12.71	83.24	0.97	96.92	8.51	83.29	2.39	94.19	3.52	64.85	24.87	93.25	1.47	18.40	19.87	297.60	317.47	12.25	3.13	617.21
Carbon Dioxide Emissions (000)																				
Run Exh	1.54	91.08	0.24	92.87	1.05	67.93	0.56	69.53	0.39	39.93	1.87	42.19	0.12	1.92	2.03	27.84	29.88	1.57	0.29	236.33
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.06	0.00	0.01	0.02	0.66	0.67	0.00	0.00	0.74
Start Ex	0.14	2.80	0.00	2.94	0.07	1.89	0.00	1.96	0.06	1.16	0.00	1.21	0.06	0.06	0.12	0.00	0.12	0.00	0.03	6.27
Total Ex	1.68	93.89	0.24	95.81	1.12	69.81	0.56	71.49	0.45	41.14	1.88	43.47	0.18	1.99	2.17	28.50	30.67	1.57	0.33	243.34
PM2.5 Emissions																				
Run Exh	0.07	2.12	0.10	2.30	0.05	2.43	0.09	2.58	0.01	0.99	0.15	1.16	0.00	0.02	0.03	11.60	11.63	0.19	0.09	17.93
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.21
Start Ex	0.01	0.21	0.00	0.21	0.00	0.20	0.00	0.21	0.00	0.09	0.00	0.09	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.53
Total Ex	0.08	2.33	0.10	2.51	0.05	2.63	0.09	2.78	0.02	1.09	0.15	1.26	0.00	0.03	0.03	11.80	11.84	0.19	0.09	18.66
TireWear	0.01	0.43	0.00	0.43	0.00	0.26	0.00	0.27	0.00	0.12	0.01	0.13	0.00	0.01	0.01	0.11	0.12	0.00	0.00	0.96
BrakeWr	0.02	1.15	0.00	1.17	0.01	0.70	0.01	0.72	0.00	0.30	0.02	0.33	0.00	0.02	0.02	0.15	0.17	0.00	0.01	2.40
Total	0.10	3.90	0.11	4.11	0.07	3.60	0.11	3.77	0.02	1.51	0.18	1.72	0.01	0.06	0.06	12.06	12.13	0.19	0.10	22.02
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.02	0.92	0.02	0.96	0.01	0.68	0.05	0.74	0.01	0.40	0.16	0.56	0.00	0.02	0.02	2.36	2.38	0.12	0.01	4.77
Fuel Consumption (000 gallons)																				
Gasoline	215.90	9785.24	0.00	10001.13	143.81	7272.76	0.00	7416.57	60.72	4288.09	0.00	4348.80	30.78	220.70	251.48	0.00	251.48	13.78	56.55	22088.31
Diesel	0.00	0.00	21.79	21.79	0.00	0.00	50.26	50.26	0.00	0.00	169.03	169.03	0.00	0.00	0.00	2565.04	2565.04	130.19	0.00	2936.32

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-6
2005 Winter Planning Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
Vehicles	154277.	5398750.	25648.	5578680.	77109.	2976130.	38640.	3091880.	22364.	1228010.	59681.	1310060.	15951.	95052.	111003.	143769.	254772.	5640.	278506.	10519500.
VMT/1000	2551.	193623.	601.	196775.	1773.	118492.	1454.	121719.	529.	51112.	3274.	54916.	158.	2620.	2778.	14755.	17533.	618.	2206.	393767.
Trips	646668.	34259600.	147390.	35053600.	329461.	18981800.	242187.	19553500.	231367.	12797900.	719405.	13748700.	291239.	1375580.	1666820.	2589990.	4256810.	22560.	556957.	73192100.
Reactive Organic Gas Emissions																				
Run Exh	17.36	21.54	0.14	39.04	12.42	15.39	0.15	27.95	3.88	12.10	0.53	16.51	1.16	3.07	4.24	17.76	22.00	0.84	9.22	115.57
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.26	0.01	0.27	0.01	0.07	0.09	1.55	1.64	0.00	0.00	1.91
Start Ex	3.63	26.98	0.00	30.61	1.86	15.13	0.00	16.99	1.58	13.52	0.00	15.10	3.63	2.77	6.39	0.00	6.39	0.03	1.58	70.70
Total Ex	20.99	48.51	0.14	69.64	14.28	30.52	0.15	44.94	5.47	25.87	0.54	31.88	4.80	5.91	10.72	19.32	30.03	0.87	10.80	188.17
Diurnal	1.35	7.40	0.00	8.76	0.67	3.40	0.00	4.07	0.06	1.24	0.00	1.30	0.01	0.03	0.05	0.00	0.05	0.00	0.90	15.06
Hot Soak	3.00	9.24	0.00	12.24	1.54	4.15	0.00	5.69	0.31	1.96	0.00	2.26	0.21	0.07	0.28	0.00	0.28	0.01	0.60	21.08
Running	14.27	29.34	0.00	43.60	4.87	19.78	0.00	24.65	0.95	12.44	0.00	13.38	1.56	0.85	2.41	0.00	2.41	0.02	2.85	86.91
Resting	0.63	2.89	0.00	3.52	0.32	1.37	0.00	1.69	0.03	0.51	0.00	0.54	0.00	0.01	0.01	0.00	0.01	0.00	0.35	6.12
Total	40.24	97.38	0.14	137.76	21.67	59.21	0.15	81.03	6.81	42.02	0.54	49.37	6.60	6.87	13.47	19.32	32.79	0.90	15.50	317.34
Carbon Monoxide Emissions																				
Run Exh	212.95	656.53	0.58	870.06	147.87	508.61	1.04	657.52	72.94	267.08	2.77	342.80	34.62	58.53	93.14	76.17	169.32	6.64	126.93	2173.27
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.58	0.05	1.67	0.09	0.43	0.52	6.66	7.18	0.00	0.00	8.85
Start Ex	21.47	288.96	0.00	310.43	11.06	181.06	0.00	192.12	11.99	163.63	0.00	175.62	33.76	44.80	78.57	0.00	78.57	0.44	5.79	762.96
Total Ex	234.42	945.48	0.58	1180.49	158.93	689.67	1.04	849.64	84.97	432.29	2.83	520.09	68.47	103.77	172.23	82.83	255.07	7.08	132.72	2945.08
Oxides of Nitrogen Emissions																				
Run Exh	13.58	76.93	1.04	91.55	9.38	80.53	2.55	92.47	3.76	54.19	26.24	84.18	1.14	15.49	16.63	306.94	323.56	13.13	3.50	608.40
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.17	0.00	0.00	0.01	9.21	9.22	0.00	0.00	9.39
Start Ex	1.01	18.53	0.00	19.53	0.51	15.44	0.00	15.95	0.32	19.44	0.00	19.77	0.55	5.48	6.03	0.00	6.03	0.04	0.19	61.51
Total Ex	14.59	95.46	1.04	111.08	9.89	95.98	2.55	108.42	4.08	73.65	26.39	104.12	1.69	20.97	22.66	316.15	338.81	13.18	3.69	679.31
Carbon Dioxide Emissions (000)																				
Run Exh	1.49	83.36	0.24	85.10	1.03	62.32	0.56	63.91	0.39	37.10	1.87	39.36	0.12	1.92	2.03	27.84	29.88	1.57	0.29	220.10
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.06	0.00	0.01	0.02	0.58	0.60	0.00	0.00	0.66
Start Ex	0.14	2.80	0.00	2.94	0.07	1.89	0.00	1.96	0.06	1.16	0.00	1.21	0.06	0.06	0.12	0.00	0.12	0.00	0.03	6.27
Total Ex	1.63	86.17	0.24	88.04	1.10	64.20	0.56	65.87	0.44	38.31	1.88	40.63	0.18	1.99	2.17	28.42	30.59	1.57	0.33	227.03
PM2.5 Emissions																				
Run Exh	0.07	2.12	0.10	2.30	0.05	2.43	0.09	2.58	0.01	0.99	0.15	1.16	0.00	0.02	0.03	11.60	11.63	0.19	0.09	17.93
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.00	0.00	0.29
Start Ex	0.01	0.21	0.00	0.21	0.00	0.20	0.00	0.21	0.00	0.09	0.00	0.09	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.53
Total Ex	0.08	2.33	0.10	2.51	0.05	2.63	0.09	2.78	0.02	1.09	0.15	1.26	0.00	0.03	0.03	11.89	11.92	0.19	0.09	18.75
TireWear	0.01	0.43	0.00	0.43	0.00	0.26	0.00	0.27	0.00	0.12	0.01	0.13	0.00	0.01	0.01	0.11	0.12	0.00	0.00	0.96
BrakeWr	0.02	1.15	0.00	1.17	0.01	0.70	0.01	0.72	0.00	0.30	0.02	0.33	0.00	0.02	0.02	0.15	0.17	0.00	0.01	2.40
Total	0.10	3.90	0.11	4.11	0.07	3.60	0.11	3.77	0.02	1.51	0.18	1.72	0.01	0.06	0.06	12.15	12.21	0.19	0.10	22.10
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.02	0.84	0.02	0.88	0.01	0.63	0.05	0.69	0.01	0.38	0.16	0.54	0.00	0.02	0.02	2.35	2.38	0.12	0.01	4.61
Fuel Consumption (000 gallons)																				
Gasoline	211.80	8991.12	0.00	9202.92	143.19	6695.03	0.00	6838.23	60.68	4000.94	0.00	4061.62	31.30	222.13	253.43	0.00	253.43	13.79	58.29	20428.28
Diesel	0.00	0.00	21.79	21.79	0.00	0.00	50.26	50.26	0.00	0.00	169.03	169.03	0.00	0.00	0.00	2558.02	2558.02	130.19	0.00	2929.29

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-7
2010 Annual Average Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks – Gasoline Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
Vehicles	55813.	5538380.	13104.	5607300.	31219.	3014720.	26944.	3072890.	10855.	1202820.	53163.	1266840.	6277.	102199.	108477.	133745.	242221.	5953.	278132.	10473300.
VMT/1000	864.	192688.	283.	193836.	687.	113942.	894.	115523.	238.	47211.	2576.	50025.	61.	2345.	2407.	13071.	15478.	652.	2220.	377734.
Trips	221389.	34975200.	70464.	35267100.	125793.	19064100.	164756.	19354600.	88728.	11876200.	646909.	12611900.	114592.	1165250.	1279840.	2378160.	3658000.	23811.	556208.	71471600.
Reactive Organic Gas Emissions																				
Run Exh	5.93	11.15	0.06	17.14	4.89	9.05	0.08	14.02	1.92	6.70	0.41	9.02	0.43	1.90	2.33	11.85	14.18	0.80	8.15	63.32
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.23	0.01	0.06	0.07	0.99	1.06	0.00	0.00	1.29
Start Ex	1.23	15.88	0.00	17.11	0.71	9.80	0.00	10.51	0.59	8.62	0.00	9.21	1.35	1.94	3.29	0.00	3.29	0.03	1.40	41.56
Total Ex	7.16	27.03	0.06	34.25	5.60	18.85	0.08	24.53	2.51	15.54	0.41	18.46	1.78	3.91	5.69	12.84	18.52	0.84	9.56	106.16
Diurnal	0.39	4.28	0.00	4.66	0.21	2.20	0.00	2.41	0.02	0.79	0.00	0.81	0.00	0.02	0.02	0.00	0.02	0.00	0.58	8.49
Hot Soak	0.74	6.24	0.00	6.97	0.43	3.19	0.00	3.61	0.09	1.32	0.00	1.41	0.06	0.04	0.10	0.00	0.10	0.00	0.24	12.35
Running	4.32	16.89	0.00	21.22	1.50	15.11	0.00	16.61	0.31	8.89	0.00	9.20	0.58	0.62	1.20	0.00	1.20	0.02	1.25	49.49
Resting	0.27	2.70	0.00	2.97	0.15	1.45	0.00	1.60	0.02	0.53	0.00	0.55	0.00	0.01	0.01	0.00	0.01	0.00	0.31	5.44
Total	12.87	57.14	0.06	70.07	7.89	40.80	0.08	48.77	2.95	27.07	0.41	30.43	2.42	4.60	7.02	12.84	19.86	0.86	11.93	181.92
Carbon Monoxide Emissions																				
Run Exh	71.70	428.92	0.26	500.89	57.04	354.03	0.61	411.68	33.14	171.49	2.27	206.89	13.02	36.48	49.50	52.00	101.50	6.20	98.28	1325.43
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.35	0.05	1.41	0.04	0.38	0.42	4.00	4.42	0.00	0.00	5.83
Start Ex	7.27	185.25	0.00	192.52	4.22	126.14	0.00	130.36	4.65	101.26	0.00	105.91	13.27	31.34	44.61	0.00	44.61	0.45	5.85	479.69
Total Ex	78.98	614.17	0.26	693.41	61.25	480.17	0.61	542.04	37.80	274.09	2.32	314.21	26.32	68.20	94.53	56.00	150.53	6.64	104.13	1810.95
Oxides of Nitrogen Emissions																				
Run Exh	4.12	39.31	0.45	43.88	3.25	43.60	1.48	48.33	1.61	28.24	15.36	45.21	0.37	8.40	8.77	183.86	192.64	11.57	2.99	344.62
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.16	0.00	0.00	0.00	9.32	9.33	0.00	0.00	9.49
Start Ex	0.34	12.72	0.00	13.06	0.19	11.24	0.00	11.44	0.13	16.06	0.00	16.20	0.20	4.11	4.31	0.00	4.31	0.05	0.19	45.24
Total Ex	4.46	52.03	0.45	56.94	3.44	54.84	1.48	59.76	1.74	44.32	15.50	61.56	0.58	12.51	13.09	193.19	206.27	11.62	3.18	399.35
Carbon Dioxide Emissions (000)																				
Run Exh	0.51	83.40	0.11	84.02	0.40	61.32	0.34	62.07	0.17	34.75	1.47	36.40	0.04	1.70	1.74	24.61	26.36	1.59	0.35	210.77
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.05	0.00	0.01	0.01	0.55	0.57	0.00	0.00	0.62
Start Ex	0.05	2.79	0.00	2.84	0.03	1.89	0.00	1.92	0.02	1.13	0.00	1.15	0.03	0.05	0.07	0.00	0.07	0.00	0.03	6.02
Total Ex	0.56	86.20	0.11	86.86	0.43	63.22	0.34	63.99	0.20	35.93	1.47	37.60	0.07	1.76	1.83	25.17	27.00	1.59	0.38	217.41
PM2.5 Emissions																				
Run Exh	0.02	2.25	0.04	2.32	0.02	2.72	0.05	2.79	0.01	1.12	0.10	1.22	0.00	0.02	0.02	7.13	7.15	0.17	0.07	13.72
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.14
Start Ex	0.00	0.21	0.00	0.22	0.00	0.23	0.00	0.23	0.00	0.10	0.00	0.10	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.57
Total Ex	0.03	2.47	0.04	2.54	0.02	2.95	0.05	3.03	0.01	1.22	0.10	1.33	0.00	0.02	0.02	7.26	7.29	0.17	0.07	14.42
TireWear	0.00	0.42	0.00	0.43	0.00	0.25	0.00	0.25	0.00	0.11	0.01	0.12	0.00	0.01	0.01	0.09	0.10	0.00	0.00	0.91
BrakeWr	0.01	1.14	0.00	1.15	0.00	0.68	0.01	0.68	0.00	0.28	0.02	0.30	0.00	0.02	0.02	0.13	0.15	0.00	0.01	2.29
Total	0.03	4.03	0.04	4.11	0.03	3.88	0.06	3.96	0.01	1.62	0.12	1.75	0.00	0.05	0.05	7.49	7.54	0.18	0.08	17.63
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.01	0.84	0.00	0.85	0.01	0.61	0.00	0.62	0.00	0.35	0.01	0.37	0.00	0.02	0.02	0.24	0.26	0.02	0.01	2.11
Fuel Consumption (000 gallons)																				
Gasoline	71.88	8933.20	0.00	9005.08	55.40	6556.07	0.00	6611.47	27.05	3727.83	0.00	3754.88	12.13	192.44	204.57	0.00	204.57	16.27	58.89	19651.16
Diesel	0.00	0.00	10.17	10.17	0.00	0.00	30.83	30.83	0.00	0.00	132.70	132.70	0.00	0.00	0.00	2264.91	2264.91	129.28	0.00	2567.89

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-8
2010 Summer Planning Emissions in Tons Per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks – Gasoline Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
Vehicles	55813.	5538380.	13104.	5607300.	31219.	3014720.	26944.	3072890.	10855.	1202820.	53163.	1266840.	6277.	102199.	108477.	133745.	242221.	5953.	278132.	10473300.
VMT/1000	864.	192688.	283.	193836.	687.	113942.	894.	115523.	238.	47211.	2576.	50025.	61.	2345.	2407.	13071.	15478.	652.	2220.	377734.
Trips	221389.	34975200.	70464.	35267100.	125793.	19064100.	164756.	19354600.	88728.	11876200.	646909.	12611900.	114592.	1165250.	1279840.	2378160.	3658000.	23811.	556208.	71471600.
Reactive Organic Gas Emissions																				
Run Exh	5.63	12.02	0.06	17.70	4.59	9.70	0.08	14.37	1.80	7.11	0.41	9.32	0.39	1.96	2.35	11.85	14.20	0.82	7.74	64.16
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.23	0.01	0.06	0.07	0.93	1.00	0.00	0.00	1.23
Start Ex	1.05	13.20	0.00	14.25	0.61	8.15	0.00	8.75	0.50	7.26	0.00	7.75	1.11	1.68	2.79	0.00	2.79	0.03	1.20	34.77
Total Ex	6.68	25.22	0.06	31.95	5.19	17.85	0.08	23.13	2.30	14.59	0.41	17.30	1.51	3.70	5.21	12.78	17.99	0.85	8.95	100.16
Diurnal	0.66	7.13	0.00	7.80	0.37	3.66	0.00	4.03	0.04	1.31	0.00	1.35	0.01	0.03	0.04	0.00	0.04	0.00	1.00	14.22
Hot Soak	0.76	7.06	0.00	7.82	0.44	3.59	0.00	4.03	0.09	1.48	0.00	1.57	0.06	0.04	0.11	0.00	0.11	0.00	0.29	13.82
Running	4.18	16.10	0.00	20.28	1.45	14.17	0.00	15.62	0.31	8.50	0.00	8.80	0.57	0.62	1.18	0.00	1.18	0.02	1.18	47.10
Resting	0.52	4.86	0.00	5.37	0.29	2.62	0.00	2.91	0.03	0.96	0.00	0.99	0.00	0.01	0.02	0.00	0.02	0.00	0.65	9.94
Total	12.80	60.36	0.06	73.22	7.74	41.90	0.08	49.73	2.77	26.83	0.41	30.02	2.15	4.40	6.55	12.78	19.34	0.87	12.06	185.23
Carbon Monoxide Emissions																				
Run Exh	70.51	476.81	0.26	547.59	54.85	390.43	0.61	445.89	31.91	186.58	2.27	220.76	12.19	37.49	49.68	52.00	101.68	6.22	92.63	1414.78
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.35	0.05	1.41	0.04	0.38	0.42	3.00	3.42	0.00	0.00	4.83
Start Ex	7.20	140.76	0.00	147.96	4.17	95.94	0.00	100.12	4.69	77.27	0.00	81.97	13.61	24.50	38.10	0.00	38.10	0.37	5.29	373.81
Total Ex	77.71	617.58	0.26	695.55	59.02	486.38	0.61	546.01	36.62	265.20	2.32	304.14	25.83	62.37	88.21	55.00	143.21	6.59	97.92	1793.41
Oxides of Nitrogen Emissions																				
Run Exh	3.98	37.70	0.45	42.13	3.11	41.71	1.47	46.29	1.54	27.06	15.38	43.98	0.35	8.07	8.42	183.94	192.36	11.52	2.84	339.11
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.16	0.00	0.00	0.00	9.62	9.62	0.00	0.00	9.78
Start Ex	0.32	11.70	0.00	12.02	0.18	10.34	0.00	10.52	0.13	15.20	0.00	15.33	0.19	3.93	4.13	0.00	4.13	0.05	0.18	42.22
Total Ex	4.29	49.40	0.45	54.15	3.29	52.05	1.47	56.81	1.67	42.28	15.52	59.47	0.54	12.01	12.55	193.56	206.11	11.57	3.02	391.12
Carbon Dioxide Emissions (000)																				
Run Exh	0.52	88.81	0.11	89.44	0.40	65.14	0.34	65.89	0.18	36.59	1.47	38.23	0.04	1.70	1.74	24.61	26.36	1.59	0.35	221.85
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.05	0.00	0.01	0.01	0.58	0.60	0.00	0.00	0.65
Start Ex	0.05	2.79	0.00	2.84	0.03	1.89	0.00	1.92	0.02	1.13	0.00	1.15	0.03	0.05	0.07	0.00	0.07	0.00	0.03	6.02
Total Ex	0.57	91.60	0.11	92.28	0.43	67.04	0.34	67.81	0.20	37.76	1.47	39.44	0.07	1.76	1.83	25.19	27.03	1.59	0.38	228.52
PM2.5 Emissions																				
Run Exh	0.02	2.25	0.04	2.32	0.02	2.72	0.05	2.79	0.01	1.12	0.10	1.22	0.00	0.02	0.02	7.13	7.15	0.17	0.07	13.72
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.12
Start Ex	0.00	0.21	0.00	0.22	0.00	0.23	0.00	0.23	0.00	0.10	0.00	0.10	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.57
Total Ex	0.03	2.47	0.04	2.54	0.02	2.95	0.05	3.03	0.01	1.22	0.10	1.33	0.00	0.02	0.02	7.24	7.27	0.17	0.07	14.40
TireWear	0.00	0.42	0.00	0.43	0.00	0.25	0.00	0.25	0.00	0.11	0.01	0.12	0.00	0.01	0.01	0.09	0.10	0.00	0.00	0.91
BrakeWr	0.01	1.14	0.00	1.15	0.00	0.68	0.01	0.68	0.00	0.28	0.02	0.30	0.00	0.02	0.02	0.13	0.15	0.00	0.01	2.29
Total	0.03	4.03	0.04	4.11	0.03	3.88	0.06	3.96	0.01	1.62	0.12	1.75	0.00	0.05	0.05	7.47	7.52	0.18	0.08	17.61
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.01	0.89	0.00	0.90	0.01	0.65	0.00	0.66	0.00	0.37	0.01	0.38	0.00	0.02	0.02	0.24	0.26	0.02	0.01	2.22
Fuel Consumption (000 gallons)																				
Gasoline	72.72	9486.45	0.00	9559.16	55.43	6947.97	0.00	7003.40	27.01	3913.90	0.00	3940.91	11.97	191.43	203.40	0.00	203.40	16.26	57.69	20780.82
Diesel	0.00	0.00	10.17	10.17	0.00	0.00	30.83	30.83	0.00	0.00	132.70	132.70	0.00	0.00	0.00	2267.49	2267.49	129.28	0.00	2570.46

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-9
2010 Winter Planning Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks – Gasoline Trucks			Heavy Duty Trucks – Diesel Trucks	Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	55813.	5538380.	13104.	5607300.	31219.	3014720.	26944.	3072890.	10855.	1202820.	53163.	1266840.	6277.	102199.	108477.	133745.	242221.	5953.	278132.	10473300.
VMT/1000	864.	192688.	283.	193836.	687.	113942.	894.	115523.	238.	47211.	2576.	50025.	61.	2345.	2407.	13071.	15478.	652.	2220.	377734.
Trips	221389.	34975200.	70464.	35267100.	125793.	19064100.	164756.	19354600.	88728.	11876200.	646909.	12611900.	114592.	1165250.	1279840.	2378160.	3658000.	23811.	556208.	71471600.
Reactive Organic Gas Emissions																				
Run Exh	5.94	10.89	0.06	16.88	4.91	8.86	0.08	13.85	1.93	6.59	0.41	8.92	0.43	1.89	2.32	11.85	14.17	0.80	8.20	62.84
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.23	0.01	0.06	0.07	1.07	1.14	0.00	0.00	1.37
Start Ex	1.24	16.12	0.00	17.36	0.71	9.95	0.00	10.66	0.59	8.74	0.00	9.33	1.35	1.96	3.31	0.00	3.31	0.03	1.41	42.11
Total Ex	7.17	27.01	0.06	34.25	5.62	18.81	0.08	24.52	2.52	15.54	0.41	18.48	1.79	3.91	5.69	12.92	18.61	0.84	9.62	106.31
Diurnal	0.50	5.08	0.00	5.58	0.28	2.60	0.00	2.87	0.03	0.93	0.00	0.96	0.01	0.03	0.03	0.00	0.03	0.00	0.75	10.21
Hot Soak	1.02	7.60	0.00	8.62	0.59	3.87	0.00	4.46	0.12	1.61	0.00	1.73	0.09	0.05	0.13	0.00	0.13	0.01	0.34	15.30
Running	4.73	19.33	0.00	24.06	1.67	17.96	0.00	19.63	0.33	10.16	0.00	10.49	0.61	0.66	1.27	0.00	1.27	0.03	1.44	56.91
Resting	0.23	2.39	0.00	2.62	0.13	1.28	0.00	1.41	0.02	0.47	0.00	0.48	0.00	0.01	0.01	0.00	0.01	0.00	0.26	4.79
Total	13.65	61.42	0.06	75.13	8.29	44.52	0.08	52.89	3.02	28.72	0.41	32.15	2.49	4.65	7.14	12.92	20.06	0.87	12.41	193.52
Carbon Monoxide Emissions																				
Run Exh	70.88	411.64	0.26	482.79	56.84	340.97	0.61	398.42	33.01	166.22	2.27	201.50	13.20	36.27	49.47	52.00	101.47	6.19	98.85	1289.22
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.35	0.05	1.41	0.04	0.38	0.42	5.40	5.82	0.00	0.00	7.22
Start Ex	7.30	189.97	0.00	197.27	4.23	129.37	0.00	133.60	4.65	103.26	0.00	107.91	13.23	31.52	44.75	0.00	44.75	0.45	5.87	489.86
Total Ex	78.19	601.61	0.26	680.06	61.07	470.34	0.61	532.02	37.68	270.82	2.32	310.81	26.46	68.17	94.64	57.40	152.04	6.64	104.73	1786.30
Oxides of Nitrogen Emissions																				
Run Exh	4.58	43.64	0.48	48.71	3.63	48.44	1.58	53.65	1.80	31.45	16.32	49.57	0.42	9.49	9.91	196.27	206.18	12.39	3.35	373.85
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.16	0.00	0.00	0.00	8.91	8.92	0.00	0.00	9.07
Start Ex	0.34	12.85	0.00	13.19	0.19	11.36	0.00	11.55	0.13	16.15	0.00	16.28	0.20	4.12	4.32	0.00	4.32	0.05	0.19	45.59
Total Ex	4.93	56.49	0.48	61.90	3.82	59.80	1.58	65.20	1.93	47.62	16.47	66.01	0.62	13.62	14.24	205.18	219.42	12.44	3.54	428.51
Carbon Dioxide Emissions (000)																				
Run Exh	0.50	81.04	0.11	81.65	0.40	59.66	0.34	60.40	0.17	33.95	1.47	35.59	0.04	1.70	1.74	24.61	26.36	1.59	0.35	205.94
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.05	0.00	0.01	0.01	0.51	0.53	0.00	0.00	0.58
Start Ex	0.05	2.79	0.00	2.84	0.03	1.89	0.00	1.92	0.02	1.13	0.00	1.15	0.03	0.05	0.07	0.00	0.07	0.00	0.03	6.02
Total Ex	0.55	83.83	0.11	84.50	0.42	61.55	0.34	62.32	0.20	35.13	1.47	36.80	0.07	1.76	1.83	25.13	26.96	1.59	0.38	212.54
PM2.5 Emissions																				
Run Exh	0.02	2.25	0.04	2.32	0.02	2.72	0.05	2.79	0.01	1.12	0.10	1.22	0.00	0.02	0.02	7.13	7.15	0.17	0.07	13.72
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.17
Start Ex	0.00	0.21	0.00	0.22	0.00	0.23	0.00	0.23	0.00	0.10	0.00	0.10	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.57
Total Ex	0.03	2.47	0.04	2.54	0.02	2.95	0.05	3.03	0.01	1.22	0.10	1.33	0.00	0.02	0.02	7.29	7.32	0.17	0.07	14.45
TireWear	0.00	0.42	0.00	0.43	0.00	0.25	0.00	0.25	0.00	0.11	0.01	0.12	0.00	0.01	0.01	0.09	0.10	0.00	0.00	0.91
BrakeWr	0.01	1.14	0.00	1.15	0.00	0.68	0.01	0.68	0.00	0.28	0.02	0.30	0.00	0.02	0.02	0.13	0.15	0.00	0.01	2.29
Total	0.03	4.03	0.04	4.11	0.03	3.88	0.06	3.96	0.01	1.62	0.12	1.75	0.00	0.05	0.05	7.52	7.57	0.18	0.08	17.65
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.01	0.81	0.00	0.82	0.01	0.60	0.00	0.61	0.00	0.34	0.01	0.36	0.00	0.02	0.02	0.24	0.26	0.02	0.01	2.07
Fuel Consumption (000 gallons)																				
Gasoline	71.25	8689.36	0.00	8760.61	55.16	6384.02	0.00	6439.19	26.95	3645.47	0.00	3672.42	12.16	192.43	204.59	0.00	204.59	16.27	59.01	19152.09
Diesel	0.00	0.00	10.17	10.17	0.00	0.00	30.83	30.83	0.00	0.00	132.70	132.70	0.00	0.00	0.00	2261.31	2261.31	129.28	0.00	2564.28

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-10
2014 Annual Average Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	17876.	5903030.	7860.	5928770.	13544.	3265470.	20703.	3299720.	6709.	1313950.	58904.	1379560.	2448.	110996.	113443.	148286.	261729.	6250.	303441.	11179500.
VMT/1000	269.	199861.	161.	200292.	290.	119503.	633.	120426.	140.	49424.	2704.	52268.	24.	2420.	2445.	14937.	17381.	685.	2408.	393460.
Trips	69091.	37055000.	39939.	37164000.	52474.	20458600.	122743.	20633800.	50532.	12927800.	721913.	13700200.	50490.	1218680.	1269170.	2622350.	3891520.	24999.	606821.	76021400.
Reactive Organic Gas Emissions																				
Run Exh	1.92	7.77	0.03	9.72	2.17	7.13	0.06	9.36	1.20	5.29	0.39	6.88	0.16	1.39	1.55	9.41	10.96	0.81	7.86	45.59
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.01	0.24	0.00	0.06	0.07	0.93	1.00	0.00	0.00	1.24
Start Ex	0.38	11.04	0.00	11.42	0.30	7.80	0.00	8.10	0.34	7.37	0.00	7.71	0.54	1.71	2.26	0.00	2.26	0.04	1.44	30.96
Total Ex	2.29	18.81	0.03	21.14	2.47	14.94	0.06	17.46	1.53	12.90	0.40	14.83	0.71	3.16	3.87	10.34	14.21	0.85	9.30	77.79
Diurnal	0.13	3.60	0.00	3.73	0.09	2.18	0.00	2.27	0.01	0.80	0.00	0.82	0.00	0.02	0.02	0.00	0.02	0.00	0.61	7.45
Hot Soak	0.22	6.27	0.00	6.50	0.18	3.68	0.00	3.85	0.05	1.54	0.00	1.59	0.03	0.04	0.07	0.00	0.07	0.00	0.23	12.24
Running	1.20	14.46	0.00	15.66	0.44	15.42	0.00	15.86	0.16	9.19	0.00	9.35	0.21	0.62	0.82	0.00	0.82	0.03	0.96	42.68
Resting	0.09	2.62	0.00	2.71	0.07	1.66	0.00	1.72	0.01	0.62	0.00	0.63	0.00	0.01	0.01	0.00	0.01	0.00	0.33	5.39
Total	3.93	45.77	0.03	49.73	3.25	37.87	0.06	41.18	1.77	25.06	0.40	27.22	0.95	3.84	4.78	10.34	15.13	0.88	11.43	145.57
Carbon Monoxide Emissions																				
Run Exh	21.76	330.28	0.15	352.19	23.89	298.38	0.43	322.70	19.34	145.24	2.36	166.93	4.61	26.32	30.93	44.43	75.35	5.99	80.60	1003.76
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.43	0.06	1.49	0.02	0.39	0.41	4.26	4.67	0.00	0.00	6.16
Start Ex	2.21	140.04	0.00	142.25	1.75	105.66	0.00	107.41	2.65	86.26	0.00	88.90	4.78	27.52	32.30	0.00	32.30	0.47	6.58	377.92
Total Ex	23.97	470.32	0.15	494.44	25.64	404.04	0.43	430.11	21.99	232.93	2.41	257.32	9.41	54.23	63.64	48.68	112.32	6.46	87.18	1387.84
Oxides of Nitrogen Emissions																				
Run Exh	1.25	28.02	0.26	29.53	1.35	33.62	1.04	36.01	0.95	21.89	12.20	35.05	0.12	5.93	6.05	134.55	140.60	10.97	3.07	255.22
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.18	0.00	0.00	0.00	11.02	11.03	0.00	0.00	11.20
Start Ex	0.11	9.33	0.00	9.44	0.08	9.18	0.00	9.26	0.08	15.75	0.00	15.82	0.07	3.64	3.71	0.00	3.71	0.06	0.21	38.49
Total Ex	1.36	37.35	0.26	38.97	1.43	42.80	1.04	45.27	1.03	37.65	12.36	51.05	0.19	9.57	9.77	145.57	155.33	11.02	3.27	304.91
Carbon Dioxide Emissions (000)																				
Run Exh	0.16	86.63	0.06	86.85	0.17	64.90	0.24	65.32	0.10	36.65	1.54	38.30	0.02	1.76	1.77	28.33	30.11	1.60	0.42	222.60
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.06	0.00	0.01	0.01	0.63	0.64	0.00	0.00	0.70
Start Ex	0.02	2.93	0.00	2.94	0.01	2.03	0.00	2.04	0.01	1.23	0.00	1.24	0.01	0.05	0.06	0.00	0.06	0.00	0.03	6.32
Total Ex	0.17	89.56	0.06	89.79	0.18	66.93	0.24	67.36	0.12	37.94	1.55	39.60	0.03	1.82	1.85	28.96	30.81	1.60	0.46	229.62
PM2.5 Emissions																				
Run Exh	0.01	2.55	0.02	2.58	0.01	3.27	0.03	3.31	0.00	1.36	0.09	1.45	0.00	0.02	0.02	5.47	5.49	0.16	0.06	13.05
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.10
Start Ex	0.00	0.24	0.00	0.24	0.00	0.28	0.00	0.28	0.00	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.66
Total Ex	0.01	2.79	0.02	2.82	0.01	3.55	0.03	3.59	0.00	1.49	0.09	1.58	0.00	0.02	0.02	5.57	5.60	0.16	0.06	13.81
TireWear	0.00	0.44	0.00	0.44	0.00	0.26	0.00	0.27	0.00	0.12	0.01	0.13	0.00	0.01	0.01	0.11	0.12	0.00	0.00	0.96
BrakeWr	0.00	1.18	0.00	1.19	0.00	0.71	0.00	0.71	0.00	0.29	0.02	0.31	0.00	0.02	0.02	0.16	0.17	0.00	0.01	2.40
Total	0.01	4.41	0.02	4.44	0.01	4.52	0.04	4.57	0.01	1.90	0.11	2.02	0.00	0.05	0.05	5.84	5.89	0.17	0.07	17.16
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.87	0.00	0.87	0.00	0.65	0.00	0.65	0.00	0.37	0.01	0.38	0.00	0.02	0.02	0.28	0.30	0.02	0.01	2.22
Fuel Consumption (000 gallons)																				
Gasoline	22.47	9251.15	0.00	9273.62	23.55	6922.95	0.00	6946.50	15.98	3925.73	0.00	3941.71	4.79	196.09	200.89	0.00	200.89	18.57	63.80	20445.07
Diesel	0.00	0.00	5.75	5.75	0.00	0.00	21.82	21.82	0.00	0.00	139.33	139.33	0.00	0.00	0.00	2606.37	2606.37	128.59	0.00	2901.85

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-11
2014 Summer Planning Emissions in Tons Per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	17876.	5903030.	7860.	5928770.	13544.	3265470.	20703.	3299720.	6709.	1313950.	58904.	1379560.	2448.	110996.	113443.	148286.	261729.	6250.	303441.	11179500.
VMT/1000	269.	199861.	161.	200292.	290.	119503.	633.	120426.	140.	49424.	2704.	52268.	24.	2420.	2445.	14937.	17381.	685.	2408.	393460.
Trips	69091.	37055000.	39939.	37164000.	52474.	20458600.	122743.	20633800.	50532.	12927800.	721913.	13700200.	50490.	1218680.	1269170.	2622350.	3891520.	24999.	606821.	76021400.
Reactive Organic Gas Emissions																				
Run Exh	1.82	8.37	0.03	10.22	2.04	7.66	0.06	9.76	1.13	5.63	0.39	7.14	0.15	1.43	1.58	9.41	10.99	0.83	7.57	46.51
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.01	0.24	0.00	0.06	0.07	0.88	0.94	0.00	0.00	1.19
Start Ex	0.32	9.18	0.00	9.50	0.26	6.49	0.00	6.74	0.28	6.22	0.00	6.51	0.45	1.48	1.93	0.00	1.93	0.03	1.24	25.96
Total Ex	2.15	17.55	0.03	19.72	2.30	14.15	0.06	16.50	1.41	12.08	0.40	13.89	0.60	2.98	3.58	10.29	13.87	0.86	8.82	73.66
Diurnal	0.22	5.95	0.00	6.16	0.16	3.58	0.00	3.75	0.03	1.32	0.00	1.35	0.00	0.02	0.03	0.00	0.03	0.00	1.06	12.34
Hot Soak	0.23	6.87	0.00	7.10	0.18	4.02	0.00	4.21	0.05	1.69	0.00	1.74	0.03	0.04	0.07	0.00	0.07	0.00	0.28	13.40
Running	1.16	13.84	0.00	15.00	0.42	14.51	0.00	14.93	0.16	8.79	0.00	8.95	0.21	0.61	0.82	0.00	0.82	0.02	0.90	40.62
Resting	0.17	4.43	0.00	4.60	0.13	2.81	0.00	2.94	0.02	1.05	0.00	1.07	0.00	0.01	0.01	0.00	0.01	0.00	0.67	9.30
Total	3.92	48.64	0.03	52.59	3.19	39.08	0.06	42.33	1.67	24.93	0.40	26.99	0.84	3.66	4.50	10.29	14.79	0.89	11.73	149.32
Carbon Monoxide Emissions																				
Run Exh	21.46	367.78	0.15	389.39	22.98	329.90	0.43	353.31	18.63	158.76	2.36	179.74	4.31	27.03	31.34	44.43	75.77	6.03	76.31	1080.54
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.43	0.06	1.49	0.02	0.39	0.41	3.19	3.60	0.00	0.00	5.10
Start Ex	2.19	106.36	0.00	108.55	1.73	80.32	0.00	82.05	2.67	65.95	0.00	68.61	4.91	21.61	26.51	0.00	26.51	0.39	5.82	291.94
Total Ex	23.65	474.14	0.15	497.94	24.71	410.22	0.43	435.36	21.30	226.13	2.41	249.85	9.24	49.03	58.26	47.62	105.89	6.42	82.13	1377.58
Oxides of Nitrogen Emissions																				
Run Exh	1.21	26.89	0.26	28.36	1.29	32.18	1.03	34.51	0.91	20.99	12.22	34.12	0.11	5.70	5.81	134.59	140.40	10.91	2.92	251.21
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.18	0.00	0.00	0.00	11.38	11.38	0.00	0.00	11.55
Start Ex	0.10	8.58	0.00	8.68	0.08	8.44	0.00	8.52	0.07	14.93	0.00	15.00	0.07	3.48	3.55	0.00	3.55	0.05	0.19	36.00
Total Ex	1.31	35.47	0.26	37.04	1.37	40.62	1.03	43.02	0.98	35.93	12.38	49.30	0.18	9.19	9.37	145.96	155.33	10.96	3.11	298.76
Carbon Dioxide Emissions (000)																				
Run Exh	0.16	92.30	0.06	92.52	0.17	68.98	0.24	69.39	0.11	38.59	1.54	40.23	0.02	1.76	1.77	28.33	30.11	1.60	0.42	234.28
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.06	0.00	0.01	0.01	0.66	0.67	0.00	0.00	0.73
Start Ex	0.02	2.93	0.00	2.94	0.01	2.03	0.00	2.04	0.01	1.23	0.00	1.24	0.01	0.05	0.06	0.00	0.06	0.00	0.03	6.32
Total Ex	0.18	95.22	0.06	95.46	0.18	71.01	0.24	71.43	0.12	39.87	1.55	41.53	0.03	1.82	1.85	28.99	30.84	1.60	0.46	241.33
PM2.5 Emissions																				
Run Exh	0.01	2.55	0.02	2.58	0.01	3.27	0.03	3.31	0.00	1.36	0.09	1.45	0.00	0.02	0.02	5.47	5.49	0.16	0.06	13.05
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.09
Start Ex	0.00	0.24	0.00	0.24	0.00	0.28	0.00	0.28	0.00	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.66
Total Ex	0.01	2.79	0.02	2.82	0.01	3.55	0.03	3.59	0.00	1.49	0.09	1.58	0.00	0.02	0.02	5.56	5.58	0.16	0.06	13.80
TireWear	0.00	0.44	0.00	0.44	0.00	0.26	0.00	0.27	0.00	0.12	0.01	0.13	0.00	0.01	0.01	0.11	0.12	0.00	0.00	0.96
BrakeWr	0.00	1.18	0.00	1.19	0.00	0.71	0.00	0.71	0.00	0.29	0.02	0.31	0.00	0.02	0.02	0.16	0.17	0.00	0.01	2.40
Total	0.01	4.41	0.02	4.44	0.01	4.52	0.04	4.57	0.01	1.90	0.11	2.02	0.00	0.05	0.05	5.83	5.88	0.17	0.07	17.15
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.92	0.00	0.92	0.00	0.69	0.00	0.69	0.00	0.39	0.01	0.40	0.00	0.02	0.02	0.28	0.30	0.02	0.01	2.34
Fuel Consumption (000 gallons)																				
Gasoline	22.77	9831.46	0.00	9854.23	23.56	7340.93	0.00	7364.49	15.96	4122.30	0.00	4138.26	4.73	195.20	199.93	0.00	199.93	18.56	62.83	21638.30
Diesel	0.00	0.00	5.75	5.75	0.00	0.00	21.82	21.82	0.00	0.00	139.33	139.33	0.00	0.00	0.00	2609.29	2609.29	128.59	0.00	2904.77

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-12
2014 Winter Planning Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	17876.	5903030.	7860.	5928770.	13544.	3265470.	20703.	3299720.	6709.	1313950.	58904.	1379560.	2448.	110996.	113443.	148286.	261729.	6250.	303441.	11179500.
VMT/1000	269.	199861.	161.	200292.	290.	119503.	633.	120426.	140.	49424.	2704.	52268.	24.	2420.	2445.	14937.	17381.	685.	2408.	393460.
Trips	69091.	37055000.	39939.	37164000.	52474.	20458600.	122743.	20633800.	50532.	12927800.	721913.	13700200.	50490.	1218680.	1269170.	2622350.	3891520.	24999.	606821.	76021400.
Reactive Organic Gas Emissions																				
Run Exh	1.92	7.59	0.03	9.53	2.18	6.98	0.06	9.22	1.20	5.20	0.39	6.80	0.16	1.38	1.54	9.41	10.95	0.81	7.90	45.21
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.01	0.24	0.00	0.06	0.07	1.00	1.07	0.00	0.00	1.31
Start Ex	0.38	11.21	0.00	11.59	0.30	7.92	0.00	8.22	0.34	7.47	0.00	7.81	0.54	1.72	2.27	0.00	2.27	0.04	1.45	31.38
Total Ex	2.30	18.80	0.03	21.13	2.48	14.90	0.06	17.44	1.54	12.91	0.40	14.85	0.71	3.16	3.87	10.42	14.29	0.85	9.35	77.90
Diurnal	0.16	4.09	0.00	4.25	0.12	2.44	0.00	2.56	0.02	0.90	0.00	0.92	0.00	0.02	0.02	0.00	0.02	0.00	0.79	8.55
Hot Soak	0.31	7.26	0.00	7.57	0.25	4.25	0.00	4.49	0.07	1.79	0.00	1.86	0.04	0.05	0.08	0.00	0.08	0.01	0.31	14.32
Running	1.30	16.40	0.00	17.69	0.49	18.23	0.00	18.72	0.17	10.50	0.00	10.67	0.22	0.66	0.88	0.00	0.88	0.03	1.13	49.12
Resting	0.08	2.36	0.00	2.44	0.06	1.48	0.00	1.54	0.01	0.55	0.00	0.56	0.00	0.01	0.01	0.00	0.01	0.00	0.28	4.82
Total	4.15	48.90	0.03	53.08	3.40	41.30	0.06	44.75	1.81	26.65	0.40	28.86	0.97	3.89	4.86	10.42	15.28	0.88	11.87	154.72
Carbon Monoxide Emissions																				
Run Exh	21.49	316.77	0.15	338.40	23.80	287.08	0.43	311.32	19.26	140.49	2.36	162.11	4.67	26.17	30.85	44.43	75.27	5.98	81.04	974.12
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.43	0.06	1.49	0.02	0.39	0.41	5.74	6.15	0.00	0.00	7.64
Start Ex	2.22	143.64	0.00	145.86	1.75	108.38	0.00	110.13	2.65	88.00	0.00	90.64	4.77	27.66	32.44	0.00	32.44	0.47	6.61	386.16
Total Ex	23.71	460.40	0.15	484.26	25.56	395.46	0.43	421.45	21.91	229.92	2.41	254.24	9.46	54.23	63.69	50.17	113.86	6.45	87.66	1367.92
Oxides of Nitrogen Emissions																				
Run Exh	1.39	31.10	0.27	32.76	1.51	37.34	1.11	39.96	1.06	24.37	12.97	38.40	0.14	6.70	6.83	143.61	150.44	11.74	3.43	276.74
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.18	0.00	0.00	0.00	10.53	10.53	0.00	0.00	10.71
Start Ex	0.11	9.42	0.00	9.53	0.08	9.27	0.00	9.35	0.08	15.82	0.00	15.90	0.07	3.65	3.72	0.00	3.72	0.06	0.21	38.76
Total Ex	1.50	40.52	0.27	42.29	1.59	46.61	1.11	49.30	1.14	40.21	13.13	54.48	0.21	10.35	10.56	154.13	164.69	11.80	3.64	326.21
Carbon Dioxide Emissions (000)																				
Run Exh	0.16	84.16	0.06	84.38	0.17	63.13	0.24	63.54	0.10	35.81	1.54	37.46	0.02	1.76	1.77	28.33	30.11	1.60	0.42	217.51
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.06	0.00	0.01	0.01	0.58	0.59	0.00	0.00	0.65
Start Ex	0.02	2.93	0.00	2.94	0.01	2.03	0.00	2.04	0.01	1.23	0.00	1.24	0.01	0.05	0.06	0.00	0.06	0.00	0.03	6.32
Total Ex	0.17	87.08	0.06	87.32	0.18	65.16	0.24	65.58	0.12	37.09	1.55	38.76	0.03	1.82	1.85	28.91	30.76	1.60	0.46	224.48
PM2.5 Emissions																				
Run Exh	0.01	2.55	0.02	2.58	0.01	3.27	0.03	3.31	0.00	1.36	0.09	1.45	0.00	0.02	0.02	5.47	5.49	0.16	0.06	13.05
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.12
Start Ex	0.00	0.24	0.00	0.24	0.00	0.28	0.00	0.28	0.00	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.66
Total Ex	0.01	2.79	0.02	2.82	0.01	3.55	0.03	3.59	0.00	1.49	0.09	1.58	0.00	0.02	0.02	5.59	5.62	0.16	0.06	13.83
TireWear	0.00	0.44	0.00	0.44	0.00	0.26	0.00	0.27	0.00	0.12	0.01	0.13	0.00	0.01	0.01	0.11	0.12	0.00	0.00	0.96
BrakeWr	0.00	1.18	0.00	1.19	0.00	0.71	0.00	0.71	0.00	0.29	0.02	0.31	0.00	0.02	0.02	0.16	0.17	0.00	0.01	2.40
Total	0.01	4.41	0.02	4.44	0.01	4.52	0.04	4.57	0.01	1.90	0.11	2.02	0.00	0.05	0.05	5.86	5.91	0.17	0.07	17.18
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.84	0.00	0.85	0.00	0.63	0.00	0.64	0.00	0.36	0.01	0.38	0.00	0.02	0.02	0.28	0.29	0.02	0.01	2.17
Fuel Consumption (000 gallons)																				
Gasoline	22.26	8996.43	0.00	9018.69	23.45	6740.08	0.00	6763.53	15.92	3839.17	0.00	3855.08	4.80	196.09	200.90	0.00	200.90	18.56	63.89	19920.65
Diesel	0.00	0.00	5.75	5.75	0.00	0.00	21.82	21.82	0.00	0.00	139.33	139.33	0.00	0.00	0.00	2602.29	2602.29	128.59	0.00	2897.78

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-13
2020 Annual Average Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	618.	6273900.	3324.	6277840.	498.	3530460.	12313.	3543270.	2061.	1445700.	65570.	1513330.	155.	122358.	122512.	165752.	288265.	6667.	331723.	11961100.
VMT/1000	9.	208635.	64.	208708.	11.	126339.	340.	126689.	40.	52894.	2889.	55823.	1.	2538.	2539.	17174.	19714.	731.	2601.	414266.
Trips	2362.	39047400.	16281.	39066000.	1917.	21834500.	69446.	21905800.	11194.	14237500.	811563.	15060200.	3179.	1289910.	1293090.	2934170.	4227260.	26669.	663380.	80949400.
Reactive Organic Gas Emissions																				
Run Exh	0.03	4.88	0.01	4.93	0.03	5.04	0.03	5.10	0.42	3.51	0.34	4.27	0.01	0.68	0.69	6.15	6.84	0.79	7.93	29.86
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.26	0.00	0.07	0.07	0.87	0.94	0.00	0.00	1.20
Start Ex	0.01	6.33	0.00	6.33	0.00	5.31	0.00	5.32	0.08	5.55	0.00	5.63	0.03	1.28	1.32	0.00	1.32	0.04	1.52	20.15
Total Ex	0.04	11.21	0.01	11.26	0.04	10.35	0.03	10.41	0.50	9.31	0.35	10.16	0.04	2.03	2.07	7.02	9.09	0.83	9.45	51.21
Diurnal	0.00	2.84	0.00	2.84	0.00	2.14	0.00	2.14	0.00	0.83	0.00	0.83	0.00	0.01	0.01	0.00	0.01	0.00	0.67	6.50
Hot Soak	0.00	5.68	0.00	5.68	0.01	3.98	0.00	3.99	0.01	1.73	0.00	1.74	0.00	0.04	0.04	0.00	0.04	0.00	0.24	11.69
Running	0.02	12.00	0.00	12.02	0.01	15.00	0.00	15.00	0.02	9.24	0.00	9.26	0.01	0.58	0.59	0.00	0.59	0.03	0.86	37.77
Resting	0.00	2.34	0.00	2.34	0.00	1.90	0.00	1.90	0.00	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.36	5.36
Total	0.07	34.07	0.01	34.15	0.06	33.37	0.03	33.45	0.53	21.86	0.35	22.75	0.05	2.67	2.72	7.02	9.74	0.87	11.58	112.53
Carbon Monoxide Emissions																				
Run Exh	0.33	224.34	0.05	224.73	0.58	228.58	0.23	229.38	6.67	112.06	2.45	121.18	0.26	14.40	14.66	34.05	48.71	5.04	71.84	700.88
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.06	1.62	0.00	0.41	0.41	4.52	4.93	0.00	0.00	6.55
Start Ex	0.04	87.74	0.00	87.78	0.04	76.98	0.00	77.03	0.72	66.97	0.00	67.69	0.27	20.89	21.16	0.00	21.16	0.50	7.42	261.57
Total Ex	0.37	312.08	0.05	312.50	0.62	305.56	0.23	306.41	7.39	180.59	2.51	190.49	0.53	35.70	36.23	38.57	74.80	5.54	79.26	968.99
Oxides of Nitrogen Emissions																				
Run Exh	0.03	17.70	0.10	17.83	0.03	23.04	0.56	23.62	0.34	14.74	8.89	23.97	0.01	3.15	3.15	80.06	83.22	9.36	3.21	161.20
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.18	0.20	0.00	0.00	0.00	12.80	12.81	0.00	0.00	13.00
Start Ex	0.00	5.26	0.00	5.27	0.00	6.15	0.00	6.15	0.02	14.52	0.00	14.55	0.00	2.75	2.76	0.00	2.76	0.06	0.22	29.01
Total Ex	0.03	22.96	0.10	23.09	0.03	29.18	0.56	29.77	0.36	29.28	9.07	38.71	0.01	5.90	5.91	92.87	98.78	9.42	3.43	203.21
Carbon Dioxide Emissions (000)																				
Run Exh	0.01	89.94	0.02	89.97	0.01	68.87	0.13	69.00	0.03	39.41	1.65	41.09	0.00	1.86	1.86	32.76	34.62	1.58	0.49	236.75
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.07	0.00	0.01	0.01	0.70	0.71	0.00	0.00	0.78
Start Ex	0.00	3.05	0.00	3.05	0.00	2.16	0.00	2.16	0.00	1.35	0.00	1.36	0.00	0.05	0.05	0.00	0.05	0.00	0.03	6.65
Total Ex	0.01	92.98	0.02	93.01	0.01	71.03	0.13	71.16	0.04	40.82	1.66	42.51	0.00	1.93	1.93	33.46	35.39	1.58	0.52	244.18
PM2.5 Emissions																				
Run Exh	0.00	2.79	0.01	2.80	0.00	3.79	0.02	3.81	0.00	1.60	0.08	1.67	0.00	0.02	0.02	3.49	3.51	0.14	0.05	11.99
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.06
Start Ex	0.00	0.27	0.00	0.27	0.00	0.33	0.00	0.33	0.00	0.15	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.76
Total Ex	0.00	3.06	0.01	3.07	0.00	4.12	0.02	4.14	0.00	1.75	0.08	1.83	0.00	0.02	0.02	3.55	3.57	0.14	0.05	12.80
TireWear	0.00	0.46	0.00	0.46	0.00	0.28	0.00	0.28	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.13	0.14	0.00	0.00	1.02
BrakeWr	0.00	1.24	0.00	1.24	0.00	0.75	0.00	0.75	0.00	0.31	0.02	0.33	0.00	0.02	0.02	0.18	0.20	0.00	0.01	2.53
Total	0.00	4.76	0.01	4.76	0.00	5.15	0.02	5.17	0.00	2.19	0.10	2.30	0.00	0.05	0.05	3.86	3.91	0.15	0.06	16.35
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.90	0.00	0.90	0.00	0.69	0.00	0.69	0.00	0.39	0.02	0.41	0.00	0.02	0.02	0.32	0.34	0.02	0.01	2.36
Fuel Consumption (000 gallons)																				
Gasoline	0.69	9573.65	0.00	9574.33	0.82	7324.48	0.00	7325.29	5.01	4211.24	0.00	4216.26	0.29	203.90	204.19	0.00	204.19	22.65	69.17	21411.89
Diesel	0.00	0.00	2.25	2.25	0.00	0.00	11.70	11.70	0.00	0.00	149.17	149.17	0.00	0.00	0.00	3010.97	3010.97	123.13	0.00	3297.22

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-14
2020 Summer Planning Emissions in Tons Per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	618.	6273900.	3324.	6277840.	498.	3530460.	12313.	3543270.	2061.	1445700.	65570.	1513330.	155.	122358.	122512.	165752.	288265.	6667.	331723.	11961100.
VMT/1000	9.	208635.	64.	208708.	11.	126339.	340.	126689.	40.	52894.	2889.	55823.	1.	2538.	2539.	17174.	19714.	731.	2601.	414266.
Trips	2362.	39047400.	16281.	39066000.	1917.	21834500.	69446.	21905800.	11194.	14237500.	811563.	15060200.	3179.	1289910.	1293090.	2934170.	4227260.	26669.	663380.	80949400.
Reactive Organic Gas Emissions																				
Run Exh	0.03	5.26	0.01	5.31	0.03	5.42	0.03	5.48	0.39	3.74	0.34	4.47	0.01	0.70	0.71	6.15	6.86	0.81	7.72	30.65
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.26	0.00	0.07	0.07	0.82	0.89	0.00	0.00	1.15
Start Ex	0.00	5.26	0.00	5.27	0.00	4.42	0.00	4.43	0.07	4.71	0.00	4.77	0.03	1.12	1.15	0.00	1.15	0.03	1.32	16.97
Total Ex	0.04	10.53	0.01	10.57	0.03	9.84	0.03	9.90	0.46	8.70	0.35	9.51	0.03	1.89	1.92	6.97	8.89	0.85	9.04	48.77
Diurnal	0.01	4.65	0.00	4.66	0.01	3.48	0.00	3.48	0.00	1.34	0.00	1.35	0.00	0.02	0.02	0.00	0.02	0.00	1.17	10.67
Hot Soak	0.00	6.07	0.00	6.07	0.01	4.24	0.00	4.25	0.01	1.85	0.00	1.86	0.00	0.04	0.04	0.00	0.04	0.00	0.29	12.52
Running	0.02	11.48	0.00	11.50	0.01	14.15	0.00	14.16	0.02	8.84	0.00	8.87	0.01	0.57	0.58	0.00	0.58	0.03	0.80	35.93
Resting	0.01	3.77	0.00	3.77	0.00	3.05	0.00	3.05	0.00	1.20	0.00	1.20	0.00	0.01	0.01	0.00	0.01	0.00	0.74	8.77
Total	0.08	36.49	0.01	36.58	0.06	34.76	0.03	34.85	0.50	21.93	0.35	22.78	0.05	2.52	2.57	6.97	9.54	0.88	12.04	116.67
Carbon Monoxide Emissions																				
Run Exh	0.33	250.46	0.05	250.84	0.56	253.67	0.23	254.46	6.44	123.30	2.45	132.18	0.24	14.77	15.01	34.05	49.06	5.12	68.38	760.05
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.06	1.62	0.00	0.41	0.41	3.40	3.81	0.00	0.00	5.43
Start Ex	0.04	66.62	0.00	66.65	0.04	58.48	0.00	58.53	0.72	51.35	0.00	52.08	0.28	16.49	16.77	0.00	16.77	0.41	6.44	200.88
Total Ex	0.37	317.08	0.05	317.50	0.60	312.16	0.23	312.99	7.17	176.20	2.51	185.88	0.52	31.67	32.19	37.45	69.64	5.53	74.82	966.36
Oxides of Nitrogen Emissions																				
Run Exh	0.03	17.00	0.10	17.13	0.03	22.07	0.56	22.66	0.32	14.14	8.90	23.37	0.01	3.02	3.03	80.08	83.10	9.30	3.06	158.62
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.18	0.20	0.00	0.00	0.00	13.21	13.22	0.00	0.00	13.42
Start Ex	0.00	4.84	0.00	4.84	0.00	5.65	0.00	5.66	0.02	13.82	0.00	13.84	0.00	2.64	2.64	0.00	2.64	0.06	0.21	27.25
Total Ex	0.03	21.85	0.10	21.97	0.03	27.73	0.56	28.31	0.34	27.98	9.08	37.40	0.01	5.66	5.67	93.29	98.96	9.36	3.27	199.28
Carbon Dioxide Emissions (000)																				
Run Exh	0.01	95.90	0.02	95.93	0.01	73.26	0.13	73.39	0.03	41.51	1.65	43.19	0.00	1.86	1.86	32.76	34.62	1.58	0.49	249.20
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.07	0.00	0.01	0.01	0.74	0.75	0.00	0.00	0.82
Start Ex	0.00	3.05	0.00	3.05	0.00	2.16	0.00	2.16	0.00	1.35	0.00	1.36	0.00	0.05	0.05	0.00	0.05	0.00	0.03	6.65
Total Ex	0.01	98.95	0.02	98.98	0.01	75.42	0.13	75.55	0.04	42.92	1.66	44.61	0.00	1.93	1.93	33.49	35.42	1.58	0.52	256.67
PM2.5 Emissions																				
Run Exh	0.00	2.79	0.01	2.80	0.00	3.79	0.02	3.81	0.00	1.60	0.08	1.67	0.00	0.02	0.02	3.49	3.51	0.14	0.05	11.99
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.05
Start Ex	0.00	0.27	0.00	0.27	0.00	0.33	0.00	0.33	0.00	0.15	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.76
Total Ex	0.00	3.06	0.01	3.07	0.00	4.12	0.02	4.14	0.00	1.75	0.08	1.83	0.00	0.02	0.02	3.54	3.57	0.14	0.05	12.80
TireWear	0.00	0.46	0.00	0.46	0.00	0.28	0.00	0.28	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.13	0.14	0.00	0.00	1.02
BrakeWr	0.00	1.24	0.00	1.24	0.00	0.75	0.00	0.75	0.00	0.31	0.02	0.33	0.00	0.02	0.02	0.18	0.20	0.00	0.01	2.53
Total	0.00	4.76	0.01	4.76	0.00	5.15	0.02	5.17	0.00	2.19	0.10	2.30	0.00	0.05	0.05	3.86	3.90	0.15	0.06	16.35
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.95	0.00	0.96	0.00	0.73	0.00	0.73	0.00	0.41	0.02	0.43	0.00	0.02	0.02	0.32	0.34	0.02	0.01	2.48
Fuel Consumption (000 gallons)																				
Gasoline	0.70	10184.70	0.00	10185.40	0.82	7774.90	0.00	7775.72	5.01	4425.29	0.00	4430.30	0.28	203.21	203.49	0.00	203.49	22.65	68.33	22685.89
Diesel	0.00	0.00	2.25	2.25	0.00	0.00	11.70	11.70	0.00	0.00	149.17	149.17	0.00	0.00	0.00	3014.23	3014.23	123.13	0.00	3300.48

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-15
2020 Winter Planning Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	618.	6273900.	3324.	6277840.	498.	3530460.	12313.	3543270.	2061.	1445700.	65570.	1513330.	155.	122358.	122512.	165752.	288265.	6667.	331723.	11961100.
VMT/1000	9.	208635.	64.	208708.	11.	126339.	340.	126689.	40.	52894.	2889.	55823.	1.	2538.	2539.	17174.	19714.	731.	2601.	414266.
Trips	2362.	39047400.	16281.	39066000.	1917.	21834500.	69446.	21905800.	11194.	14237500.	811563.	15060200.	3179.	1289910.	1293090.	2934170.	4227260.	26669.	663380.	80949400.
Reactive Organic Gas Emissions																				
Run Exh	0.03	4.77	0.01	4.81	0.03	4.92	0.03	4.99	0.42	3.45	0.34	4.21	0.01	0.68	0.69	6.15	6.84	0.79	7.96	29.59
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.26	0.00	0.07	0.07	0.94	1.01	0.00	0.00	1.27
Start Ex	0.01	6.42	0.00	6.43	0.00	5.39	0.00	5.40	0.08	5.62	0.00	5.70	0.03	1.29	1.32	0.00	1.32	0.04	1.53	20.42
Total Ex	0.04	11.19	0.01	11.24	0.04	10.32	0.03	10.38	0.50	9.33	0.35	10.17	0.04	2.04	2.08	7.09	9.17	0.83	9.48	51.28
Diurnal	0.01	3.09	0.00	3.09	0.00	2.25	0.00	2.25	0.00	0.86	0.00	0.87	0.00	0.01	0.01	0.00	0.01	0.00	0.86	7.09
Hot Soak	0.00	6.30	0.00	6.31	0.01	4.40	0.00	4.41	0.01	1.92	0.00	1.93	0.00	0.04	0.05	0.00	0.05	0.00	0.32	13.02
Running	0.02	13.58	0.00	13.61	0.01	17.61	0.00	17.62	0.02	10.53	0.00	10.56	0.01	0.62	0.63	0.00	0.63	0.04	1.03	43.48
Resting	0.00	2.16	0.00	2.16	0.00	1.72	0.00	1.72	0.00	0.67	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.31	4.87
Total	0.07	36.33	0.01	36.41	0.06	36.29	0.03	36.38	0.54	23.31	0.35	24.20	0.06	2.72	2.77	7.09	9.86	0.87	12.01	119.74
Carbon Monoxide Emissions																				
Run Exh	0.33	214.95	0.05	215.33	0.57	219.60	0.23	220.40	6.63	108.10	2.45	117.18	0.26	14.32	14.59	34.05	48.63	5.03	72.19	678.76
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.06	1.62	0.00	0.41	0.41	6.09	6.50	0.00	0.00	8.12
Start Ex	0.04	90.00	0.00	90.03	0.04	78.97	0.00	79.01	0.72	68.34	0.00	69.07	0.27	21.00	21.27	0.00	21.27	0.50	7.46	267.33
Total Ex	0.36	304.95	0.05	305.36	0.62	298.56	0.23	299.41	7.36	177.99	2.51	187.86	0.54	35.73	36.27	40.14	76.41	5.53	79.65	954.22
Oxides of Nitrogen Emissions																				
Run Exh	0.03	19.63	0.11	19.77	0.03	25.57	0.59	26.20	0.37	16.40	9.45	26.22	0.01	3.55	3.56	85.45	89.01	10.03	3.59	174.82
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.18	0.20	0.00	0.00	0.00	12.23	12.23	0.00	0.00	12.43
Start Ex	0.00	5.32	0.00	5.32	0.00	6.21	0.00	6.21	0.02	14.58	0.00	14.61	0.00	2.76	2.76	0.00	2.76	0.06	0.23	29.19
Total Ex	0.03	24.95	0.11	25.09	0.03	31.78	0.59	32.41	0.40	31.00	9.63	41.03	0.01	6.32	6.33	97.68	104.00	10.09	3.82	216.44
Carbon Dioxide Emissions (000)																				
Run Exh	0.01	87.34	0.02	87.37	0.01	66.96	0.13	67.10	0.03	38.50	1.65	40.18	0.00	1.86	1.86	32.76	34.62	1.58	0.49	231.33
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.07	0.00	0.01	0.01	0.65	0.66	0.00	0.00	0.73
Start Ex	0.00	3.05	0.00	3.05	0.00	2.16	0.00	2.16	0.00	1.35	0.00	1.36	0.00	0.05	0.05	0.00	0.05	0.00	0.03	6.65
Total Ex	0.01	90.39	0.02	90.42	0.01	69.12	0.13	69.26	0.04	39.91	1.66	41.60	0.00	1.93	1.93	33.40	35.34	1.58	0.52	238.71
PM2.5 Emissions																				
Run Exh	0.00	2.79	0.01	2.80	0.00	3.79	0.02	3.81	0.00	1.60	0.08	1.67	0.00	0.02	0.02	3.49	3.51	0.14	0.05	11.99
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.07
Start Ex	0.00	0.27	0.00	0.27	0.00	0.33	0.00	0.33	0.00	0.15	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.76
Total Ex	0.00	3.06	0.01	3.07	0.00	4.12	0.02	4.14	0.00	1.75	0.08	1.83	0.00	0.02	0.02	3.56	3.58	0.14	0.05	12.81
TireWear	0.00	0.46	0.00	0.46	0.00	0.28	0.00	0.28	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.13	0.14	0.00	0.00	1.02
BrakeWr	0.00	1.24	0.00	1.24	0.00	0.75	0.00	0.75	0.00	0.31	0.02	0.33	0.00	0.02	0.02	0.18	0.20	0.00	0.01	2.53
Total	0.00	4.76	0.01	4.76	0.00	5.15	0.02	5.17	0.00	2.19	0.10	2.30	0.00	0.05	0.05	3.87	3.92	0.15	0.06	16.36
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.87	0.00	0.87	0.00	0.67	0.00	0.67	0.00	0.39	0.02	0.40	0.00	0.02	0.02	0.32	0.34	0.02	0.01	2.30
Fuel Consumption (000 gallons)																				
Gasoline	0.68	9306.59	0.00	9307.27	0.81	7128.16	0.00	7128.97	4.99	4117.49	0.00	4122.48	0.29	203.91	204.19	0.00	204.19	22.65	69.24	20854.81
Diesel	0.00	0.00	2.25	2.25	0.00	0.00	11.70	11.70	0.00	0.00	149.17	149.17	0.00	0.00	0.00	3006.40	3006.40	123.13	0.00	3292.65

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-16
2023 Annual Average Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Gasoline Non-cat	Gasoline Cat	Gasoline Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
Vehicles	159.	6364430.	2096.	6366680.	143.	3646470.	9292.	3655910.	215.	1503300.	68333.	1571850.	0.	132606.	132606.	175518.	308124.	6921.	332848.	12242300.
VMT/1000	2.	210337.	39.	210378.	3.	129984.	245.	130232.	4.	54700.	2990.	57694.	0.	2683.	2683.	18251.	20934.	759.	2570.	422567.
Trips	592.	39498500.	10155.	39509200.	534.	22444900.	50620.	22496000.	814.	14804300.	848724.	15653800.	0.	1321280.	1321280.	3084270.	4405560.	27682.	665629.	82758000.
Reactive Organic Gas Emissions																				
Run Exh	0.01	3.95	0.01	3.96	0.01	4.31	0.02	4.33	0.01	2.83	0.32	3.16	0.00	0.45	0.45	5.35	5.80	0.79	7.70	25.75
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.26	0.00	0.07	0.07	0.89	0.96	0.00	0.00	1.22
Start Ex	0.00	4.83	0.00	4.83	0.00	4.40	0.00	4.40	0.00	4.69	0.00	4.70	0.00	1.05	1.05	0.00	1.05	0.04	1.51	16.53
Total Ex	0.01	8.78	0.01	8.79	0.01	8.71	0.02	8.74	0.02	7.77	0.33	8.12	0.00	1.57	1.57	6.24	7.81	0.83	9.21	43.50
Diurnal	0.00	2.44	0.00	2.44	0.00	2.07	0.00	2.07	0.00	0.82	0.00	0.82	0.00	0.01	0.01	0.00	0.01	0.00	0.68	6.02
Hot Soak	0.00	5.17	0.00	5.17	0.00	3.92	0.00	3.93	0.00	1.75	0.00	1.75	0.00	0.04	0.04	0.00	0.04	0.00	0.24	11.12
Running	0.01	10.89	0.00	10.89	0.00	14.53	0.00	14.54	0.00	9.07	0.00	9.07	0.00	0.54	0.54	0.00	0.54	0.04	0.84	35.91
Resting	0.00	2.11	0.00	2.11	0.00	1.96	0.00	1.96	0.00	0.78	0.00	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.37	5.22
Total	0.02	29.38	0.01	29.40	0.01	31.20	0.02	31.23	0.02	20.20	0.33	20.54	0.00	2.16	2.16	6.24	8.40	0.87	11.32	101.77
Carbon Monoxide Emissions																				
Run Exh	0.08	188.91	0.03	189.03	0.11	201.66	0.17	201.93	0.24	99.87	2.48	102.59	0.00	10.69	10.69	31.53	42.22	4.97	67.53	608.26
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	0.07	1.65	0.00	0.41	0.41	4.79	5.20	0.00	0.00	6.85
Start Ex	0.01	69.31	0.00	69.32	0.01	65.33	0.00	65.34	0.02	58.99	0.00	59.01	0.00	17.54	17.54	0.00	17.54	0.50	7.51	219.22
Total Ex	0.09	258.22	0.03	258.35	0.12	266.99	0.17	267.27	0.26	160.44	2.55	163.25	0.00	28.63	28.63	36.32	64.95	5.48	75.03	834.32
Oxides of Nitrogen Emissions																				
Run Exh	0.01	14.46	0.06	14.53	0.01	19.37	0.40	19.78	0.01	12.25	7.51	19.77	0.00	2.34	2.34	66.03	68.36	9.10	3.15	134.68
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19	0.21	0.00	0.00	0.00	13.85	13.85	0.00	0.00	14.06
Start Ex	0.00	3.96	0.00	3.96	0.00	4.96	0.00	4.96	0.00	13.78	0.00	13.78	0.00	2.36	2.36	0.00	2.36	0.07	0.23	25.36
Total Ex	0.01	18.42	0.06	18.49	0.01	24.34	0.40	24.74	0.01	26.05	7.70	33.76	0.00	4.70	4.70	79.87	84.58	9.16	3.37	174.10
Carbon Dioxide Emissions (000)																				
Run Exh	0.00	90.78	0.02	90.80	0.00	71.18	0.09	71.27	0.00	40.95	1.71	42.66	0.00	1.97	1.97	34.92	36.89	1.61	0.49	243.72
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.07	0.00	0.02	0.02	0.75	0.77	0.00	0.00	0.84
Start Ex	0.00	3.07	0.00	3.07	0.00	2.22	0.00	2.22	0.00	1.41	0.00	1.41	0.00	0.05	0.05	0.00	0.05	0.00	0.03	6.78
Total Ex	0.00	93.85	0.02	93.86	0.00	73.40	0.09	73.49	0.00	42.41	1.72	44.13	0.00	2.04	2.04	35.67	37.71	1.61	0.52	251.33
PM2.5 Emissions																				
Run Exh	0.00	2.88	0.00	2.88	0.00	4.00	0.01	4.01	0.00	1.70	0.07	1.77	0.00	0.02	0.02	2.99	3.01	0.14	0.05	11.86
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.05
Start Ex	0.00	0.27	0.00	0.27	0.00	0.34	0.00	0.34	0.00	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.77
Total Ex	0.00	3.15	0.00	3.15	0.00	4.34	0.01	4.35	0.00	1.86	0.07	1.93	0.00	0.02	0.02	3.03	3.06	0.14	0.05	12.68
TireWear	0.00	0.46	0.00	0.46	0.00	0.29	0.00	0.29	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.14	0.15	0.00	0.00	1.04
BrakeWr	0.00	1.25	0.00	1.25	0.00	0.77	0.00	0.77	0.00	0.32	0.02	0.34	0.00	0.02	0.02	0.20	0.21	0.00	0.01	2.59
Total	0.00	4.86	0.00	4.86	0.00	5.39	0.01	5.41	0.00	2.31	0.10	2.41	0.00	0.05	0.05	3.37	3.42	0.15	0.06	16.31
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.90	0.00	0.91	0.00	0.71	0.00	0.71	0.00	0.41	0.02	0.43	0.00	0.02	0.02	0.34	0.36	0.02	0.01	2.42
Fuel Consumption (000 gallons)																				
Gasoline	0.17	9652.59	0.00	9652.76	0.22	7560.45	0.00	7560.67	0.42	4370.73	0.00	4371.15	0.00	214.30	214.30	0.00	214.30	24.15	68.20	21891.23
Diesel	0.00	0.00	1.37	1.37	0.00	0.00	8.43	8.43	0.00	0.00	154.48	154.48	0.00	0.00	0.00	3210.35	3210.35	124.55	0.00	3499.17

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-17
2023 Summer Planning Emissions in Tons Per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	159.	6364430.	2096.	6366680.	143.	3646470.	9292.	3655910.	215.	1503300.	68333.	1571850.	0.	132606.	132606.	175518.	308124.	6921.	332848.	12242300.
VMT/1000	2.	210337.	39.	210378.	3.	129984.	245.	130232.	4.	54700.	2990.	57694.	0.	2683.	2683.	18251.	20934.	759.	2570.	422567.
Trips	592.	39498500.	10155.	39509200.	534.	22444900.	50620.	22496000.	814.	14804300.	848724.	15653800.	0.	1321280.	1321280.	3084270.	4405560.	27682.	665629.	82758000.
Reactive Organic Gas Emissions																				
Run Exh	0.01	4.26	0.01	4.27	0.01	4.64	0.02	4.67	0.01	3.02	0.32	3.35	0.00	0.46	0.46	5.35	5.81	0.81	7.51	26.42
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.26	0.00	0.07	0.07	0.84	0.91	0.00	0.00	1.17
Start Ex	0.00	4.02	0.00	4.02	0.00	3.67	0.00	3.67	0.00	3.99	0.00	3.99	0.00	0.92	0.92	0.00	0.92	0.04	1.32	13.95
Total Ex	0.01	8.28	0.01	8.30	0.01	8.30	0.02	8.33	0.01	7.26	0.33	7.60	0.00	1.45	1.45	6.19	7.64	0.85	8.83	41.55
Diurnal	0.00	4.03	0.00	4.03	0.00	3.39	0.00	3.39	0.00	1.33	0.00	1.33	0.00	0.01	0.01	0.00	0.01	0.00	1.19	9.95
Hot Soak	0.00	5.49	0.00	5.49	0.00	4.15	0.00	4.16	0.00	1.85	0.00	1.85	0.00	0.04	0.04	0.00	0.04	0.00	0.30	11.84
Running	0.01	10.39	0.00	10.40	0.00	13.72	0.00	13.72	0.00	8.67	0.00	8.68	0.00	0.53	0.53	0.00	0.53	0.03	0.78	34.14
Resting	0.00	3.34	0.00	3.34	0.00	3.08	0.00	3.08	0.00	1.23	0.00	1.23	0.00	0.01	0.01	0.00	0.01	0.00	0.75	8.40
Total	0.02	31.53	0.01	31.55	0.01	32.64	0.02	32.68	0.02	20.35	0.33	20.69	0.00	2.04	2.04	6.19	8.23	0.89	11.83	105.88
Carbon Monoxide Emissions																				
Run Exh	0.08	211.24	0.03	211.35	0.10	224.36	0.17	224.63	0.23	110.31	2.48	113.03	0.00	10.95	10.95	31.53	42.48	5.06	64.35	660.90
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	0.07	1.65	0.00	0.41	0.41	3.60	4.01	0.00	0.00	5.66
Start Ex	0.01	52.63	0.00	52.64	0.01	49.64	0.00	49.64	0.02	45.33	0.00	45.35	0.00	13.91	13.91	0.00	13.91	0.42	6.49	168.45
Total Ex	0.09	263.87	0.03	263.99	0.11	274.00	0.17	274.28	0.25	157.23	2.55	160.02	0.00	25.27	25.27	35.13	60.40	5.48	70.84	835.01
Oxides of Nitrogen Emissions																				
Run Exh	0.01	13.90	0.06	13.97	0.01	18.58	0.40	18.98	0.01	11.76	7.52	19.29	0.00	2.25	2.25	66.03	68.28	9.04	3.00	132.56
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19	0.21	0.00	0.00	0.00	14.29	14.30	0.00	0.00	14.50
Start Ex	0.00	3.64	0.00	3.64	0.00	4.57	0.00	4.57	0.00	13.13	0.00	13.13	0.00	2.26	2.26	0.00	2.26	0.06	0.21	23.88
Total Ex	0.01	17.54	0.06	17.61	0.01	23.14	0.40	23.55	0.01	24.91	7.71	32.63	0.00	4.51	4.51	80.32	84.84	9.10	3.21	170.94
Carbon Dioxide Emissions (000)																				
Run Exh	0.00	96.82	0.02	96.84	0.00	75.74	0.09	75.84	0.00	43.14	1.71	44.85	0.00	1.97	1.97	34.92	36.89	1.61	0.49	256.52
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.07	0.00	0.02	0.02	0.79	0.80	0.00	0.00	0.87
Start Ex	0.00	3.07	0.00	3.07	0.00	2.22	0.00	2.22	0.00	1.41	0.00	1.41	0.00	0.05	0.05	0.00	0.05	0.00	0.03	6.78
Total Ex	0.00	99.89	0.02	99.91	0.00	77.96	0.09	78.06	0.00	44.60	1.72	46.32	0.00	2.04	2.04	35.71	37.75	1.61	0.52	264.17
PM2.5 Emissions																				
Run Exh	0.00	2.88	0.00	2.88	0.00	4.00	0.01	4.01	0.00	1.70	0.07	1.77	0.00	0.02	0.02	2.99	3.01	0.14	0.05	11.86
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.04
Start Ex	0.00	0.27	0.00	0.27	0.00	0.34	0.00	0.34	0.00	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.77
Total Ex	0.00	3.15	0.00	3.15	0.00	4.34	0.01	4.35	0.00	1.86	0.07	1.93	0.00	0.02	0.02	3.03	3.05	0.14	0.05	12.68
TireWear	0.00	0.46	0.00	0.46	0.00	0.29	0.00	0.29	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.14	0.15	0.00	0.00	1.04
BrakeWr	0.00	1.25	0.00	1.25	0.00	0.77	0.00	0.77	0.00	0.32	0.02	0.34	0.00	0.02	0.02	0.20	0.21	0.00	0.01	2.59
Total	0.00	4.86	0.00	4.86	0.00	5.39	0.01	5.41	0.00	2.31	0.10	2.41	0.00	0.05	0.05	3.37	3.42	0.15	0.06	16.31
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.96	0.00	0.96	0.00	0.75	0.00	0.75	0.00	0.43	0.02	0.45	0.00	0.02	0.02	0.34	0.36	0.02	0.01	2.55
Fuel Consumption (000 gallons)																				
Gasoline	0.18	10272.03	0.00	10272.20	0.22	8028.87	0.00	8029.09	0.43	4594.21	0.00	4594.64	0.00	213.72	213.72	0.00	213.72	24.16	67.40	23201.21
Diesel	0.00	0.00	1.37	1.37	0.00	0.00	8.43	8.43	0.00	0.00	154.48	154.48	0.00	0.00	0.00	3213.86	3213.86	124.55	0.00	3502.68

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-18
2023 Winter Planning Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	159.	6364430.	2096.	6366680.	143.	3646470.	9292.	3655910.	215.	1503300.	68333.	1571850.	0.	132606.	132606.	175518.	308124.	6921.	332848.	12242300.
VMT/1000	2.	210337.	39.	210378.	3.	129984.	245.	130232.	4.	54700.	2990.	57694.	0.	2683.	2683.	18251.	20934.	759.	2570.	422567.
Trips	592.	39498500.	10155.	39509200.	534.	22444900.	50620.	22496000.	814.	14804300.	848724.	15653800.	0.	1321280.	1321280.	3084270.	4405560.	27682.	665629.	82758000.
Reactive Organic Gas Emissions																				
Run Exh	0.01	3.85	0.01	3.87	0.01	4.21	0.02	4.24	0.01	2.77	0.32	3.11	0.00	0.45	0.45	5.35	5.80	0.79	7.72	25.52
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.26	0.00	0.07	0.07	0.96	1.03	0.00	0.00	1.29
Start Ex	0.00	4.90	0.00	4.90	0.00	4.47	0.00	4.47	0.00	4.76	0.00	4.76	0.00	1.06	1.06	0.00	1.06	0.04	1.52	16.75
Total Ex	0.01	8.76	0.01	8.77	0.01	8.68	0.02	8.71	0.02	7.79	0.33	8.13	0.00	1.57	1.57	6.31	7.89	0.83	9.24	43.56
Diurnal	0.00	2.65	0.00	2.65	0.00	2.15	0.00	2.15	0.00	0.83	0.00	0.84	0.00	0.01	0.01	0.00	0.01	0.00	0.87	6.52
Hot Soak	0.00	5.67	0.00	5.67	0.00	4.28	0.00	4.29	0.00	1.91	0.00	1.91	0.00	0.04	0.04	0.00	0.04	0.00	0.32	12.24
Running	0.01	12.37	0.00	12.38	0.00	17.04	0.00	17.04	0.00	10.34	0.00	10.34	0.00	0.58	0.58	0.00	0.58	0.04	1.01	41.39
Resting	0.00	1.96	0.00	1.97	0.00	1.77	0.00	1.77	0.00	0.71	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.31	4.75
Total	0.02	31.41	0.01	31.44	0.01	33.92	0.02	33.95	0.02	21.57	0.33	21.92	0.00	2.21	2.21	6.31	8.52	0.88	11.76	108.46
Carbon Monoxide Emissions																				
Run Exh	0.08	180.89	0.03	181.00	0.11	193.53	0.17	193.80	0.23	96.17	2.48	98.89	0.00	10.63	10.63	31.53	42.16	4.96	67.85	588.66
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	0.07	1.65	0.00	0.41	0.41	6.45	6.86	0.00	0.00	8.52
Start Ex	0.01	71.09	0.00	71.10	0.01	67.02	0.00	67.02	0.02	60.22	0.00	60.24	0.00	17.63	17.63	0.00	17.63	0.51	7.55	224.05
Total Ex	0.09	251.98	0.03	252.10	0.11	260.55	0.17	260.83	0.25	157.97	2.55	160.78	0.00	28.67	28.67	37.98	66.66	5.47	75.40	821.23
Oxides of Nitrogen Emissions																				
Run Exh	0.01	16.03	0.07	16.11	0.01	21.50	0.43	21.93	0.01	13.62	7.98	21.61	0.00	2.64	2.64	70.46	73.10	9.75	3.52	146.03
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19	0.21	0.00	0.00	0.00	13.22	13.23	0.00	0.00	13.43
Start Ex	0.00	4.00	0.00	4.00	0.00	5.01	0.00	5.01	0.00	13.84	0.00	13.84	0.00	2.37	2.37	0.00	2.37	0.07	0.23	25.51
Total Ex	0.01	20.03	0.07	20.10	0.01	26.51	0.43	26.94	0.01	27.48	8.17	35.66	0.00	5.01	5.01	83.68	88.69	9.82	3.75	184.97
Carbon Dioxide Emissions (000)																				
Run Exh	0.00	88.15	0.02	88.17	0.00	69.20	0.09	69.29	0.00	40.00	1.71	41.71	0.00	1.97	1.97	34.92	36.89	1.61	0.49	238.16
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.07	0.00	0.02	0.02	0.70	0.71	0.00	0.00	0.78
Start Ex	0.00	3.07	0.00	3.07	0.00	2.22	0.00	2.22	0.00	1.41	0.00	1.41	0.00	0.05	0.05	0.00	0.05	0.00	0.03	6.78
Total Ex	0.00	91.22	0.02	91.23	0.00	71.42	0.09	71.51	0.00	41.46	1.72	43.18	0.00	2.04	2.04	35.62	37.66	1.61	0.52	245.72
PM2.5 Emissions																				
Run Exh	0.00	2.88	0.00	2.88	0.00	4.00	0.01	4.01	0.00	1.70	0.07	1.77	0.00	0.02	0.02	2.99	3.01	0.14	0.05	11.86
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.05
Start Ex	0.00	0.27	0.00	0.27	0.00	0.34	0.00	0.34	0.00	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.77
Total Ex	0.00	3.15	0.00	3.15	0.00	4.34	0.01	4.35	0.00	1.86	0.07	1.93	0.00	0.02	0.02	3.04	3.07	0.14	0.05	12.69
TireWear	0.00	0.46	0.00	0.46	0.00	0.29	0.00	0.29	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.14	0.15	0.00	0.00	1.04
BrakeWr	0.00	1.25	0.00	1.25	0.00	0.77	0.00	0.77	0.00	0.32	0.02	0.34	0.00	0.02	0.02	0.20	0.21	0.00	0.01	2.59
Total	0.00	4.86	0.00	4.86	0.00	5.39	0.01	5.41	0.00	2.31	0.10	2.41	0.00	0.05	0.05	3.38	3.43	0.15	0.06	16.32
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.88	0.00	0.88	0.00	0.69	0.00	0.69	0.00	0.40	0.02	0.42	0.00	0.02	0.02	0.34	0.36	0.02	0.01	2.37
Fuel Consumption (000 gallons)																				
Gasoline	0.17	9382.20	0.00	9382.37	0.22	7356.51	0.00	7356.73	0.42	4273.02	0.00	4273.44	0.00	214.31	214.31	0.00	214.31	24.15	68.26	21319.26
Diesel	0.00	0.00	1.37	1.37	0.00	0.00	8.43	8.43	0.00	0.00	154.48	154.48	0.00	0.00	0.00	3205.44	3205.44	124.55	0.00	3494.26

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-19
2030 Annual Average Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0.	6648800.	480.	6649280.	0.	3982650.	4098.	3986750.	0.	1662560.	75115.	1737670.	0.	161513.	161513.	198818.	360331.	7569.	342013.	13083600.
VMT/1000	0.	219670.	9.	219678.	0.	141909.	99.	142008.	0.	60363.	3296.	63659.	0.	3132.	3132.	20611.	23743.	830.	2614.	452533.
Trips	0.	41103600.	2273.	41105800.	0.	24300400.	19458.	24319900.	0.	16365800.	938690.	17304500.	0.	1429760.	1429760.	3455160.	4884910.	30277.	683957.	88329300.
Reactive Organic Gas Emissions																				
Run Exh	0.00	2.57	0.00	2.57	0.00	3.15	0.01	3.16	0.00	1.79	0.26	2.05	0.00	0.20	0.20	4.63	4.83	0.45	7.82	20.87
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.01	0.29	0.00	0.07	0.07	0.99	1.06	0.00	0.00	1.35
Start Ex	0.00	2.75	0.00	2.75	0.00	3.06	0.00	3.06	0.00	3.46	0.00	3.46	0.00	0.79	0.79	0.00	0.79	0.04	1.54	11.64
Total Ex	0.00	5.32	0.00	5.32	0.00	6.21	0.01	6.22	0.00	5.53	0.27	5.80	0.00	1.07	1.07	5.61	6.68	0.49	9.35	33.87
Diurnal	0.00	1.55	0.00	1.55	0.00	1.85	0.00	1.85	0.00	0.80	0.00	0.80	0.00	0.01	0.01	0.00	0.01	0.00	0.70	4.92
Hot Soak	0.00	3.93	0.00	3.93	0.00	3.55	0.00	3.55	0.00	1.68	0.00	1.68	0.00	0.04	0.04	0.00	0.04	0.00	0.25	9.44
Running	0.00	9.44	0.00	9.44	0.00	13.14	0.00	13.14	0.00	8.39	0.00	8.39	0.00	0.49	0.49	0.00	0.49	0.03	0.84	32.33
Resting	0.00	1.51	0.00	1.51	0.00	1.94	0.00	1.94	0.00	0.85	0.00	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.38	4.68
Total	0.00	21.75	0.00	21.75	0.00	26.70	0.01	26.70	0.00	17.24	0.27	17.52	0.00	1.60	1.60	5.61	7.22	0.53	11.53	85.24
Carbon Monoxide Emissions																				
Run Exh	0.00	143.20	0.01	143.21	0.00	164.83	0.06	164.90	0.00	83.55	2.57	86.12	0.00	7.28	7.28	30.59	37.87	4.16	67.27	503.52
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77	0.07	1.84	0.00	0.44	0.44	5.46	5.90	0.00	0.00	7.75
Start Ex	0.00	45.24	0.00	45.24	0.00	48.78	0.00	48.78	0.00	47.93	0.00	47.93	0.00	13.40	13.40	0.00	13.40	0.54	7.79	163.68
Total Ex	0.00	188.44	0.01	188.45	0.00	213.61	0.06	213.68	0.00	133.25	2.64	135.90	0.00	21.12	21.12	36.05	57.18	4.70	75.06	674.95
Oxides of Nitrogen Emissions																				
Run Exh	0.00	10.35	0.01	10.36	0.00	13.84	0.16	14.00	0.00	8.55	5.54	14.09	0.00	1.56	1.56	54.04	55.61	7.00	3.20	104.26
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.21	0.23	0.00	0.00	0.00	16.13	16.13	0.00	0.00	16.36
Start Ex	0.00	2.34	0.00	2.34	0.00	3.22	0.00	3.22	0.00	12.89	0.00	12.89	0.00	1.86	1.86	0.00	1.86	0.08	0.23	20.63
Total Ex	0.00	12.69	0.01	12.71	0.00	17.06	0.16	17.22	0.00	21.45	5.75	27.21	0.00	3.43	3.43	70.17	73.60	7.09	3.43	141.25
Carbon Dioxide Emissions (000)																				
Run Exh	0.00	94.22	0.00	94.22	0.00	77.67	0.04	77.70	0.00	45.33	1.88	47.22	0.00	2.36	2.36	39.33	41.69	1.61	0.50	262.95
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.08	0.00	0.02	0.02	0.87	0.88	0.00	0.00	0.96
Start Ex	0.00	3.17	0.00	3.17	0.00	2.40	0.00	2.40	0.00	1.55	0.00	1.55	0.00	0.06	0.06	0.00	0.06	0.00	0.03	7.21
Total Ex	0.00	97.39	0.00	97.39	0.00	80.06	0.04	80.10	0.00	46.95	1.89	48.84	0.00	2.43	2.43	40.20	42.63	1.62	0.53	271.11
PM2.5 Emissions																				
Run Exh	0.00	3.00	0.00	3.00	0.00	4.38	0.00	4.38	0.00	1.88	0.07	1.95	0.00	0.02	0.02	2.66	2.68	0.12	0.04	12.17
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.03
Start Ex	0.00	0.28	0.00	0.28	0.00	0.35	0.00	0.35	0.00	0.17	0.00	0.17	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.80
Total Ex	0.00	3.27	0.00	3.28	0.00	4.73	0.00	4.73	0.00	2.05	0.07	2.12	0.00	0.03	0.03	2.69	2.72	0.12	0.05	13.01
TireWear	0.00	0.48	0.00	0.48	0.00	0.31	0.00	0.31	0.00	0.14	0.01	0.16	0.00	0.01	0.01	0.16	0.17	0.00	0.00	1.13
BrakeWr	0.00	1.30	0.00	1.30	0.00	0.84	0.00	0.84	0.00	0.36	0.02	0.38	0.00	0.02	0.02	0.22	0.24	0.00	0.01	2.78
Total	0.00	5.06	0.00	5.06	0.00	5.88	0.01	5.89	0.00	2.55	0.10	2.65	0.00	0.06	0.06	3.07	3.13	0.13	0.06	16.91
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.94	0.00	0.94	0.00	0.77	0.00	0.77	0.00	0.45	0.02	0.47	0.00	0.02	0.02	0.38	0.41	0.02	0.01	2.61
Fuel Consumption (000 gallons)																				
Gasoline	0.00	10002.62	0.00	10002.62	0.00	8233.53	0.00	8233.53	0.00	4829.86	0.00	4829.86	0.00	252.67	252.67	0.00	252.67	29.34	69.78	23417.81
Diesel	0.00	0.00	0.30	0.30	0.00	0.00	3.38	3.38	0.00	0.00	170.52	170.52	0.00	0.00	0.00	3617.77	3617.77	120.19	0.00	3912.17

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-20
2030 Summer Planning Emissions in Tons Per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0.	6648800.	480.	6649280.	0.	3982650.	4098.	3986750.	0.	1662560.	75115.	1737670.	0.	161513.	161513.	198818.	360331.	7569.	342013.	13083600.
VMT/1000	0.	219670.	9.	219678.	0.	141909.	99.	142008.	0.	60363.	3296.	63659.	0.	3132.	3132.	20611.	23743.	830.	2614.	452533.
Trips	0.	41103600.	2273.	41105800.	0.	24300400.	19458.	24319900.	0.	16365800.	938690.	17304500.	0.	1429760.	1429760.	3455160.	4884910.	30277.	683957.	88329300.
Reactive Organic Gas Emissions																				
Run Exh	0.00	2.77	0.00	2.77	0.00	3.40	0.01	3.40	0.00	1.92	0.26	2.18	0.00	0.21	0.21	4.63	4.84	0.45	7.64	21.29
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.01	0.29	0.00	0.07	0.07	0.93	1.00	0.00	0.00	1.29
Start Ex	0.00	2.29	0.00	2.29	0.00	2.55	0.00	2.55	0.00	2.95	0.00	2.95	0.00	0.70	0.70	0.00	0.70	0.04	1.35	9.87
Total Ex	0.00	5.06	0.00	5.06	0.00	5.95	0.01	5.95	0.00	5.15	0.27	5.43	0.00	0.98	0.98	5.56	6.54	0.49	8.99	32.46
Diurnal	0.00	2.58	0.00	2.58	0.00	3.01	0.00	3.01	0.00	1.29	0.00	1.29	0.00	0.01	0.01	0.00	0.01	0.00	1.24	8.13
Hot Soak	0.00	4.12	0.00	4.12	0.00	3.72	0.00	3.72	0.00	1.75	0.00	1.75	0.00	0.04	0.04	0.00	0.04	0.00	0.31	9.94
Running	0.00	8.99	0.00	8.99	0.00	12.43	0.00	12.43	0.00	8.03	0.00	8.03	0.00	0.48	0.48	0.00	0.48	0.03	0.78	30.74
Resting	0.00	2.32	0.00	2.32	0.00	2.99	0.00	2.99	0.00	1.31	0.00	1.31	0.00	0.01	0.01	0.00	0.01	0.00	0.78	7.41
Total	0.00	23.08	0.00	23.08	0.00	28.10	0.01	28.11	0.00	17.53	0.27	17.80	0.00	1.51	1.51	5.56	7.07	0.53	12.09	88.68
Carbon Monoxide Emissions																				
Run Exh	0.00	160.72	0.01	160.73	0.00	184.29	0.06	184.35	0.00	93.04	2.57	95.61	0.00	7.45	7.45	30.59	38.04	4.22	64.24	547.19
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77	0.07	1.84	0.00	0.44	0.44	4.10	4.54	0.00	0.00	6.39
Start Ex	0.00	34.30	0.00	34.30	0.00	37.00	0.00	37.00	0.00	36.91	0.00	36.91	0.00	10.72	10.72	0.00	10.72	0.45	6.71	126.08
Total Ex	0.00	195.02	0.01	195.03	0.00	221.29	0.06	221.35	0.00	131.72	2.64	134.37	0.00	18.61	18.61	34.69	53.30	4.67	70.94	679.66
Oxides of Nitrogen Emissions																				
Run Exh	0.00	9.97	0.01	9.98	0.00	13.30	0.16	13.46	0.00	8.22	5.54	13.77	0.00	1.50	1.50	54.04	55.54	6.95	3.05	102.75
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.21	0.23	0.00	0.00	0.00	16.65	16.65	0.00	0.00	16.88
Start Ex	0.00	2.16	0.00	2.16	0.00	2.96	0.00	2.96	0.00	12.31	0.00	12.31	0.00	1.78	1.78	0.00	1.78	0.08	0.22	19.51
Total Ex	0.00	12.12	0.01	12.14	0.00	16.26	0.16	16.42	0.00	20.55	5.76	26.31	0.00	3.29	3.29	70.69	73.98	7.03	3.27	139.15
Carbon Dioxide Emissions (000)																				
Run Exh	0.00	100.59	0.00	100.59	0.00	82.73	0.04	82.77	0.00	47.78	1.88	49.66	0.00	2.36	2.36	39.33	41.69	1.61	0.50	276.83
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.08	0.00	0.02	0.02	0.91	0.93	0.00	0.00	1.01
Start Ex	0.00	3.17	0.00	3.17	0.00	2.40	0.00	2.40	0.00	1.55	0.00	1.55	0.00	0.06	0.06	0.00	0.06	0.00	0.03	7.21
Total Ex	0.00	103.76	0.00	103.76	0.00	85.13	0.04	85.17	0.00	49.39	1.89	51.29	0.00	2.43	2.43	40.24	42.67	1.62	0.53	285.04
PM2.5 Emissions																				
Run Exh	0.00	3.00	0.00	3.00	0.00	4.38	0.00	4.38	0.00	1.88	0.07	1.95	0.00	0.02	0.02	2.66	2.68	0.12	0.04	12.17
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.03
Start Ex	0.00	0.28	0.00	0.28	0.00	0.35	0.00	0.35	0.00	0.17	0.00	0.17	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.80
Total Ex	0.00	3.27	0.00	3.28	0.00	4.73	0.00	4.73	0.00	2.05	0.07	2.12	0.00	0.03	0.03	2.69	2.71	0.12	0.05	13.01
TireWear	0.00	0.48	0.00	0.48	0.00	0.31	0.00	0.31	0.00	0.14	0.01	0.16	0.00	0.01	0.01	0.16	0.17	0.00	0.00	1.13
BrakeWr	0.00	1.30	0.00	1.30	0.00	0.84	0.00	0.84	0.00	0.36	0.02	0.38	0.00	0.02	0.02	0.22	0.24	0.00	0.01	2.78
Total	0.00	5.06	0.00	5.06	0.00	5.88	0.01	5.89	0.00	2.55	0.10	2.65	0.00	0.06	0.06	3.07	3.12	0.13	0.06	16.91
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	1.00	0.00	1.00	0.00	0.82	0.00	0.82	0.00	0.48	0.02	0.49	0.00	0.02	0.02	0.38	0.41	0.02	0.01	2.74
Fuel Consumption (000 gallons)																				
Gasoline	0.00	10655.47	0.00	10655.47	0.00	8753.58	0.00	8753.58	0.00	5079.73	0.00	5079.73	0.00	252.23	252.23	0.00	252.23	29.34	69.00	24839.35
Diesel	0.00	0.00	0.30	0.30	0.00	0.00	3.38	3.38	0.00	0.00	170.52	170.52	0.00	0.00	0.00	3621.84	3621.84	120.19	0.00	3916.23

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

Table E-21
2030 Winter Planning Emissions in Tons per Day
in the South Coast Air Basin

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
													Gasoline Trucks			Diesel	Total HD	Urban	Motor-	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0.	6648800.	480.	6649280.	0.	3982650.	4098.	3986750.	0.	1662560.	75115.	1737670.	0.	161513.	161513.	198818.	360331.	7569.	342013.	13083600.
VMT/1000	0.	219670.	9.	219678.	0.	141909.	99.	142008.	0.	60363.	3296.	63659.	0.	3132.	3132.	20611.	23743.	830.	2614.	452533.
Trips	0.	41103600.	2273.	41105800.	0.	24300400.	19458.	24319900.	0.	16365800.	938690.	17304500.	0.	1429760.	1429760.	3455160.	4884910.	30277.	683957.	88329300.
Reactive Organic Gas Emissions																				
Run Exh	0.00	2.51	0.00	2.51	0.00	3.07	0.01	3.08	0.00	1.75	0.26	2.02	0.00	0.20	0.20	4.63	4.83	0.45	7.83	20.72
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.01	0.29	0.00	0.07	0.07	1.07	1.14	0.00	0.00	1.43
Start Ex	0.00	2.79	0.00	2.79	0.00	3.11	0.00	3.11	0.00	3.51	0.00	3.51	0.00	0.80	0.80	0.00	0.80	0.04	1.55	11.80
Total Ex	0.00	5.30	0.00	5.30	0.00	6.18	0.01	6.19	0.00	5.54	0.27	5.81	0.00	1.07	1.07	5.69	6.76	0.49	9.38	33.94
Diurnal	0.00	1.66	0.00	1.66	0.00	1.82	0.00	1.82	0.00	0.77	0.00	0.77	0.00	0.01	0.01	0.00	0.01	0.00	0.91	5.17
Hot Soak	0.00	4.22	0.00	4.22	0.00	3.79	0.00	3.79	0.00	1.79	0.00	1.79	0.00	0.04	0.04	0.00	0.04	0.00	0.33	10.17
Running	0.00	10.79	0.00	10.79	0.00	15.34	0.00	15.34	0.00	9.55	0.00	9.55	0.00	0.52	0.52	0.00	0.52	0.04	1.02	37.26
Resting	0.00	1.46	0.00	1.46	0.00	1.77	0.00	1.77	0.00	0.76	0.00	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.32	4.32
Total	0.00	23.42	0.00	23.42	0.00	28.91	0.01	28.92	0.00	18.42	0.27	18.69	0.00	1.65	1.65	5.69	7.34	0.54	11.96	90.87
Carbon Monoxide Emissions																				
Run Exh	0.00	136.91	0.01	136.92	0.00	157.87	0.06	157.94	0.00	80.17	2.57	82.74	0.00	7.25	7.25	30.59	37.84	4.15	67.55	487.14
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77	0.07	1.84	0.00	0.44	0.44	7.37	7.81	0.00	0.00	9.65
Start Ex	0.00	46.42	0.00	46.42	0.00	50.05	0.00	50.05	0.00	48.96	0.00	48.96	0.00	13.47	13.47	0.00	13.47	0.54	7.83	167.26
Total Ex	0.00	183.33	0.01	183.33	0.00	207.92	0.06	207.99	0.00	130.90	2.64	133.55	0.00	21.15	21.15	37.96	59.11	4.69	75.38	664.05
Oxides of Nitrogen Emissions																				
Run Exh	0.00	11.46	0.02	11.48	0.00	15.34	0.17	15.52	0.00	9.50	5.89	15.39	0.00	1.76	1.76	57.66	59.43	7.51	3.58	112.90
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.21	0.23	0.00	0.00	0.00	15.40	15.40	0.00	0.00	15.63
Start Ex	0.00	2.37	0.00	2.37	0.00	3.25	0.00	3.25	0.00	12.93	0.00	12.93	0.00	1.87	1.87	0.00	1.87	0.08	0.23	20.73
Total Ex	0.00	13.83	0.02	13.85	0.00	18.59	0.17	18.76	0.00	22.45	6.10	28.55	0.00	3.64	3.64	73.06	76.69	7.60	3.81	149.26
Carbon Dioxide Emissions (000)																				
Run Exh	0.00	91.45	0.00	91.46	0.00	75.47	0.04	75.51	0.00	44.27	1.88	46.16	0.00	2.36	2.36	39.33	41.69	1.61	0.50	256.92
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.08	0.00	0.02	0.02	0.80	0.82	0.00	0.00	0.90
Start Ex	0.00	3.17	0.00	3.17	0.00	2.40	0.00	2.40	0.00	1.55	0.00	1.55	0.00	0.06	0.06	0.00	0.06	0.00	0.03	7.21
Total Ex	0.00	94.62	0.00	94.62	0.00	77.87	0.04	77.90	0.00	45.89	1.89	47.78	0.00	2.43	2.43	40.13	42.57	1.62	0.53	265.03
PM2.5 Emissions																				
Run Exh	0.00	3.00	0.00	3.00	0.00	4.38	0.00	4.38	0.00	1.88	0.07	1.95	0.00	0.02	0.02	2.66	2.68	0.12	0.04	12.17
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.04
Start Ex	0.00	0.28	0.00	0.28	0.00	0.35	0.00	0.35	0.00	0.17	0.00	0.17	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.80
Total Ex	0.00	3.27	0.00	3.28	0.00	4.73	0.00	4.73	0.00	2.05	0.07	2.12	0.00	0.03	0.03	2.69	2.72	0.12	0.05	13.01
TireWear	0.00	0.48	0.00	0.48	0.00	0.31	0.00	0.31	0.00	0.14	0.01	0.16	0.00	0.01	0.01	0.16	0.17	0.00	0.00	1.13
BrakeWr	0.00	1.30	0.00	1.30	0.00	0.84	0.00	0.84	0.00	0.36	0.02	0.38	0.00	0.02	0.02	0.22	0.24	0.00	0.01	2.78
Total	0.00	5.06	0.00	5.06	0.00	5.88	0.01	5.89	0.00	2.55	0.10	2.65	0.00	0.06	0.06	3.08	3.13	0.13	0.06	16.92
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.91	0.00	0.91	0.00	0.75	0.00	0.75	0.00	0.44	0.02	0.46	0.00	0.02	0.02	0.38	0.41	0.02	0.01	2.55
Fuel Consumption (000 gallons)																				
Gasoline	0.00	9718.36	0.00	9718.36	0.00	8007.65	0.00	8007.65	0.00	4721.01	0.00	4721.01	0.00	252.67	252.67	0.00	252.67	29.34	69.84	22798.88
Diesel	0.00	0.00	0.30	0.30	0.00	0.00	3.38	3.38	0.00	0.00	170.52	170.52	0.00	0.00	0.00	3612.08	3612.08	120.19	0.00	3906.48

* Emissions are from the EMFAC2007V2.3. Emission adjustments beyond the EMFAC are not included.

ATTACHMENT F

FINAL 2007 AQMP APPENDIX III

EMISSIONS FROM DIESEL COMBUSTION BY MAJOR SOURCE CATEGORY

TABLE F-1
2002 Baseline Diesel Emissions (Tons/Day)
in South Coast Air Basin

MSC		Annual Average Inventory						Planning Inventory			
Code	Major Source Category (MSC)	VOC	NOX	CO	SOX	PM10	PM2.5	VOC	NOX	CO	NO2
010	Electric Utilities	0.132	0.000	0.359	0.025	0.115	0.114	0.132	0.000	0.359	0.000
030	Oil and Gas Production (Combustion)	0.005	0.000	0.036	0.017	0.118	0.117	0.005	0.000	0.036	0.000
050	Manufacturing and Industrial	0.064	0.361	0.177	0.013	0.057	0.056	0.077	0.484	0.212	0.484
052	Food and Agricultural Processing	0.104	1.553	0.339	0.023	0.107	0.104	0.104	1.554	0.340	1.554
060	Service and Commercial	0.120	1.320	0.472	0.034	0.090	0.089	0.131	1.448	0.509	1.448
099	Other (Fuel Combustion)	0.756	6.060	2.150	0.003	0.275	0.255	0.845	6.789	1.921	5.440
310	Oil and Gas Production	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
320	Petroleum Refining	0.020	0.000	0.000	0.000	0.000	0.000	0.020	0.000	0.000	0.000
330	Petroleum Marketing	0.005	0.000	0.000	0.000	0.002	0.002	0.005	0.000	0.000	0.000
610	Residential Fuel Combustion	0.000	0.075	0.010	0.013	0.009	0.009	0.000	0.075	0.010	0.075
710	Light Duty Passenger	0.192	1.315	0.810	0.027	0.163	0.150	0.192	1.313	0.810	1.403
722	Light Duty Trucks-1 (up to 3750 lb.)	0.121	2.229	0.918	0.042	0.089	0.082	0.121	2.225	0.918	2.373
723	Light Duty Trucks-2 (3751 to 5750 lb.)	0.035	0.381	0.202	0.008	0.028	0.026	0.035	0.381	0.202	0.406
724	Medium Duty Trucks (5751-8500 lb.)	0.016	0.276	0.121	0.005	0.011	0.010	0.016	0.276	0.121	0.295
742	Light Heavy Duty Diesel Trucks-1 (8501-10000 lb.)	0.017	0.635	0.079	0.004	0.009	0.008	0.017	0.636	0.079	0.675
743	Light Heavy Duty Diesel Trucks-2 (10001-14000 lb.)	0.188	8.371	0.829	0.043	0.062	0.057	0.188	8.386	0.829	8.890
744	Medium Heavy Duty Diesel Trucks (14001-33000 lb.)	1.069	71.088	10.152	0.572	1.486	1.367	1.069	71.062	10.152	75.933
746	Heavy Heavy Duty Diesel Trucks (>33001 lb.)	12.033	147.842	49.218	1.006	8.280	7.617	11.970	148.071	50.441	156.760
760	Heavy Duty Diesel Urban Buses	0.415	12.860	2.652	0.125	0.220	0.203	0.415	12.833	2.652	13.725
770	School Buses	0.084	4.015	0.788	0.036	0.133	0.122	0.084	4.011	0.788	4.254
776	Other Buses	0.031	2.367	0.305	0.019	0.049	0.045	0.031	2.367	0.305	2.531
780	Motor Homes	0.006	0.880	0.060	0.007	0.013	0.012	0.006	0.881	0.060	0.941
820	Trains	2.515	37.911	6.305	1.244	0.920	0.842	2.515	37.911	6.305	37.911
830	Ships and Commercial Boats	2.976	57.635	7.334	23.291	4.035	3.879	2.976	57.635	7.334	57.635
840	Recreational Boats	0.198	0.671	0.298	0.004	0.017	0.016	0.323	1.095	0.110	0.248
860	Commercial/Industrial Mobile Equipment	32.820	201.408	103.356	1.190	12.598	11.591	32.864	201.578	103.366	201.226
870	Farm Equipment	1.402	8.415	3.858	0.057	0.520	0.479	1.709	10.259	3.013	6.570
	RECLAIM		1.330		0.085				1.366		1.366
	Total Diesel	**55.322**	**568.997**	**190.827**	**27.893**	**29.404**	**27.249**	**55.850**	**572.634**	**190.870**	**582.141**

Note:
(1) No adjustment for Large spark-ignited engines (LSI) adjustment in 2002.
(2) Emission from line items (NSR/Set-Aside) not included.
(3) Mobile source emission adjustments not included.
(4) Ships and Commercial Boats included Residual Oil.

TABLE F-2
2010 Baseline Diesel Emissions (Tons/Day)
in South Coast Air Basin

MSC		Annual Average Inventory						Planning Inventory			
Code	Major Source Category (MSC)	VOC	NOX	CO	SOX	PM10	PM2.5	VOC	NOX	CO	NO2
010	Electric Utilities	0.101	0.000	0.275	0.001	0.079	0.078	0.101	0.000	0.275	0.000
030	Oil and Gas Production (Combustion)	0.005	0.000	0.036	0.001	0.106	0.105	0.005	0.000	0.036	0.000
050	Manufacturing and Industrial	0.078	0.143	0.215	0.001	0.062	0.062	0.095	0.187	0.260	0.187
052	Food and Agricultural Processing	0.033	0.484	0.114	0.001	0.030	0.029	0.033	0.484	0.115	0.484
060	Service and Commercial	0.128	0.403	0.492	0.002	0.089	0.088	0.142	0.445	0.535	0.445
099	Other (Fuel Combustion)	0.509	4.445	1.459	0.000	0.183	0.169	0.570	4.965	1.309	3.955
310	Oil and Gas Production	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
320	Petroleum Refining	0.019	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000
330	Petroleum Marketing	0.005	0.000	0.000	0.000	0.001	0.001	0.005	0.000	0.000	0.000
610	Residential Fuel Combustion	0.000	0.082	0.011	0.001	0.009	0.009	0.000	0.082	0.011	0.082
710	Light Duty Passenger	0.055	0.439	0.265	0.001	0.043	0.040	0.055	0.438	0.265	0.468
722	Light Duty Trucks-1 (up to 3750 lb.)	0.064	1.281	0.520	0.003	0.043	0.040	0.064	1.278	0.520	1.363
723	Light Duty Trucks-2 (3751 to 5750 lb.)	0.013	0.153	0.079	0.000	0.009	0.009	0.013	0.153	0.079	0.163
724	Medium Duty Trucks (5751-8500 lb.)	0.009	0.181	0.075	0.000	0.006	0.005	0.009	0.181	0.075	0.193
742	Light Heavy Duty Diesel Trucks-1 (8501-10000 lb.)	0.193	8.101	1.247	0.008	0.052	0.048	0.193	8.114	1.247	8.598
743	Light Heavy Duty Diesel Trucks-2 (10001-14000 lb.)	0.189	6.715	0.988	0.005	0.047	0.043	0.189	6.726	0.988	7.128
744	Medium Heavy Duty Diesel Trucks (14001-33000 lb.)	0.936	45.005	9.681	0.074	1.153	1.061	0.936	44.986	9.681	48.048
746	Heavy Heavy Duty Diesel Trucks (>33001 lb.)	11.200	135.293	45.218	0.155	6.400	5.888	11.146	135.637	46.618	143.133
760	Heavy Duty Diesel Urban Buses	0.365	10.454	2.232	0.014	0.178	0.163	0.365	10.435	2.232	11.162
770	School Buses	0.106	3.833	1.000	0.005	0.141	0.130	0.106	3.830	1.000	4.058
776	Other Buses	0.034	1.854	0.372	0.004	0.046	0.042	0.034	1.854	0.372	1.980
780	Motor Homes	0.009	1.048	0.100	0.002	0.017	0.016	0.009	1.048	0.100	1.120
820	Trains	2.448	19.686	7.329	0.150	0.840	0.769	2.448	19.686	7.329	19.686
830	Ships and Commercial Boats	3.112	75.618	9.360	18.412	3.665	3.530	3.112	75.618	9.360	75.618
840	Recreational Boats	0.286	0.977	0.430	0.001	0.025	0.023	0.466	1.593	0.159	0.361
860	Commercial/Industrial Mobile Equipment	21.943	152.443	105.120	0.151	8.882	8.173	21.970	152.306	105.145	152.574
870	Farm Equipment	0.912	5.989	3.025	0.006	0.358	0.330	1.112	7.301	2.362	4.676
	RECLAIM		0.752		0.088				0.772		0.772
	Total Diesel	**42.751**	**475.376**	**189.642**	**19.088**	**22.464**	**20.851**	**43.197**	**478.119**	**190.072**	**486.254**

Note:
(1) Large spark-ignited engines (LSI) adjustment not reflected.
(2) Emission from line items (NSR/Set-Aside) not included.
(3) Ships and Commercial Boats included Residual Oil.

TABLE F-3
2014 Baseline Diesel Emissions (Tons/Day)
in South Coast Air Basin

MSC		Annual Average Inventory						Planning Inventory			
Code	Major Source Category (MSC)	VOC	NOX	CO	SOX	PM10	PM2.5	VOC	NOX	CO	NO2
010	Electric Utilities	0.105	0.000	0.285	0.002	0.082	0.081	0.105	0.000	0.285	0.000
030	Oil and Gas Production (Combustion)	0.005	0.000	0.036	0.001	0.106	0.105	0.005	0.000	0.036	0.000
050	Manufacturing and Industrial	0.082	0.152	0.227	0.001	0.065	0.065	0.100	0.198	0.274	0.198
052	Food and Agricultural Processing	0.026	0.385	0.091	0.001	0.024	0.023	0.026	0.385	0.092	0.385
060	Service and Commercial	0.133	0.418	0.513	0.003	0.094	0.093	0.147	0.462	0.559	0.462
099	Other (Fuel Combustion)	0.407	3.776	1.226	0.000	0.149	0.138	0.456	4.219	1.103	3.364
310	Oil and Gas Production	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
320	Petroleum Refining	0.019	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000
330	Petroleum Marketing	0.005	0.000	0.000	0.000	0.001	0.001	0.006	0.000	0.000	0.000
610	Residential Fuel Combustion	0.000	0.086	0.012	0.001	0.009	0.009	0.000	0.086	0.012	0.086
710	Light Duty Passenger	0.029	0.244	0.147	0.001	0.022	0.021	0.029	0.244	0.147	0.261
722	Light Duty Trucks-1 (up to 3750 lb.)	0.045	0.892	0.373	0.002	0.030	0.028	0.045	0.890	0.373	0.949
723	Light Duty Trucks-2 (3751 to 5750 lb.)	0.008	0.101	0.052	0.000	0.005	0.005	0.008	0.101	0.052	0.107
724	Medium Duty Trucks (5751-8500 lb.)	0.007	0.137	0.058	0.000	0.004	0.004	0.007	0.137	0.058	0.146
742	Light Heavy Duty Diesel Trucks-1 (8501-10000 lb.)	0.195	6.514	1.360	0.009	0.049	0.045	0.195	6.526	1.360	6.912
743	Light Heavy Duty Diesel Trucks-2 (10001-14000 lb.)	0.173	5.177	0.989	0.006	0.040	0.037	0.173	5.185	0.989	5.493
744	Medium Heavy Duty Diesel Trucks (14001-33000 lb.)	0.843	31.607	9.302	0.079	1.004	0.923	0.843	31.595	9.302	33.725
746	Heavy Heavy Duty Diesel Trucks (>33001 lb.)	8.865	101.991	38.053	0.186	4.711	4.334	8.814	102.359	39.539	107.493
760	Heavy Duty Diesel Urban Buses	0.347	9.720	2.110	0.014	0.168	0.155	0.347	9.703	2.110	10.378
770	School Buses	0.120	3.814	1.136	0.005	0.151	0.139	0.120	3.812	1.136	4.037
776	Other Buses	0.032	1.253	0.379	0.005	0.040	0.037	0.032	1.253	0.379	1.337
780	Motor Homes	0.009	0.870	0.099	0.002	0.015	0.014	0.009	0.870	0.099	0.929
820	Trains	2.500	22.753	7.989	0.020	0.844	0.773	2.500	22.753	7.989	22.753
830	Ships and Commercial Boats	3.105	83.012	10.237	21.844	3.995	3.862	3.105	83.012	10.237	83.012
840	Recreational Boats	0.323	1.104	0.485	0.001	0.028	0.026	0.526	1.800	0.179	0.407
860	Commercial/Industrial Mobile Equipment	16.920	121.173	120.063	0.162	6.297	5.794	16.934	121.040	120.109	121.308
870	Farm Equipment	0.643	4.522	2.724	0.006	0.256	0.235	0.784	5.513	2.127	3.531
	RECLAIM		0.738		0.092				0.759		0.759
	Total Diesel	**34.944**	**400.436**	**197.945**	**22.441**	**18.191**	**16.947**	**35.334**	**402.898**	**198.545**	**408.031**

Note:
(1) Large spark-ignited engines (LSI) adjustment not reflected.
(2) Emission from line items (NSR/Set-Aside) not included.
(3) Ships and Commercial Boats included Residual Oil.

TABLE F-4
2020 Baseline Diesel Emissions (Tons/Day)
in South Coast Air Basin

MSC		Annual Average Inventory						Planning Inventory			
Code	Major Source Category (MSC)	VOC	NOX	CO	SOX	PM10	PM2.5	VOC	NOX	CO	NO2
010	Electric Utilities	0.116	0.000	0.314	0.002	0.091	0.090	0.116	0.000	0.314	0.000
030	Oil and Gas Production (Combustion)	0.005	0.000	0.036	0.001	0.106	0.105	0.005	0.000	0.036	0.000
050	Manufacturing and Industrial	0.088	0.167	0.244	0.001	0.070	0.070	0.107	0.217	0.296	0.217
052	Food and Agricultural Processing	0.019	0.268	0.064	0.001	0.017	0.016	0.019	0.268	0.064	0.268
060	Service and Commercial	0.141	0.439	0.542	0.003	0.099	0.099	0.156	0.488	0.592	0.488
099	Other (Fuel Combustion)	0.294	3.010	0.988	0.000	0.100	0.093	0.330	3.365	0.893	2.686
310	Oil and Gas Production	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
320	Petroleum Refining	0.019	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000
330	Petroleum Marketing	0.005	0.000	0.000	0.000	0.001	0.001	0.006	0.000	0.000	0.000
610	Residential Fuel Combustion	0.000	0.093	0.013	0.001	0.010	0.010	0.000	0.093	0.013	0.093
710	Light Duty Passenger	0.009	0.093	0.054	0.000	0.007	0.007	0.009	0.093	0.054	0.100
722	Light Duty Trucks-1 (up to 3750 lb.)	0.024	0.465	0.203	0.001	0.016	0.015	0.024	0.464	0.203	0.495
723	Light Duty Trucks-2 (3751 to 5750 lb.)	0.003	0.047	0.023	0.000	0.002	0.002	0.003	0.046	0.023	0.050
724	Medium Duty Trucks (5751-8500 lb.)	0.004	0.079	0.034	0.000	0.002	0.002	0.004	0.078	0.034	0.084
742	Light Heavy Duty Diesel Trucks-1 (8501-10000 lb.)	0.185	4.809	1.493	0.009	0.047	0.043	0.185	4.817	1.493	5.101
743	Light Heavy Duty Diesel Trucks-2 (10001-14000 lb.)	0.141	3.433	0.985	0.006	0.033	0.031	0.141	3.438	0.985	3.641
744	Medium Heavy Duty Diesel Trucks (14001-33000 lb.)	0.706	17.990	8.736	0.084	0.831	0.764	0.706	17.982	8.736	19.175
746	Heavy Heavy Duty Diesel Trucks (>33001 lb.)	5.780	62.366	28.174	0.223	2.744	2.524	5.734	62.755	29.744	65.179
760	Heavy Duty Diesel Urban Buses	0.301	7.807	1.786	0.013	0.147	0.135	0.301	7.794	1.786	8.337
770	School Buses	0.140	3.663	1.329	0.006	0.166	0.152	0.140	3.662	1.329	3.876
776	Other Buses	0.033	0.811	0.426	0.005	0.039	0.036	0.033	0.811	0.426	0.864
780	Motor Homes	0.008	0.640	0.095	0.002	0.013	0.012	0.008	0.640	0.095	0.684
820	Trains	2.599	25.816	9.195	0.024	0.874	0.800	2.599	25.816	9.195	25.816
830	Ships and Commercial Boats	3.437	100.120	11.966	28.597	4.840	4.694	3.437	100.120	11.966	100.120
840	Recreational Boats	0.387	1.324	0.581	0.001	0.035	0.032	0.631	2.159	0.215	0.489
860	Commercial/Industrial Mobile Equipment	12.276	79.172	139.578	0.178	3.155	2.904	12.250	79.192	139.675	79.153
870	Farm Equipment	0.364	2.693	2.475	0.006	0.129	0.119	0.444	3.282	1.932	2.102
	RECLAIM		0.738		0.092				0.759		0.759
	Total Diesel	**27.083**	**316.042**	**209.334**	**29.255**	**13.573**	**12.754**	**27.406**	**318.337**	**210.099**	**319.774**

Note:
(1) Large spark-ignited engines (LSI) adjustment not reflected.
(2) Emission from line items (NSR/Set-Aside) not included.
(3) Ships and Commercial Boats included Residual Oil.

TABLE F-5
2023 Baseline Diesel Emissions (Tons/Day)
in South Coast Air Basin

MSC		Annual Average Inventory						Planning Inventory			
Code	Major Source Category (MSC)	VOC	NOX	CO	SOX	PM10	PM2.5	VOC	NOX	CO	NO2
010	Electric Utilities	0.116	0.000	0.314	0.002	0.091	0.090	0.116	0.000	0.314	0.000
030	Oil and Gas Production (Combustion)	0.005	0.000	0.036	0.001	0.106	0.105	0.005	0.000	0.036	0.000
050	Manufacturing and Industrial	0.092	0.175	0.254	0.001	0.073	0.072	0.112	0.227	0.308	0.227
052	Food and Agricultural Processing	0.016	0.227	0.055	0.001	0.014	0.014	0.016	0.228	0.055	0.228
060	Service and Commercial	0.145	0.451	0.558	0.003	0.103	0.102	0.161	0.501	0.609	0.501
099	Other (Fuel Combustion)	0.295	3.012	0.990	0.000	0.100	0.093	0.331	3.367	0.895	2.689
310	Oil and Gas Production	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
320	Petroleum Refining	0.019	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000
330	Petroleum Marketing	0.005	0.000	0.000	0.000	0.001	0.001	0.006	0.000	0.000	0.000
610	Residential Fuel Combustion	0.000	0.096	0.013	0.001	0.010	0.010	0.000	0.096	0.013	0.096
710	Light Duty Passenger	0.005	0.058	0.032	0.000	0.004	0.004	0.005	0.058	0.032	0.062
722	Light Duty Trucks-1 (up to 3750 lb.)	0.017	0.343	0.148	0.001	0.012	0.011	0.017	0.342	0.148	0.365
723	Light Duty Trucks-2 (3751 to 5750 lb.)	0.002	0.033	0.016	0.000	0.001	0.001	0.002	0.033	0.016	0.035
724	Medium Duty Trucks (5751-8500 lb.)	0.003	0.061	0.026	0.000	0.002	0.002	0.003	0.061	0.026	0.065
742	Light Heavy Duty Diesel Trucks-1 (8501-10000 lb.)	0.177	4.260	1.537	0.010	0.046	0.042	0.177	4.267	1.537	4.517
743	Light Heavy Duty Diesel Trucks-2 (10001-14000 lb.)	0.127	2.909	0.991	0.006	0.031	0.028	0.127	2.914	0.991	3.085
744	Medium Heavy Duty Diesel Trucks (14001-33000 lb.)	0.672	14.411	8.654	0.087	0.788	0.725	0.672	14.405	8.654	15.348
746	Heavy Heavy Duty Diesel Trucks (>33001 lb.)	5.043	55.937	25.882	0.240	2.223	2.045	4.996	56.364	27.547	58.201
760	Heavy Duty Diesel Urban Buses	0.291	7.738	1.755	0.013	0.143	0.131	0.291	7.724	1.755	8.262
770	School Buses	0.149	3.720	1.420	0.006	0.171	0.157	0.149	3.719	1.420	3.935
776	Other Buses	0.033	0.696	0.443	0.005	0.039	0.036	0.033	0.696	0.443	0.741
780	Motor Homes	0.008	0.558	0.096	0.002	0.012	0.011	0.008	0.558	0.096	0.596
820	Trains	2.661	27.627	9.916	0.026	0.892	0.817	2.661	27.627	9.916	27.627
830	Ships and Commercial Boats	3.795	112.407	13.062	32.887	5.451	5.290	3.795	112.407	13.062	112.407
840	Recreational Boats	0.423	1.450	0.636	0.001	0.038	0.035	0.691	2.364	0.235	0.535
860	Commercial/Industrial Mobile Equipment	11.334	66.408	154.006	0.187	2.290	2.107	11.316	66.504	154.123	66.315
870	Farm Equipment	0.289	2.049	2.401	0.006	0.087	0.080	0.353	2.498	1.875	1.600
	RECLAIM		0.738		0.092				0.759		0.759
	Total Diesel	**25.722**	**305.364**	**223.240**	**33.578**	**12.728**	**12.010**	**26.059**	**307.717**	**224.104**	**308.193**

Note:
(1) Large spark-ignited engines (LSI) adjustment not reflected.
(2) Emission from line items (NSR/Set-Aside) not included.
(3) Ships and Commercial Boats included Residual Oil.