

# Directors Handbook 2013

## Table of Contents

- Section #1 District Overview**
- A. Cover Letter 2013
  - B. Mission Statement
  - C. Administrative Rules/By-laws
  - D. District Introduction
  - E. Specific Goals 2012/13
  - F. Board of Directors List 2013
  - G. District Staff List 2013
  - H. District Organizational Chart
  - I. Meetings Calendar 2013
- Section #2 Financial**
- A. Fiscal Year 2012/13 Budget
  - B. Performance Indicators Data and Charts
  - C. Clean Air Grants Fiscal Summary (2000-2012)
- Section #3 Permitted Facilities as of January 2013**
- A. Permitting Performance
  - B. Permitted Sources Summary
- Section #4 Compliance Performance**
- A. Enforcement Statistics for 2012
- Section #5 Emission Inventory and Air Quality Planning**
- A. Emission Inventory
  - B. Land Use Performance Chart
- Section #6 Planned Resource Allocations for 2013**
- A. Significant Issues
  - B. List of Regulatory Measures
- Section #7 Glossaries**
- Glossary of Air Pollution Terms
  - Glossary of Terms Used in Greenhouse Gas Inventories



January 2013

Placer County Air Pollution Control District Board of Directors:

Your District Staff have prepared this 2013 version of our annual Directors Handbook with updates to relevant performance and workload indicators as well as details related to programs and projects we are engaged in. We have designed this Handbook to be an easy to use reference document that provides most of the details regarding District administration, finances, operations, as well as significant or emerging issues that are impacting or may have a tendency to impact resource allocations. We also continue to include a short District Introduction section that provides an overview of the air pollution control regulatory framework as well as some details about our various air basins and major program areas. Although your Board has experienced minimal turnover for many years, and you are likely familiar with much of the information within the Handbook, I might recommend that you take a few minutes to skim this introduction and accompanying data and refresh your knowledge of the various functions of our District as well as our regulatory relationship with the State Air Resources Board and the Federal Environmental Protection Agency.

Highlights of last year's accomplishments included a formal recognition by EPA of our regions' attainment of the 1-hour Federal Ozone standard, even though that standard had been subsequently replaced by a standard that uses the 8 hour averaging criteria. This was important because there are financial penalties embedded within the Federal Clean Air Act for failing to attain a standard within the specified time frame, and those penalties remained in place even though the averaging time and concentration levels were changed. We also wrapped up work and published the District's CEQA Handbook, which was a multi-year effort that created a resource document for project developers and lead agencies as they consider and work through the process of assessing the air quality impacts of prospective plans and land development projects. In its electronic form, this document has hyperlinks to numerous tools to assist the user (such as a project proponent or their consultants) in their assessment, quantification of impacts, and mitigation options, which should clarify and speed up the environmental review process and potentially reduce project costs. We commenced the development of an Information Technology Strategic Plan (Plan) which will provide a roadmap for enhancing existing and future internal operations through technology based business process improvements. These enhancements will increase efficiencies and reduce operating costs. We expect the implementation phase of the Plan to kick off in the latter half of this year. We also continued in streamlining, consolidating, and updating many District Rules, and asked your Board to rescind over a dozen regulations that were outdated or overcome by other events. Finally, in our on-going efforts to reduce the energy use of our District office building and our "carbon footprint", and having

already realized substantial benefits from earlier on site improvements which are yielding better than expected reductions in our monthly facility operating and maintenance costs, your Board approved the installation of a 30 KW photovoltaic system that should further reduce our grid supplied electrical energy consumption by about 50%, with a return on investment of approximately 10 years. Details of focused efforts for this year, as well as our on-going general program responsibilities can be found in the 2012-2013 Section Specific Goals as well as the 2013 Significant Issues portions of this Handbook. As always, should you or any staff or constituents of your individual jurisdictions need assistance or have questions on issues related to air quality, please feel free to let me know.

Regards,

A handwritten signature in blue ink that reads "Thomas J. Christofk". The signature is written in a cursive style with a large, stylized initial "T".

Thomas J. Christofk

Air Pollution Control Officer

# The Placer County Air Pollution Control District

## What we are all about...

*Our vision is to achieve and maintain clean air standards throughout Placer County*



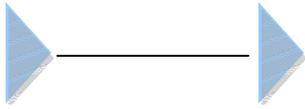
*We strive towards this end by managing the County's air quality in a manner to protect and promote public health by controlling and seeking reductions of air pollutants while recognizing and considering the economical and environmental impacts*



*We do this by focusing on eight specific goals and applying our resources toward accomplishing their associated objectives*



- ▶ 1. **Regulate air pollutant emissions from stationary sources**
  - a. Evaluate emissions, potential emissions, and establish permit limitations consistent with District rules and regulations and applicable air pollution control laws
  - b. Develop and maintain a vigilant inspection program to ensure compliance of permitted terms and conditions
  - c. Provide guidance on implementation of rules and regulations to regulated sources
  - d. Establish partnerships with industry by providing both a technical and personal level of service to promote innovative reductions of emissions
  - e. Adopt such rules and regulations as are necessary to further the goals of the District and to meet state and federal mandates
- ▶ 2. **Seek quantitative reductions in amounts of air pollutants being released within the County**
  - a. Identify and regulate new sources of emissions
  - b. Alleviate toxic and nuisance emission impacts upon the public
  - c. Provide economic incentives for emission reductions
  - d. Deter emission violations through the enforcement of District rules, and air pollution control laws
  - e. Increase resources applied to mitigation measures
  - f. Provide public education about sources, effects, and methods of reduction
  - g. Modify and/or incorporate new rules and regulations as appropriate to obtain reductions suited for the County
- ▶ 3. **Respond to and investigate non-compliant events and sources of emissions in an efficient manner**
  - a. Initiate measures to allow sources to gain compliance by providing quality service within acceptable limits
  - b. Establish a hierarchical enforcement system that yields appropriate sanctions based on severity, frequency, and quantity of pollution
  - c. Partner with other agencies when feasible to assist in field response and inspections/investigations
- ▶ 4. **Mitigate effects of growth through quality planning measures**
  - a. Maintain and enhance a data and information collection system regarding emission inventory and air shed properties throughout the basins
  - b. Prepare and update air quality plans to effectively maintain or achieve attainment of air quality standards through measures best suited for the County
  - c. Review development plans for impacts on air quality and work toward mitigating those impacts through programs that reduce emissions
  - d. Develop and implement initiatives to address the growth of the County with respect to maintaining and improving air quality



5. *Pool resources with other agencies, districts, and jurisdictions*
  - a. Partner with local municipalities in areas of mutual interest and where mandates cross jurisdictional boundaries
  - b. Form strategic alliances with other air districts and agencies as appropriate to develop technical resources and gain needed assistance
  - c. Contract out for services/program management to areas where the cost/benefit of doing such is favorable



6. *Market and promote the positive impacts the District is making on the air quality in the County*
7. *Reduce mobile source emissions through collaborative efforts with planning and transportation entities*
  - a. Support zero emission, alternative, and renewable fuels technologies, and accompanying infrastructure, including waste to energy and biomass to energy initiatives, as well as cleaner burning fossil fuels.
  - b. Assist in the implementation/funding of Transportation Control Measures (TCMs) called for in Air Quality Plans



8. *Improve District business processes and internal operations so as to provide cost effective and quality service to the citizens and industry of Placer County.*

**ADOPTED BY THE DISTRICT BOARD APRIL 13, 2000**

**ADMINISTRATIVE RULES AND REGULATIONS**

**PLACER COUNTY**

**AIR POLLUTION CONTROL DISTRICT BOARD**

**ARTICLE I**

**BOARD MEMBERS**

**Section 1.1 Name**

**The name shall be the Placer County Air Pollution Control District Board of Directors.**

**Section 1.2 Composition**

**The membership of the Board shall be composed of nine members: three (3) members who are Placer County Supervisors and six (6) members who are Mayors or City Council Members of cities incorporated within the County.**

**Section 1.3 Appointment of Membership**

**The Placer County Board of Supervisors shall appoint the three County Supervisor Members. Each city shall select its own representative. Alternates to the County Supervisor Members may be appointed by the Placer County Board of Supervisors, and shall be County Supervisors. Alternates for a City Member may be appointed by the City Council of the city represented by the City Member and must be a Mayor or City Council Member of said city.**

**Section 1.4 Terms of Office**

**The term served by the Board of Directors shall be concurrent with their official term of office or as new appointments are made by the respective appointing authority of Section 1.3.**

## ARTICLE II

### OFFICERS

#### Section 2.1 Designation of Chairperson and Vice Chairperson

**Section 2.1.1** The Chairperson and the Vice Chairperson shall serve a one-year term starting with the first regularly scheduled meeting of the calendar year. The position of the Chairperson and Vice chairperson shall be rotated annually among the members in the following order, starting in 2005:

Auburn  
Colfax  
Placer County Seat 1  
Lincoln  
Loomis  
Placer County seat 2  
Rocklin  
Roseville  
Placer County Seat 3

**Section 2.1.2** The Vice Chairperson shall be the representative of the member jurisdiction next in line for Chairperson.

**Section 2.1.3** If the incoming Chairperson is a new member of the Board who has not sat on the board for at least one year, the Vice Chair shall become the Chairperson for the coming year and the new member of the board shall sit as Vice Chair. When this circumstance arises, the subsequent annual rotation shall continue with the jurisdiction that follows the two entities involved in the switching of the Chairperson position.

**Section 2.1.4** If the incoming Chairperson and Vice Chair are both new members of the Board who have not sat on the board for at least one year, then the Board shall vote on who the Chairperson shall be for the upcoming year at the first meeting of the year as the first order of business, and the previous year's Chairperson (or the new representative for that jurisdiction) shall preside over the meeting until the vote for Chairperson has taken place. The Vice Chair shall be the representative from the jurisdiction that was due to hold the Chairperson position. When this circumstance arises, the subsequent annual rotation shall continue with the Vice Chair becoming the Chairperson the next year.

**Section 2.2 Clerk of the Board**

**The Clerk of the Board shall be appointed by the Air Pollution Control Officer with the consent of the Chairperson.**

**Section 2.3 Removal and Vacancies**

**The Board may remove the Chairperson or the Vice Chairperson at anytime upon the affirmative vote of six (6) members of the Board. A vacancy in an office shall be filled by the next member in order of rotation.**

**Section 2.4 Rights of the Presiding Officer**

**The Chairperson, Vice Chairperson or the Board, or such other members as may be presiding, shall not be deprived of the rights and privileges of a member by reason of his or her occupying the chair and may move, second, and debate from the chair subject only to such limitations of debate.**

**Section 2.5 Chairperson Duties**

**The Chairperson shall preside and preserve order at all regular and special meetings of the Board. The Chairperson shall state every question coming before the Board and announce the decision of the Board on all subjects. The Chairperson shall also decide all questions of order without debate, subject, however, to a request by any Board member.**

**Section 2.6 Vice Chairperson Duties**

**In the absence of the Chairperson, the Vice Chairperson may perform the duties and obligations of the office of Chairperson.**

**Section 2.7 Temporary Chairperson**

**In the absence of the Chairperson and the Vice Chairperson, the next member in rotation shall serve as Chairperson.**

## ARTICLE III

### MEETINGS

#### Section 3.1 Regular Meetings

Meetings of the Board shall be held, as needed, on the second Thursday of alternating months (even numbered months), at 2:30 PM, in the Placer County Board of Supervisors Chambers, 175 Fulweiler Avenue, Auburn, California. If any such meeting date shall fall on a holiday, such meeting, which, was scheduled to be held on such holiday, shall be held on a date set by the Board at a regularly scheduled meeting preceding such holiday. Such regular meetings may be adjourned from day to day, or to any day prior to the next regular meeting day until the business before the Board is finished. The cancellation of a meeting or changes in the time or location of a regularly scheduled meeting shall be made in the required notice of the meeting in the agenda, and shall be posted at the Placer County Board of Supervisors Chambers, 175 Fulweiler Avenue, Auburn California, the regular meeting location, at least 72 hours prior to the regular meeting time or the changed meeting time whichever is earlier.

#### Section 3.2 Special Meetings

Special Meetings may be called by the Chairperson, or upon the written request of fifty percent (50%) of the members, and when a special meeting is so requested, said meeting shall be called and held within sixty (60) days after receipt of such written request.

#### Section 3.3 Notices

The Air Pollution Control Officer is responsible for ensuring that legal notice of meetings of the Board and legal notice of proposed Board actions are made.

#### Section 3.4 Compensation of Board Members

Members or alternate members of the Board shall be entitled to receive: \$100.00 per meeting attended on the behalf of the District with a maximum limit on compensation for twelve (12) meetings per fiscal year; mileage reimbursement at the current rate as assigned by the Placer County Auditor's Office for personal automobile travel between home and the location of each meeting; and actual and necessary expenses incidental to the proper execution of their duties and responsibilities.

### **Section 3.5 Worker's Compensation Insurance**

**Members or alternate members of any Placer County Air Pollution Control District Board or Committee, and any volunteers acting on behalf of or for the Placer County Air Pollution Control District shall be provided Workers Compensation Insurance coverage while acting within the course and scope of their activities with the Placer County Air Pollution Control District.**

**ARTICLE IV**  
**CONDUCT OF BUSINESS**

**Section 4.1 Session**

**All meetings shall be conducted by the Chairperson (or the Vice Chairperson in the absence of the Chairperson), who shall take the chair at the appointed hour for the meeting and shall call the Board to order. In the absence of the Chairperson and the Vice Chairperson, the Air Pollution Control Officer shall call the Board to order, whereupon the next member in rotation shall serve as Chairperson. Upon the arrival of the Chairperson or Vice Chairperson, the temporary Chairperson shall relinquish the chair upon conclusion of the item before the Board.**

**Section 4.2 Order of Business**

**At regular meetings of the Board, the following shall be the order of business:**

- 1. Roll Call**
- 2. Approval of Minutes from the previous meeting of the Board**
- 3. Public Comment**
- 4. Agenda of the Board**
- 5. Adjournment**

**Section 4.3 Voting**

**1. Manner of Voting**

**On all matters acted upon by the Board that are not unanimous, the voting shall be on roll call, the yes and noes, and the members present but abstaining from voting shall be entered upon the minutes of the meeting.**

**2. Vote Required**

**At any meeting where a vote is taken, a quorum must be present unless otherwise required by law. All actions of the Board shall require an affirmative vote of at least a majority of the members present.**

#### **Section 4.4 Minutes**

**The Clerk of the Board shall attend all meetings of the Board, and shall record in the minutes the time and place of meetings of the Board, the names of members present, the names of persons giving testimony or comment, all official acts of the Board, the votes given by members and shall cause the minutes to be written up forthwith and presented for approval or amendment at the next regular meeting.**

#### **Section 4.5 Quorum**

**A majority of the Board Members shall constitute a quorum, and no business may be conducted unless a quorum is present. Whenever a quorum is not present, the meeting shall be postponed or adjourned to a subsequent time and place as determined by the Chairperson.**

#### **Section 4.6 Agenda**

**The Agenda shall be prepared by the Clerk of the Board for each meeting of the Board, and an abstract of all matters requiring action shall be set forth therein.**

#### **Section 4.7 Robert's Rules of Order**

**Unless otherwise provided by these Rules, all proceedings before the Board shall be conducted with and pursuant to the Parliamentary Rules of Procedure, as prescribed in "Robert's Rules of Order", provided that in the event of a conflict, such rules shall be superceded by these bylaws, any resolution of the board, and any applicable law.**

#### **Section 4.8 Ralph M. Brown Act**

**Board meetings shall be conducted in the manner prescribed by the Ralph M. Brown Act (Chapter 9, commencing with Section 54950, Part 1, Division 2, Title 5 of the California Government Code).**

#### **Section 4.9 Amendment of Rules of the Board**

**Except as otherwise provided by law, any Administrative Rule set forth herein may be amended, or repealed, at any time, by a two-thirds (2/3) vote of the Board (i.e. the affirmative vote of 6 Board members); provided that any such amendment on Appeal shall not affect any pending matter.**

## **ARTICLE V**

### **DISTRICT BUSINESS PRACTICE**

#### **Section 5.1 Purchasing Policy**

**The Board shall adopt a purchasing policy manual that can be amended from time to time by a majority vote of the Board.**

# **PLACER COUNTY AIR POLLUTION CONTROL DISTRICT**

## **BOARD OF DIRECTORS**

### **DISTRICT INTRODUCTION**

**2013**

This introduction has been prepared for the Placer County Air Pollution Control District Board of Directors. It is intended to provide information in a summary format and to introduce members to air pollution and the regulatory environment that has been created to control it.

The information provided is separated into these sections:

- **District Mission**
- **Governance and Authority (Local/State/Federal)**
- **Overview of Emission Sources**
- **Air Basins in Placer County**
- **Areas Not Meeting Air Quality Standards**
- **District Structure**
  - Directors
  - Hearing Board
  - District Staff
  - District Organization
- **Program Overview**

## DISTRICT INTRODUCTION

- **District Mission**

The mission of the Placer County Air Pollution Control District is to manage the county's air quality in a manner to protect and promote public health by controlling and seeking reductions of air pollutants while recognizing and considering the economic and environmental impacts. District Staff seek to accomplish this mission by focusing on eight specific goals and a number of enabling objectives. The District Board of Directors adopted the Mission Statement with accompanying goals and objectives on April 13, 2000, and District resources and operations have been, and continue to be, aligned towards accomplishing these goals and objectives.

- **Governance and Authority (Local/ State/ Federal)**

The Placer County Air Pollution Control District (District) is one of 35 local air pollution control agencies established by counties pursuant to Section 40002 of the California Health & Safety Code (HSC). The District has primary responsibility for the control of air pollution generated from stationary and area-wide sources. Mobile sources are the responsibility of the California Air Resources Board (ARB). The United States Environmental Protection Agency (EPA) sets limits on how much of a pollutant can be in the air anywhere in the United States. This ensures that all Americans have in place the same basic health and environmental protections. Areas are designated in "attainment" or in "non-attainment" of the federal standards. The Federal Clean Air Act allows individual states to establish their own pollution controls, however, they are required to be more stringent than those set for the whole country. The law recognizes that it makes sense for states to take the lead in

carrying out the Clean Air Act because pollution control problems often require special understanding of local industries, geography, transportation patterns, etc. States that have non-attainment areas are required to develop state implementation plans (SIPs) that explain how it will do its job under the Clean Air Act. A state implementation plan is a collection of the regulations a state will use in order to improve air quality and to attain the federal standards. The states must involve the public, through hearings and opportunities to comment, in the development of each state implementation plan. California also has a Clean Air Act statute that mandates the development of air quality plans and the implementation of strategies to improve air quality, as well as air quality standards that are in addition to the federal standards and which are more stringent than the federal standards.

EPA must approve each SIP, and if a SIP isn't acceptable the EPA can take over enforcing the Clean Air Act in that state. The United States government, through EPA, assists the states by providing scientific research, expert studies, engineering designs and some funding to support clean air programs.

Local air districts (like the Placer County Air Pollution Control District), are charged with the enforcement of local air pollution control rules that have been adopted by each district's Board of Directors, the State's non-vehicular air pollution laws, and certain federal air pollution laws that have been delegated to states and local agencies. The primary authority of local air districts is in the regulation and control of air pollution created by industrial sources and businesses. Local air districts also regulate open burning, respond to odor and dust complaints, and encourage the reduction of emissions in areas that are not regulated directly, such as from vehicles. Districts are responsible for preparing,

adopting, and implementing the air quality plans that seek to achieve and maintain state and federal air quality standards, or to regain attainment of standards that have been exceeded. These plans may be proposed as revisions to the SIP as means to meet federal air quality standards or to meet state requirements. In some cases the strategies contained in these plans can only be implemented by the local jurisdictions with land use authority. In addition, local air districts usually act as a commenting agency under the California Environmental Quality Act (CEQA) with respect to land use projects unless the project requires a permit from the district, in which case the district may become a responsible agency or a lead agency.

The Placer County Air Pollution Control District is a “county” district with its jurisdiction within the boundaries of the County of Placer. In comparison with other county air districts, this District is medium in size with respect to budget and staffing. More urbanized county districts can be much larger than Placer’s District, while there are a number of small rural county air districts with only one or two staff persons. There are a number of large unified air pollution control districts and air quality management agencies (multi-county), such as the Bay Area Metropolitan Air Quality Management District, the South Coast Air Quality Management District, and the San Joaquin Unified Air Pollution Control District

The District receives technical and program development assistance from the Air Resources Board (ARB), which also has a consultation and oversight role with respect to the local air districts.

- **Overview of Emission Sources**

Air pollution comes from many different sources: stationary sources such as factories,

power plants, and boilers; smaller area sources such as dry cleaners, gas stations, degreasing operations and paints/consumer products; mobile sources such as cars, buses, planes, trucks, and trains; and naturally occurring sources such as windblown dust, fires, volcanic eruptions, and vegetation. Emissions from human related sources are referred to as anthropogenic, while natural occurring emissions are either biogenic (related to vegetation) or geogenic (related to soils/dust). Air quality can be affected in many ways by the pollution emitted from these sources. These pollution sources may emit many different types of pollutants. The EPA has classified as “criteria pollutants” the six principal pollutants which are: Ozone; Particulate Matter; Carbon Monoxide; Sulfur Dioxide; Nitrogen Dioxide; and Lead. The two pollutants for which Placer County does not meet the federal air quality standards are ozone and particulate matter (PM).

Ozone is a secondary pollutant which is not directly emitted from any source; it is formed by photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NOx) in the atmosphere. ROG and NOx are called ozone precursors. In this region, excluding the naturally occurring (biogenic/geogenic) sources, the current estimates are that there are about 264 tons per day of ozone precursors in the emission “inventory” with about 72% from mobile sources and 28% from stationary and area sources. For the PM standard, the EPA classified all of Sacramento County and portions of Placer, El Dorado, and Yolo Counties be designated as non-attainment for fine particulate matter which is less than 2.5 microns in size (PM2.5), although Placer County may be on the verge of attaining the PM2.5 standard in 2013.

In addition to criteria pollutants, the control of air contaminants is increasingly focused on

toxic emissions (such as carcinogens) that may be an acute or a chronic health hazard. New tools to assess air quality impacts of new toxic emission sources to foster improved land use decision-making are being developed.

- **Air Basins in Placer County**

Air Basins: The District is unique in the state in that it is the only one that includes portions of three different air basins.

- The **Sacramento Valley Air Basin** is shared with eight (8) other air districts: Butte County AQMD, Colusa County APCD, Feather River AQMD (Sutter and Yuba Counties), Glenn County APCD, Sacramento Metropolitan AQMD, Shasta County APCD, Tehama County APCD, and Yolo-Solano AQMD.

By statute (HSC 40900) there is the continued existence of a basinwide air pollution control council. The Sacramento Valley Basinwide Air Pollution Control Council is comprised of elected officials representing their respective air district in the basin. The purpose of the Council is to foster cooperation among the air districts. The Council's activities are primarily focused on the rice straw burning smoke management program, Northern Sacramento Valley air quality attainment plans, and other cooperative efforts. The APCOs (Air Pollution Control Officers) and staff of the air districts serve the Council in an advisory capacity on a Technical Advisory Committee.

- The **Mountain Counties Air Basin** is shared with six (6) other air districts which are wholly or partially within the Mountain Counties Air Basin: Amador County APCD, Calaveras County APCD, El Dorado County APCD, Mariposa County APCD, Northern Sierra AQMD

(Nevada, Plumas, and Sierra Counties), and Tuolumne County APCD.

In the same manner as for the Sacramento Valley Air Basin, the Mountain Counties Basinwide Air Pollution Control Council is comprised of elected officials representing their respective air district in the basin. Again, the purpose of the Council is to foster cooperation among the air districts. The Mountain Counties Basinwide Control Council's activities are primarily focused on forest management and prescribed burning issues and increasingly on air quality attainment plan development and other cooperative efforts. The APCO's and staff of the air districts serve the Council in an advisory capacity on a Technical Advisory Committee.

- The California portion of the **Lake Tahoe Air Basin** is shared between Placer County APCD and El Dorado County APCD. Within this air basin, with the exceptions of permitting stationary sources and complaint response, most air quality issues are addressed by the Tahoe Regional Planning Agency (TRPA). TRPA was formed through a bi-state compact between the States of California and Nevada. Because this basin includes a portion of the State of Nevada and only the two California air districts there is not a "Basin Air Pollution Control Council" for this air basin, although the Placer and El Dorado County Districts cooperate with each other.

- **Areas Not Meeting Air Quality Standards**

Placer County is currently designated as non-attainment for the 2008 Federal 8-hour ozone ambient air quality standard (0.075ppm) (with a severe designation based on the final designation published by the EPA on May 21, 2012) in both the Sacramento Valley and

Mountain Counties Air Basins which are part of the broader Sacramento Federal Ozone Nonattainment Area (SFONA). The SFONA includes the Sacramento Valley and the Mountain Counties Air Basin portions of Placer County, all of Sacramento County, and portions of El Dorado, Sutter, and Yolo Counties.

Placer County was also designated as non-attainment for the 2006 Federal 24-hour PM<sub>2.5</sub> Ambient Air Quality Standard (35 µg/m<sup>3</sup>) in the Sacramento Valley Air Basin along with all of Sacramento County and portions of El Dorado, and Yolo Counties. Because of regional collaborative efforts, on October 16, 2012, the EPA proposed to re-designate the Sacramento Area as attainment for the 2006 PM<sub>2.5</sub> 24-hr standard based on the data finding from 2009 to 2011. EPA will finalize this proposed attainment determination for the region after the public review period is concluded. In addition to the federal standards, Placer County is in non-attainment of the State standards for ozone and PM<sub>10</sub> in the Sacramento Valley Air Basin, the Mountain Counties Air Basin, and the Lake Tahoe Air Basin portions of the District.

- **District Structure**

- Board of Directors

- The District's governing board of Directors is composed of nine elected officials. Each local jurisdiction in the county has continuous representation on the Board. Three seats are held by members of the County Board of Supervisors (by appointment). Each of the six incorporated municipalities appoints a member of their city council. The District's Board appoints the Air Pollution Control Officer and provides policy and fiscal direction for the District.

- Hearing Board

- The District Hearing Board is a statutory body appointed by the District Board of Directors as a whole to hear petitions for variances or modifications from air pollution rules or permit conditions, including the denial, approval, or revocation of a permit, and orders for abatement (per HSC 40801). The Hearing Board is composed of five members, each with three-year terms: one lawyer; one registered engineer; two public-at-large members; and one medical professional. An alternate having the same qualifications may be appointed for each member. The professional affiliation requirements specified in state law may be waived if the District Board is unable to find a person having the required qualifications who is willing and able to serve. The Placer County Air Pollution Control District Hearing Board is convened on an as-needed basis.

- District Staff

- District staff members are Placer County employees working for the Placer County Air Pollution Control District as ex officio employees and officers.

As provided for by State law (HSC 40750), the head of each local air district has the title of Air Pollution Control Officer (APCO). On matters of District business, the APCO receives direction from and reports directly to the District Board; District staff other than the APCO receives their direction from and report to the District Board through the APCO. The District has entered into a Memorandum of Understanding (MOU) with Placer County. The MOU clarifies the relationship between the District, District Staff, and the APCO, with regard to county policies which are to be followed and the role of the APCO and District

Board, as the governing board of the District, vs. the County Executive Officer (CEO) and County Board of Supervisors. Additionally, on personnel related issues, including employee rights, privileges, and responsibilities, District staff generally receive their direction from and report to the APCO, but have access on these issues to any other appropriate county personnel or entity.

At the request of the CEO, the APCO will provide administrative or other support to the CEO on issues related to the county provided services, facilities, policies, or staff. Should the District enter into an agreement with any municipality for the provision of services, facilities, or staff, then at the request of a City Manager, the APCO will provide administrative or other support to the City Manager on issues related to the services, facilities or staff provided.

○ District Organization

The District is organized into four operating sections, each led by a supervisor. Each section has specific functional responsibilities, as described below:

▪ Compliance & Enforcement Section-

The Compliance and Enforcement Section is responsible for District permitted source inspections and complaint investigations to ensure compliance with regulations and permits; after-hours and weekend complaint response; fire agency support; alleviating air quality public nuisance problems through education, intervention, and enforcement actions as necessary; initiating enforcement actions for violations of permits, rules, regulations, and air quality laws; and

resolving violations through the mutual settlement process, District Attorney involvement, or litigation; assisting in the development of District rules implementing required emission control measures; and the assessment of rule compliance Air Quality Plans and federal/state requirements and standards.

▪ Permitting & Engineering Section-

The Permitting & Engineering Section is responsible for permitting stationary sources of emissions in accordance with applicable State and federal laws and District regulations; identifying and permitting new sources of pollution; permitting assistance and response to business inquiries; emission assessment and health assessment for toxic emission sources, administering the Emission Reduction Credit banking program; assisting in the development of rules; administering variances, permitting data management; maintenance of permitted source files; development of project air quality mitigation sign-offs; and the dispatching of field inspectors to complaints.

▪ Air Quality Planning & Monitoring Section-

The Air Quality Planning and Monitoring Section is responsible for developing regional planning documents to attain state and federal ambient air quality standards; ensuring compliance with federal conformity requirements; developing emission inventories; developing rules implementing emission control measures for adoption; assisting in the development of land use plans;

reviewing environmental documents submitted by lead agencies for compliance with the California Environmental Quality Act; preparing environmental documents when the District is the lead agency; inspecting new development to verify that mitigation measures were implemented; administering the Clean Air Grant and Offsite Mitigation Programs; management of open burning programs; providing public outreach and information; operating air monitoring equipment at six existing locations, developing additional monitoring sites; and submitting air monitoring data to the State and federal governments.

▪ **Administrative Services Section-**

The Administrative Services Section is responsible for providing administrative support to the APCO, staff and Board of Directors, including: the Clerk of the Board functions; preparation of Board information and action items; tracking, filing, and archiving of documents along with the development and implementation of a document management system; all fiscal matters - including budget preparation, internal controls, payroll, accounts receivable and payable, purchasing, and cost accounting/cost allocation; scheduling for staff; oversight of network computers and office equipment; database management; development of administrative rules, procedures, and policies; contract administration; permit revenue administration and coordination; maintenance and control of personnel files and coordination of personnel training; customer service and assistance in complaint

registration/intake; and overall office management functions. For the District's office building, Administrative Services personnel are also in charge of monitoring contracted services, utility services, building maintenance, consumable supplies, and the costs of operation.

• **Program Overview**

To achieve its Mission, District operations are structured into major program areas, for which the direct management and operational responsibility is delegated to the sections described above. The major programs can be summarized as:

- Stationary Source Permitting and Inspections
- Opening Burning
- Air Quality Planning
- Land Use Planning
- Air Toxics Assessment and Control
- Air Monitoring
- Enforcement
- Complaint Response
- Public Education and Incentives

## Placer County Air Pollution Control District Fiscal Year 2012-2013 Section Goals

### Permitting and Engineering Section:

### Mission Goal/Objective

The Permitting and Engineering Section has the primary responsibility of permitting stationary sources of emissions in accordance with applicable state and federal laws and District regulations. Specific responsibilities of the Section include:

- Evaluation of new Authority to Construct applications and annually review Permits to Operate prior to renewal. 1(a), 1(c), 1(d)
- Supporting the Hearing Board’s consideration of Variances and Abatement Orders. 2(a), 2(d), 3(a), 3(b)
- Administering the Emission Reduction Credit (ERCs) banking program by issuing ERCs and tracking in a Registry. 1(a), 2(c)
- Implementing the AB 2588 Hot Spots program and evaluation of airborne toxic emissions from new and modified facilities. 2(a), 2(b)
- Preparation and review of annual information requests sent to stationary sources to gather information used to calculate emissions and determine compliance. 1(a), 1(b), 4(a)
- Conducting comparison of state and federal control measure guidelines to adopted District rules and emission sources in order to demonstrate compliance or rule deficiencies that will need to be corrected through new future rules or rule amendments. 1(a), 1(e), 2(g)
- Reviewing state and federal regulations for applicability to District emission sources that would need to be regulated. 1(a), 1(e), 2(g)
- Assisting in regulation compliance education and response to business inquiries and public information requests about sources. 1(c), 2(f), 3(a)
- Identifying business operations that should be permitted by the District through a permitting outreach effort, or “Harvest” program, in conjunction with Compliance and Enforcement Section staff. 1(a), 1(b), 1(c), 2(d), 2(f), 3(a), 3(b)

In addition to the section general functions noted above, specific tasks to be completed in the 2012-2013 fiscal year are:

- Document Handling System Support: Testing and review of the document processing system in cooperation with the Administrative Services Section to manage documents by scanning them and linking to the database for easy access. 5(c), 8
- Air Toxics: Continue a review of stationary sources for compliance with AB 2588 “Air Toxics Hot Spots” program requirements and develop a Toxics Program Plan to guide future work in this area. Update the toxic emission inventory for reporting to CARB. 2(a), 2(b)
- California Environmental Quality Act (CEQA) Requirements for Permitting: Implementation of CEQA compliance procedures, such as ministerial permit evaluation procedures, and CEQA checklists, with the 1(a), 8

- assistance of the Planning and Monitoring Section.
- Rule 206, Incinerator Burning: Amend to address startup temperatures in the primary chamber of a crematory and work with EPA to gain SIP approval. 1(e)
- Annual Information Requests: Improve the creation and handling of the annual information requests sent to sources, automating the creation of the throughput request letters, and evaluating throughput requests made through e-mail and the submittal of throughput information via on-line reporting. 1(b), 4(a)
- Emission Data Review: In cooperation with the Planning and Monitoring Section, develop a review process for throughput data where the data is only entered into a database once for both emission fees, compliance, and emission inventory purposes, and where emissions are recalculated for Emission Inventory sources, including Major Sources and Synthetic Minor Sources, and sources that have been modified or that reported significant increases in throughput. 1(b), 4(a), 8

**Planning & Monitoring Section:**

**Mission  
Goal/Objective**

The Planning and Monitoring Section is responsible for air quality planning that is required to guide local emission reduction efforts and to demonstrate that these efforts satisfy state and federal planning requirements. The Section also conducts assessments of land use projects with respect to their impact on air quality. The air quality planning effort, and the determination of whether state and local emission control measures have been successful, is verified by the air monitors that measure ambient air quality in the District. The Section is also responsible for preparing inventories of emissions in the District, regulating open burning and burning from wood-fired appliances, and managing the Clean Air Grant Program. Specific activities of the Section include:

- Working with Federal, State, and the other local agencies to develop regional planning documents to attain State and Federal ambient air quality standards. 4(b), 4(d), 5(a), 5(b)
- Ensuring compliance with federal conformity requirements. 7(b)
- Developing emission inventories and new or amended rules and regulations for adoption. 1(e), 2(g), 4(a), 4(b)
- Assisting in the development of land use plans, such as specific and general plans. 4(c), 5(a), 7(b)
- Reviewing environmental documents submitted by lead agencies in compliance with the California Environmental Quality Act (CEQA). 4(c), 5(a), 7(b)
- Preparing environmental documents when the District is the lead agency. 2(a), 2(g), 4(c)
- Inspecting new development projects to verify mitigation measures were implemented. 1(b), 4(c), 4(d)
- Administering the Clean Air Grant and Offsite Mitigation Programs. 1(d), 2(c), 2(e), 4(c), 4(d), 5(a), 7
- Providing public outreach and information. 1(c), 2(f)
- Operating air monitoring equipment at three existing locations and developing additional air monitoring sites. 4(a), 8

- Submitting air monitoring data to the State and Federal governments. 4(a), 8
- Overseeing the District burn program to minimize smoke impacts, including residential burning, rice burning, and forest management prescribed burning – through smoke management plan approval, permitting, burn project authorization, and burn day declarations. 1(a), 1(b), 2(f), 5(b)

In addition to the section functions noted above, specific tasks to be completed during the 2012-2013 fiscal year are:

- Air Quality Plans for the Federal and State Standards: Work with CARB and other local air districts in Sacramento federal nonattainment area to prepare two regional air quality plans which will demonstrate the regional efforts to attain and maintain the attainment status for the federal 24-hour PM<sub>2.5</sub> and 1-hour ozone standards, respectively. In addition to the plans for federal standards, Staff will prepare a triennial progress report (2008-2011) to assess the progress made towards attaining the state air quality standards in Placer County. 1(a), 1(e), 2(f), 2(g), 4(a), 4(b), 4(d), 5(b)
- Emission Inventory Reconciliation and Enhancement: Review and reconcile the emission inventory data for criteria pollutants and air toxics emitted from the facilities and area-wide sources in the County to produce more accurate baseline emissions data for future rule development and regional air quality planning work. 4(a), 8
- Emission Data Review: Staff will assist the Permitting and Engineering Section to develop a review process for throughput data where the data is only entered into a database once for both emission fees, compliance, and emission inventory purposes, and where emissions are recalculated for sources, including major and synthetic minor sources, and sources that have been modified or that reported significant increase in throughput. 1(b), 4(a), 8
- Air Monitoring Improvements: Improve the existing monitoring stations operation and monitoring data reporting managed by the District. The improvement includes developing internal protocols for field operations, laboratory operations, and data handling procedures to enhance the data quality assurance and the ability for providing air monitoring data instantly to officials and public. 4(a), 8
- CEQA Handbook: Continue the development of the District CEQA Guide/Handbook for facilitating the evaluation and review of air quality impacts for land use development projects in the County. The first draft was released in November 2011 to the lead agencies for review and comment. Staff is preparing the second version of the Handbook based on the comments received; it will include the upgraded CalEEMod model when it is available. 4(c), 4(d), 5(a), 5(b), 8
- Regional CEQA GHG Thresholds: Continue working with the other local air districts within the Sacramento area to develop CEQA GHG thresholds of significance for land use development projects. The anticipated product would be a guideline to provide a recommendation to the lead agencies on way to determine the level of the land use project's related GHG impacts and to identify the appropriate mitigation measures to offset the project's impacts within the project's environmental documents. 4(b), 4(c), 4(d), 5(b)

- Land Use Project Tracking Database: Work to develop a land use tracking database which could be integrated into the existing District permitting database in the future to support the District’s CEQA review program to track the land development related documents including comments and recommended mitigation measures and to monitor the project’s status and the implementation of mitigation measures. 4(c), 8
- Outreach to Jurisdictions: Outreach to City and County jurisdictions to address a number of District regulatory issues, including naturally-occurring asbestos and dust control for development, wood-fired appliance requirements, District permit requirements, and statutory mandates upon building departments with regard to hazardous materials storage and emission sources near schools – through a supplemental questionnaire and the provision of informational resources. 1(a), 1(b), 1(c), 2(d), 2(f), 3(a), 3(c), 5(a), 8
- District Sustainable Initiatives Webpage: Work to design a webpage regarding the “sustainable initiatives” which will integrate the information from the existing District programs and the tools/programs developed by the other agencies or organizations to promote the energy efficiency, renewable fuel usage, transportation improvement, land use and green building initiatives design. 2(f), 6, 8

**Compliance and Enforcement Section:**

**Mission  
Goal/Objective**

The Compliance and Enforcement Section is responsible for ensuring compliance with permit conditions, District rules and regulations, and applicable state and federal air pollution laws through investigations and on-site inspections, and, if violations are found, pursuing enforcement actions. Specific responsibilities of the Section include:

- Inspection of permitted and unpermitted stationary sources of air pollution (i.e. facilities) for compliance with applicable rules and regulations, including the inspection of Portable Equipment that is registered with the state. 1(a), 1(b), 1(c), 2(a), 2(b), 2(d), 3(a), 3(b), 3(c)
- Inspection of new home construction in the unincorporated areas of Placer County for compliance with land use mitigation conditions on wood burning appliances. 1(c), 4(c), 3(c)
- Investigation and resolution of air pollution complaints from the public regarding odors or air pollutant emissions from any source, including smoke from burning and dust from construction and other activities. 1(a), 1(b), 2(a), 2(b), 2(d), 2(f), 3(a), 3(b), 3(c)
- Review and observation of source tests, monitoring data, and reports, for compliance with applicable rules and regulations. 1(a), 1(b)
- Issuing Notices of Violation or Corrective Action Notices. 2(d), 3(a), 3(b)
- Resolving enforcement cases for violations of District, state, and federal air pollution laws and regulations through mutual civil settlement, orders of abatement through the District’s Hearing Board, or by referral of the case to the Placer County District Attorney’s Office or the State Attorney General’s Office. 3(b)
- Education of the public and permitted sources on air pollution rules and regulations. 1(c), 2(f)

- Assistance with control measure and rule development. 1(e), 2(g), 4(b)

Additional tasks to be accomplished or to be moved significantly further toward completion in Fiscal Year 2012-13 include:

- Inspections: Evaluate, and work toward implementing automated procedures to improve field investigation and source inspection efficiency – including the in-field use of portable electronic devices that communicate with the District database, enhancements to reduce data entry duplication, and use of source-specific checklists and violation notices that are electronically compatible with the District database. Establish a program for sample evidence collection, tracking, and analysis. Expand staff knowledge and inspection capabilities, including that for gas dispensing facilities and odor nuisance response. 1(a), 1(b), 2(a), 2(b), 2(d), 2(f), 8
- Enforcement Settlement: Use Small Claims Court to efficiently settle violation enforcement cases that are not resolved through Mutual Settlement. Streamline the issuance, tracking, and processing of violation notices. Develop a monetary penalty assessment structure and/or schedule to assist in the establishment of consistent and defensible fines for enforcement case settlement. 3(b), 3(c), 8
- Greenhouse Gases: Provide greenhouse gas emissions verification services for the CARB Mandatory Reporting Rule. Emission Offset Projects, and Cap and Trade programs. 2(a), 3(b), 4(a), 4(b), 4(c), 5(b)
- Biomass: Continue to advance and support forest management projects that reduce air pollution through: utilization of waste biomass for energy as an alternative to open burning; hazardous fuel reduction thinning and defensible space clearing; and the development of tools that quantify and provide monetary value to emission reductions. 1(a), 1(c), 1(d), 2(a), 2(c), 2(e), 2(f), 2(g), 5(a), 5(c), 6
- Inter-agency Cooperation: Enhance working relationships with local partner agencies, including County and City building and public works departments, law enforcement, Fire Districts, code enforcement, weights and measures, animal control, and environmental health. 3(c), 5(a), 5(b), 5(c)

**Administrative Services Section:**

**Mission  
Goal/Objective**

The Administrative Services Section is responsible for providing overall administrative services and support for the District. Specific responsibilities of the Section include:

- Preparation of monthly fiscal statements and review for management and Board information. 8
- Clerk of the Board functions including preparation of the Board Meeting Agenda and preparation of the Board Packet that includes information and action items. 8
- Tracking, filing, and archiving of District documents. The conduct of this function is being improved through the implementation of an electronic document handling system (EDHS). 5(c), 8
- Handling of payroll, accounts receivable, accounts payable, purchasing, cost accounting/cost allocation and conducting a bi-annual outside audit. 5(b), 8

- Preparation, oversight, management, and administration of grant and professional services contracts, including inter-agency MOUs. 5(a), 5(b), 5(c), 8
- Assisting the APCO in the preparation of the annual budget and providing the APCO with fiscal status summaries each month and performance statistics for the District each quarter. 8
- Maintenance of the District's networked computers and office equipment, and recommendations for equipment replacement. 5(b), 5(c), 8
- Maintenance and upgrade of the District database program and training of District Staff on the use of this in-house program. 5(b), 5(c), 8
- Overseeing the maintenance of District motor vehicles and their sign-out by staff. 5(b), 5(c), 8
- Maintenance and control of personnel files and training logs (Personnel Liaison). 8
- Facility maintenance and operations for the District offices at 110 Maple Street, Auburn, including management of repairs and scheduled preventive maintenance, and oversight of building related service contracts. 5(c), 8
- Complete office management functions, including answering caller inquiries and directing the public to the proper staff and facilitating all business transactions with the District. 8

In addition to the section functions noted above, specific tasks to be completed within the Fiscal Year 2012-13 are:

- Technology Improvement Program: Management of a multi-branched effort to assess options for the District to better utilize electronic information technology and communications tools, to identify the best process improvement pathways, and to manage program implementation. Among the technology improvement areas are increasing the efficiency of field staff through providing access in the field to permit holder information and improved communications; to provide District clients with on-line access to District permit and billing information and client contact profiles; and to fully implement the electronic document handling system (EDHS), deferred in the prior year. 1(a), 1(b), 3(b), 5(c), 8
- Database Improvements: Continue and complete the improvements identified or started in the prior year, including enhancing the functionality of the existing in-house database program through screen and data reporting improvements, and data accuracy checks. 5(c), 8
- County-district MOU Update: Continue and complete the amendment of the County-District MOU to address recent revisions to the County policies and their organization, as well as changes required by the District to facilitate its operations. In addition, prepare and adopt policies and procedures to ensure internal control and to address areas where the District practices diverge from usual County policies and procedures. 5(b), 8

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| <b>Placer County APCD Board Members List 2013</b> |
|---|

|                             |  |  |
|-----------------------------|--|--|
| <b>Supervisors</b>          | 175 Fulweiler Ave, Auburn CA 95603<br>BOS office phone:<br>BOS Fax   | <a href="mailto:bos@placer.ca.gov">bos@placer.ca.gov</a><br>530-889-4010<br>530-889-4299   |
| District II                 | <b>Weygandt, Robert M.</b><br><a href="mailto:weygandt@placer.ca.gov">weygandt@placer.ca.gov</a>                 |  |
| District III                | <b>Holmes, Jim</b><br><a href="mailto:jholmes@placer.ca.gov">jholmes@placer.ca.gov</a>                           |  |
| District V                  | <b>Montgomery, Jennifer - Chair 2013</b><br><a href="mailto:jenmonten@placer.ca.gov">jenmonten@placer.ca.gov</a> |  |
| <b>City Representatives</b> | <b>Auburn</b>  | <b>Holmes, Mike - Vice Chair 2013</b><br><a href="mailto:njrhs@inreach.com">njrhs@inreach.com</a><br>1225 Lincoln Way, Auburn 95603  |
|                             | <b>Colfax</b>  | <b>Barkle, Donna</b><br>PO Box 702, Colfax 95713   |
|                             | <b>Lincoln</b>   | <b>Nader, Stan</b><br><a href="mailto:stann@gtcinternet.com">stann@gtcinternet.com</a><br>640 5th Street, Lincoln 95648              |
|                             | <b>Loomis</b>  | <b>Ucovich, Miguel (Mike)</b><br><a href="mailto:ucovich@hotmail.com">ucovich@hotmail.com</a><br>3665 Taylor Road, Loomis 95650      |
|                             | <b>Rocklin</b>   | <b>Ruslin, Diana</b><br><a href="mailto:dianaruslin@sbcglobal.net">dianaruslin@sbcglobal.net</a><br>3970 Rocklin road, Rocklin 95677 |
|                             | <b>Roseville</b>   | <b>Garcia, Carol</b><br><a href="mailto:cgarcia@community1bank.com">cgarcia@community1bank.com</a><br>311 Vernon St, Roseville 95678 |



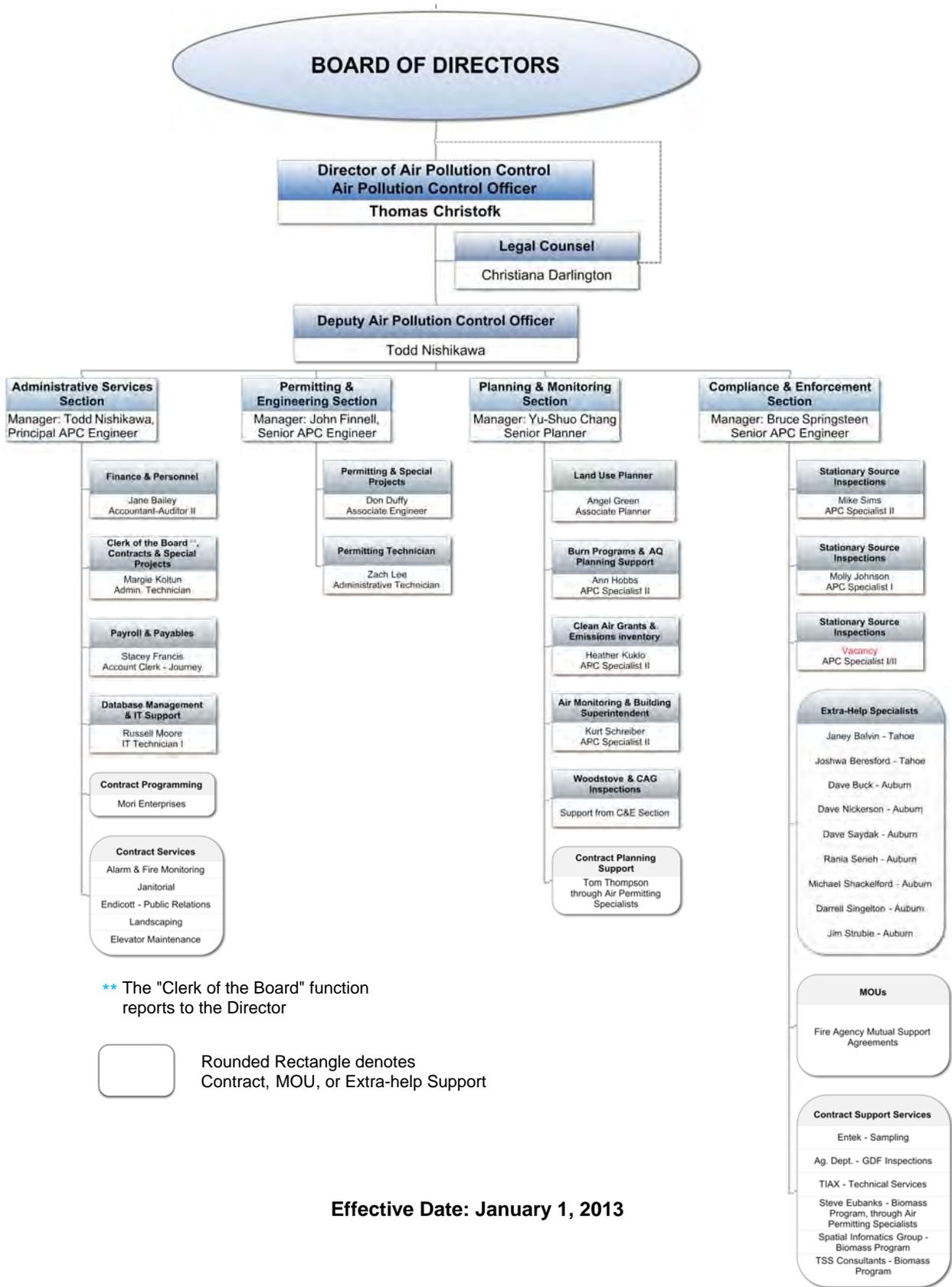
# Placer County Air Pollution Control District

## Staff List 2013

|                            |   |   |
|----------------------------|---|---|
| <b>Thomas J. Christofk</b> | <b>Air Pollution Control Officer</b>                      | <b>Director, Air Pollution Control District</b>                                 |
| <b>Todd Nishikawa</b>      | <b>Principal Air Pollution Control Engineer</b>           | <b>Deputy Air Pollution Control Officer<br/>Administrative Services Manager</b> |
| <b>Jane Bailey</b>         | <b>Accountant-Auditor II</b>                              | <b>Administrative Services - Fiscal Officer</b>                                 |
| <b>Margie Koltun</b>       | <b>Administrative Technician &amp; Clerk of the Board</b> | <b>Administrative Services</b>  |
| <b>Russell Moore</b>       | <b>Information Technology Technician I</b>                | <b>Administrative Services</b>  |
| <b>Stacey Francis</b>      | <b>Account Clerk Journey</b>                              | <b>Administrative Services</b>  |
| <b>Bruce Springsteen</b>   | <b>Senior Air Pollution Control Engineer</b>              | <b>Compliance and Enforcement Manager</b>                                       |
| <b>Mike Sims</b>           | <b>Air Pollution Control Specialist II</b>                | <b>Compliance and Enforcement</b>   |
| <b>Molly Johnson</b>       | <b>Air Pollution Control Specialist II</b>                | <b>Compliance and Enforcement</b>   |
| <b>John Finnell</b>        | <b>Senior Air Pollution Control Engineer</b>              | <b>Engineering and Permitting Manager</b>                                       |
| <b>Don Duffy</b>           | <b>Associate Air Pollution Control Engineer</b>           | <b>Engineering and Permitting</b>   |
| <b>Zach Lee</b>            | <b>Administrative Technician-Permitting</b>               | <b>Engineering and Permitting</b>   |
| <b>Yu-Shuo Chang</b>       | <b>Senior Air Quality Planner</b>                         | <b>Planning and Monitoring Manager</b>  |
| <b>Angel Rinker</b>        | <b>Associate Planner</b>                                  | <b>Planning and Monitoring</b>  |
| <b>Ann Hobbs</b>           | <b>Air Pollution Control Specialist II</b>                | <b>Planning and Monitoring</b>  |
| <b>Heather Kuklo</b>       | <b>Air Pollution Control Specialist II</b>                | <b>Planning and Monitoring</b>  |
| <b>Kurt Schreiber</b>      | <b>Air Pollution Control Specialist II</b>                | <b>Planning and Monitoring</b>  |
| <b>Darrell Singleton</b>   | <b>Air Pollution Control Specialist II</b>                | <b>Extra Help - Compliance and Enforcement</b>                                  |
| <b>Janey Balvin</b>        | <b>Air Pollution Control Specialist I</b>                 | <b>Extra Help - Compliance and Enforcement</b>                                  |
| <b>David Buck</b>          | <b>Air Pollution Control Specialist I</b>                 | <b>Extra Help - Compliance and Enforcement</b>                                  |
| <b>David Nickerson</b>     | <b>Air Pollution Control Specialist I</b>                 | <b>Extra Help - Compliance and Enforcement</b>                                  |
| <b>David Saydak</b>        | <b>Air Pollution Control Specialist I</b>                 | <b>Extra Help - Compliance and Enforcement</b>                                  |
| <b>Jim Struble</b>         | <b>Air Pollution Control Specialist II</b>                | <b>Extra Help - Compliance and Enforcement</b>                                  |
| <b>Joshua Beresford</b>    | <b>Air Pollution Control Specialist I</b>                 | <b>Extra Help - Compliance and Enforcement</b>                                  |
| <b>Michael Shackelford</b> | <b>Air Pollution Control Specialist I</b>                 | <b>Extra Help - Compliance and Enforcement</b>                                  |
| <b>Rania Serieh</b>        | <b>Air Pollution Control Specialist I</b>                 | <b>Extra Help - Compliance and Enforcement</b>                                  |



# Placer County Air Pollution Control District Organization Chart



\*\* The "Clerk of the Board" function reports to the Director

Rounded Rectangle denotes Contract, MOU, or Extra-help Support

**Effective Date: January 1, 2013**





## **Scheduled Board Meetings For 2013**

|                 |                             |
|-----------------|-----------------------------|
| <b>Thursday</b> | <b>February 21, 2013 **</b> |
| <b>Thursday</b> | <b>April 11, 2013</b>       |
| <b>Thursday</b> | <b>June 13, 2013</b>        |
| <b>Thursday</b> | <b>August 8, 2013</b>       |
| <b>Thursday</b> | <b>October 10, 2013</b>     |
| <b>Thursday</b> | <b>December 12, 2013</b>    |

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**Meetings are held at 2:30 PM on the second Thursday  
of even numbered months at the  
Placer County Board of Supervisors Chambers  
175 Fulweiler Ave, Auburn CA 95603  
unless otherwise indicated and noticed \*\***



## BUDGET OVERVIEW

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### Fund Summary:

The District Budget is organized into three separate funds, each with its own revenue and expenditure accounts. The three funds are briefly described below:

- **The Operations Fund** is used for the purpose of conducting the business of the District not covered by the other two funds. The revenue sources for this fund are: permit fees, fines, state subvention, interest derived from these sources, Per Capita Assessment, co-funding of projects/programs from the private sector and administrative fees. Sub-funds to the Operations Funds include:

| <u>Sub Fund Name</u>              | <u>FY 2011-12<br/>Ending</u> | <u>FY 2012-13<br/>Change</u> | <u>FY 2012-13<br/>Ending</u> |
|-----------------------------------|------------------------------|------------------------------|------------------------------|
| Non-Tort Defense Fund             | \$90,000                     | 0                            | \$90,000                     |
| Reserve Fund                      | \$95,000                     | 0                            | \$95,000                     |
| Vehicle Replacement Fund          | \$45,000                     | +\$15,000                    | \$60,000                     |
| Building Capital Maintenance Fund | \$50,000                     | 0                            | \$50,000                     |
| <b>Total</b>                      |                              |                              | <b>\$295,000</b>             |

The Non-Tort Defense Fund is set aside for the legal defense of the District and is currently at \$90,000. The Reserve Fund is a sub-fund for contingencies in case of unforeseen events and was established in the FY 2007-08 budget. The Vehicle Replacement sub-fund has been established by earmarking \$15,000 per year since FY 2009-10 for vehicle replacement. The District may plan to replace two vehicle(s) using this fund in FY 2013-14. The approved budget for FY 2011-12 established a Building Capital Maintenance Fund of \$50,000 for unforeseen major repairs to the newly owned facility at 110 Maple Street in Auburn.

In the beginning of FY 2007-08, the District received litigation settlement (\$2,742,500) and litigation cost recovery (\$700,000) funds from the Sierra Pacific Industries (SPI) case brought by the State Attorney General's Office on behalf of the District and other parties that was set aside in a non-budgeted fund for the District. These funds are held in an interest bearing account and the interest derived from these funds is used for specific projects, programs, and normal operations which are detailed in the approved budget. In the 2010-11 purchase of the new District facility located at 110 Maple Street in Auburn, the Board approved the use of \$1,500,000 of the Settlement Fund for the purpose of purchasing the facility and the use of \$361,500 from the Litigation Cost Recovery Fund for one time facility relocation costs. The Settlement Fund now has a balance of \$1,242,500 and the Litigation Cost Recovery Fund is now at \$338,500. In the Approved Budget for FY 2012-13, the District proposes to pay-back \$50,000 to the Settlement Fund which will bring the total to \$1,292,500.

- **The DMV Fund** is a restricted fund that is to be used to reduce mobile source emissions and to carry out related California Clean Air Act activities, such as: air monitoring, air modeling, emission inventory assessment and identification, control strategies, air quality planning, public information, and direct incentives to reduce mobile source emissions. The DMV Fund has three sources of revenue – DMV (AB 2766 and AB 923) Fees, also referred to as Vehicle Surcharge Fees, and interest derived from these fees.
- **The Mitigation Fund** is a restricted fund that is used only for the purposes described in each individual mitigation plan. The revenue sources for this fund come from mitigation plans approved at the discretion of the Land Use Authorities. Because the District cannot predict which of these plans will be approved nor the amount that will be received, future revenue for this fund is not budgeted.

### Highlights:

The Approved Budget for Fiscal Year 2012-13 (\$4,223,757) reflects a 1.76% decrease over the Final Budget for Fiscal Year 2011-12 (\$4,299,430)<sup>1</sup>. Essentially, this is a very similar budget to that adopted for FY 2011-12.

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<sup>1</sup>The Approved Budget for FY 2011-12 has been revised three times since the original approval. It was revised once to include the EPA 105 grant funding of \$74,866, a second time to increase the funding received from State Subvention - \$5,000 to be used for a PSA

The Approved Budget for FY 2012-13 includes the following concerns and strategies:

- (1) The District has a projected reduction of 1.55% of its usual revenue stream mainly from Interest, Mitigation Fees and Land Use Permits. Because the District budgets conservatively, the District is proposed to reduce costs by at least .67%, while maintaining the core operations necessary to carry out the District's Mission Statement.
- (2) Management will be continuing to evaluate the cost savings of the District owning its own building and the impact of paying back the funds used for the purchase of the building.
- (3) Management will be evaluating the effectiveness of existing programs and projects. The District will be continuing several large programs and projects: the Clean Air Grant Program, the Technology Assessment Program (TAP), and the Biomass Project.
- (4) Management will also be evaluating the future needs of the District in regard to the functionality of the existing Staff. In FY 2012-13, the District proposed to maintain its current allocation of 18 full-time employees. As per past practices and budgets, the District will augment its staffing to fulfill core functions and maintain the level of service demands through the use of service contracts, and extra-help/part-time employees. The use of extra-help employees is necessary to fulfill the commitment to complete projects that are not on-going and therefore do not warrant hiring full-time employees. Use of extra-help and contracted support gives the District the flexibility to quickly respond to economic fluctuations.

The Approved Budget for FY 2012-13 contains the resources for many programs, projects, and enhancements that will allow the District to continue fulfilling its mission (see page 14 of this Approved budget for a list).

- New to the Approved FY 2012-13 budget is the approved pay-back of \$50,000 to the Settlement Fund, the fund from which the purchase of the 110 Maple Street building was derived. This will increase the Settlement Fund to \$1,292,500.
- The Operations and Maintenance budget for the District facility at 110 Maple Street of \$55,759 is \$14,000 less than budgeted for FY 2011-12. Also the District has entered into a lease with a tenant for 876 square feet of the District facility which will generate rental income of approximately \$15,000.
- "Supplies and Services" (commented on in the footnote to the pie chart on page 13 of this Approved budget) includes \$216,513 in contracted services that serve to augment the capabilities of Staff. This is in-keeping with the management philosophy to not increase permanent staff costs to meet one time project needs and to obtain expert consultant services when that is most cost effective. The Approved "17%" for "Supplies and Services" is 1% lower than the amount approved in the FY 2011-12 Budget. In addition to those contracted services, the District contracts with the County for an additional \$385,706 for administrative support, telecommunications and data processing functions for the District.
- Contained in this Approved budget is \$850,000 for "Clean Air Grants (CAGs) and \$60,000 for the Technology Assessment Program (TAP)". The percentage of the Approved budget for CAGs and TAP is 22% and almost the same as was approved in the FY 2011-12 Budget. The District will increase the CAG budget as funds from approved Mitigation Plans become available.
- While the over-all "Salaries and Benefits" decreased by \$115,230, the staff salaries (18 allocated full-time positions) decreased by \$57,600 due mainly to cost savings by retiring personnel and the lower entry level salary cost to fill a vacancy. There was also a decrease of \$57,630 for extra-help (temporary) staff representing a decrease of approximately 1,716 hours.
- This approved budget continues to maintain a healthy balance in the Operations Fund of \$329,083 (the sub-funds to the Operations Fund are included in this total), which is 7.8%<sup>2</sup> of the total Approved Operating Budget for Fiscal Year 2012-13.

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consultant, and a third time to increase the funding of services received from Placer County of \$10,000 from the County's Biomass Utilization Project.

<sup>2</sup> It is recommended by the National Advisory Council on State and Local Budgeting for the Government Finance Officers Association to maintain an ending balance in the operation fund of between 5 and 15% in case of any unforeseeable catastrophic event.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT  
 FY 2012-13 BUDGET SUMMARY COMPARISON  
 CONSOLIDATED FUND SUMMARY

|   | APPROVED<br>CONSOLIDATED<br>BUDGET<br>FY 2011-12 | REVISED<br>CONSOLIDATED<br>BUDGET<br>FY 2011-12 | ACTUAL<br>CONSOLIDATED<br>FUNDS FY 2011-12<br>6/30/2012 | APPROVED<br>CONSOLIDATED<br>BUDGET<br>FY 2012-13 |
|---|--|---|---|--|
| <b>REVENUE:</b>                                   |  |   |   |  |
| Permit Fees                                       | 764,550  | 764,550   | 771,016   | 836,942  |
| Fines/Settlement Funds                            | 35,000   | 35,000  | 58,434  | 35,000 ***                                       |
| Interest  | 120,000  | 120,000   | 65,445  | 70,000   |
| State Subvention                                  | 97,000   | 102,000   | 109,622   | 106,000  |
| Statewide PERP                                    | 43,675   | 43,675  | 43,675  | 43,000   |
| Other Government Assistance                       |  | 84,866  | 94,682  | 74,866   |
| State Vehicle Surcharge Fee (AB2766 & AB923)      | 2,013,000  | 2,013,000                                       | 2,047,782   | 2,040,000  |
| Burn / Land / Other                               | 48,707   | 48,707  | 45,605  | 32,134   |
| Mitigation Fees                                   | 82,107   | 82,107  | 265,725   | -  |
| Per Capita Assessment                             | 176,190  | 176,190   | 176,190   | 177,664  |
| Miscellaneous                                     | 2,700  | 2,700   | 54  | 2,700  |
| From Litigation Cost Recovery Fund                |  |   |   | -  |
| District Facility Rental Income                   | 14,862   | 14,862  | 20,191  | 15,242   |
| From Settlement Fund                              |  |   |   |  |
| Private Sector-Project Participation              |  |   | -   | -  |
| <b>Total Revenue:</b>                             | <b>3,397,792</b>                                 | <b>3,487,657</b>                                | <b>3,698,421</b>  | <b>3,433,549</b>                                 |
| <b>TOTAL FUND CARRY-OVER PREVIOUS FY</b>          | <b>811,773</b>                                   | <b>811,773</b>                                  | <b>811,773</b>  | <b>790,208</b>                                   |
| <b>TOTAL FUNDS AVAILABLE</b>                      | <b>4,209,565</b>                                 | <b>4,299,430</b>                                | <b>4,510,194</b>  | <b>4,223,757</b>                                 |
| <b>EXPENSE:</b>                                   |  |   |   |  |
| Salary & Benefits                                 | 2,246,965  | 2,304,831                                       | 2,199,134   | 2,189,600  |
| Supplies & Services                               | 753,155  | 657,155   | 564,852   | 742,034  |
| Clean Air Grants and TAP                          | 828,000  | 956,000   | 956,000   | 910,000  |
| Building Purchase Payback                         |  |   |   | 50,000 ***                                       |
| Equipment   | -  |   |   | -  |
| <b>Total Expense:</b>                             | <b>3,828,120</b>                                 | <b>3,917,985</b>                                | <b>3,719,985</b>  | <b>3,891,634</b>                                 |
| <b>Ending Fund Balance:</b>                       | <b>381,445</b>                                   | <b>381,445</b>                                  | <b>790,208</b>  | <b>332,123 *</b>                                 |
| <b>Unencumbered (encumbered) Current</b>          |  |   | -   |  |
| <b>TOTAL FUND BALANCE</b>                         | <b>381,445</b>                                   | <b>381,445</b>                                  | <b>790,208</b>  | <b>332,123</b>                                   |
| <b>Encumbered Funds (Funds already committed)</b> | <b>2,025,327</b>                                 | <b>2,025,327</b>                                | <b>1,610,062</b>  | <b>1,610,062 **</b>                              |
| <b>TOTAL FUND BALANCE</b>                         | <b>2,406,772</b>                                 | <b>2,406,772</b>                                | <b>2,400,270</b>  | <b>1,942,185</b>                                 |

\*The "Ending Fund Balance" for the Approved FY 2012-13 budget is the consolidated total for the following fund balances:

|   |           |                |
|---|-----------|----------------|
| Operations Fund                                       | \$        | 34,083         |
| Building - Maintenance Capital Outlay                 |           | 50,000         |
| Vehicle Replacement Fund                              |           | 60,000         |
| Reserve -- sub fund to Operations                     |           | 95,000         |
| Non-Tort Defense Fund--sub fund to Operations         |           | 90,000         |
| Sub-Total Unreserved Operations + Reserved Operations | =         | \$329,083      |
| DMV (AB2766 & AB923) Fund                             |           | 334            |
| Mitigation Fund                                       |           | 2,705          |
| <b>Ending Fund Balance Totals</b>                     | <b>\$</b> | <b>332,123</b> |

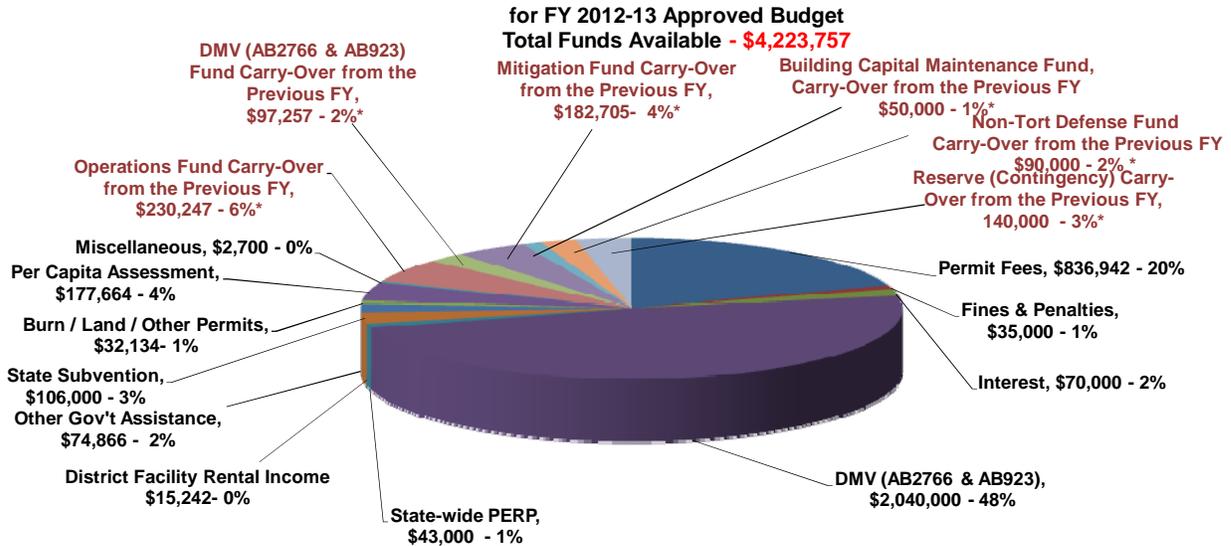
\*\*The "Encumbered Funds" for the approved FY 2012-13 budget are consolidated from the following:

|                           |           |                  |
|---------------------------|-----------|------------------|
| Operations Fund           | \$        | 58,487           |
| DMV (AB2766 & AB923) Fund |           | 916,380          |
| Mitigation Fund           |           | 635,195          |
| <b>Encumbered Funds</b>   | <b>\$</b> | <b>1,610,062</b> |

\*\*\* Note that the Settlement Revenue from the SPI case (settlement was received on July 24, 2007) of \$2,742,500 has been removed to a separate sub-fund; likewise, the recovered litigation costs for the same case of \$700,000 has also been moved to a sub-fund in order to separate these funds from the District's Operational Budget. The funds for the purchase of the building were taken from the Settlement Fund (\$1,500,000) leaving \$1,242,500 and \$361,500 was taken from the Litigation Cost Recovery Fund for "Relocation Costs" leaving \$338,500 in that fund. The District is proposing to payback \$50,000 to the Settlement Fund in FY2012-13 for a total in that fund of \$1,292,500. Interest derived from those funds is included in the Operations Fund for FY 2012-13.

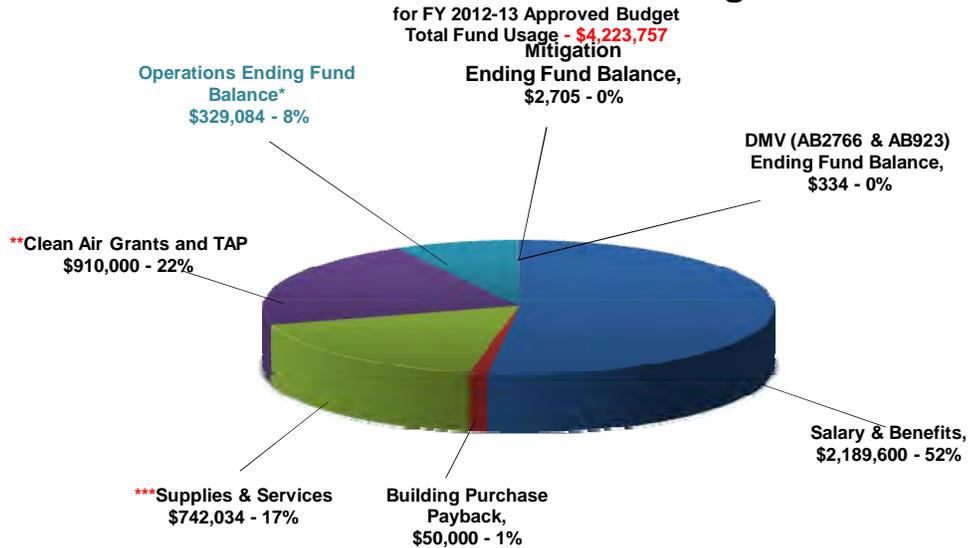
Most of the encumbered funds (93.26%) are Clean Air Grants that have been awarded to Placer County recipients over the last three fiscal years. The funds have not been dispersed because the contracted clean air projects have not been completed.

## Consolidated Funds Available



\*The total actual "Fund Carry-Over" from the previous fiscal year is \$790,208 (based on actual revenue and expenditures from FY 2011-12).

## Consolidated Fund Usage



\* The Operations Ending Fund Balance includes \$90,000 Non-Tort Defense Fund , \$95,000 Reserve (Contingency), \$50,000 Building Capital Maintenance Fund, \$60,000 Vehicle Replacement Fund, and \$34,084 general Operations Fund.

\*\* "Clean Air Grants and TAP " are comprised of: \$670,000 from DMV Fund and \$180,000 from the Mitigation Fund for the CAG Program. This year the District is funding \$60,000 for the Technology Assessment Program (TAP).

\*\*\*The "Services" contained in "Supplies and Services" are for contracted services that augment the Staff in programs and projects. These services include the Biomass Project - \$45,000; Spare the Air Program - \$7,888; Legal Support - \$100,000; Gasoline Dispensing Facility Inspections - \$15,960; Programming and Software Support - \$78,000; Air Permitting Specialist Support - \$30,000; and \$40,403 for special services that augment the existing Staff. Additional costs in the form of Liability Insurance - \$25,000; Air Monitoring Equipment Maintenance - \$15,000; District Facility Operations and Maintenance - \$55,759; Other District Participation - \$10,000 and Air Monitoring Site Construction - \$10,000 are included. The District also contracts with the County for an additional \$95,560 in administrative services.

| PLACER COUNTY AIR POLLUTION CONTROL DISTRICT<br>Listing of Programs, Projects and District Enhancements for the<br>APPROVED BUDGET FOR FY 2012-13 |                              |  | APPROVED<br>EXPENDITURES<br>FY 2012-13 | ENCUMBERED<br>FUNDS IN<br>FY 2011-12 |
|---|------------------------------|--|--|--------------------------------------|
| Item #  | Mission Goal/Objective       | Name:  | Amount                                 | Amount                               |
| 1   | 2(f), 5(c), 6                | Public Outreach/Public Relations Assistance - Endicott Contract                                |  | 19,700                               |
| 2   | 5(b)                         | Participation with Other Districts   | 10,000                                 |                                      |
| 3   | 5(b), 7(b)                   | Spare the Air Program (#5) - CMAQ Match  | 7,888                                  |                                      |
| 4   | 4(a)                         | Air Monitoring Projects - site development   | 10,000                                 |                                      |
| 5   | 4(b), 5(c)                   | TIAX Contract (Mobile Source Analysis Support)   | -                                      | 20,000                               |
| 6   | 1(e), 4(c), 5(c), 7(a), 7(b) | Air Permitting Specialists Contract (DMV qualified tasks)                                      | 30,000                                 | 10,326                               |
| 7   | 1(d), 2(a), 4(d), 5(c)       | Endicott Contract - Public Relations (Biomass Project)   | -                                      | 7,329                                |
| 8   | 1(d), 2(a), 4(d), 5(c)       | SIG Contract (Biomass Project Support)   | 20,000                                 | 11,399                               |
| 9   | 1(d), 2(a), 4(d), 5(c)       | TSS Associates Contract (Biomass Project Support)  | 25,000                                 | 938                                  |
| 10  | 1(d), 2(a), 4(d), 5(c)       | Air Permitting Specialists Contract (Operations Support - includes \$15,000 - Biomass Project) |  | 29,142                               |
| 11  | 5(c), 8                      | Database Programming /Software Support   | 45,000                                 |                                      |
| 12  | 5(c), 8                      | IT Consulting  | 33,000                                 |                                      |
| 13  | 8                            | Hardware/Software - for IT enhancements  | 10,000                                 |                                      |
| 14  | 1(b), 4(a)                   | Entek Contract (Grab Sampling Incident Response)   | -                                      | 7,000                                |
| 15  | 3(c), 5(b)                   | NSAQMD MOU (Tahoe Inspections)   | -                                      | 2,679                                |
| 16  | 5(a), 5(b), 6                | CAP to CAP attendance - APCO and 1 director  | 7,000                                  |                                      |
| 17  | 5(b), 8                      | County Administrative Services/Personnel/Fleet Maintenance                                     | 139,186                                |                                      |
| 18  | 5(b), 8                      | County IT Interface & Support  | 12,000                                 |                                      |
| 19  | 3(b), 5(b)                   | County DA - enforcement support  | 10,000                                 |                                      |
| 20  | 5(b), 8                      | County Counsel Support   | 90,000                                 |                                      |
| 21  | 5(b), 8                      | County IPSS (Data Processing) Charges  | 70,560                                 |                                      |
| 22  | 1(b), 3(c), 5(b)             | AG Dept MOU - Gasoline Dispensing Facility Inspections   | 15,960                                 |                                      |
| 23  | 5(b), 8                      | Vehicle Replacement Fund**   | 15,000                                 |                                      |
| 24  | 8                            | Building Purchase Payback***   | 50,000                                 |                                      |
| 25  | 8                            | District Liability Insurance   | 25,000                                 |                                      |
| 26  | 1(b), 3(a),                  | Extra-Help - Permitting/Inspection Specialist/3,734 hours                                      | 100,131                                |                                      |
| 27  | *                            | GASB 45 - Provision for Post Employment Benefits   | 117,250                                | -                                    |
| 28  | *                            | Core of the Operational Budget (Minus the above projects and service contracts)                | 993,626                                |                                      |
| 29  | *                            | Core of the DMV Fund Budget (Minus the above projects and \$670,000 in CAGs)                   | 1,145,033                              |                                      |
| 30  | *                            | Core of the Mitigation Fund Budget (Minus the above projects and \$180,000 in CAGs)            | -                                      |                                      |
| 31  | 1(d), 5(a), 5(b), 5(c)       | Technology Assessment Program (TAP)  | 60,000                                 | -                                    |
| 32  | 4(d), 7(a), 7(b)             | Clean Air Grants for 2011****  | 850,000                                | 1,501,549                            |
| TOTAL   |                              |  | 3,891,634                              | 1,610,062                            |

\*These are the salary/benefit/overhead costs that allow the District to carry out its mission goals and objectives.

\*\*In the three previous fiscal years, the District has funded \$45,000 (\$15,000/year) for vehicle replacements. This will bring the total to \$60,000.

\*\*\*New this year is the Building Purchase Payback to the Settlement Fund.

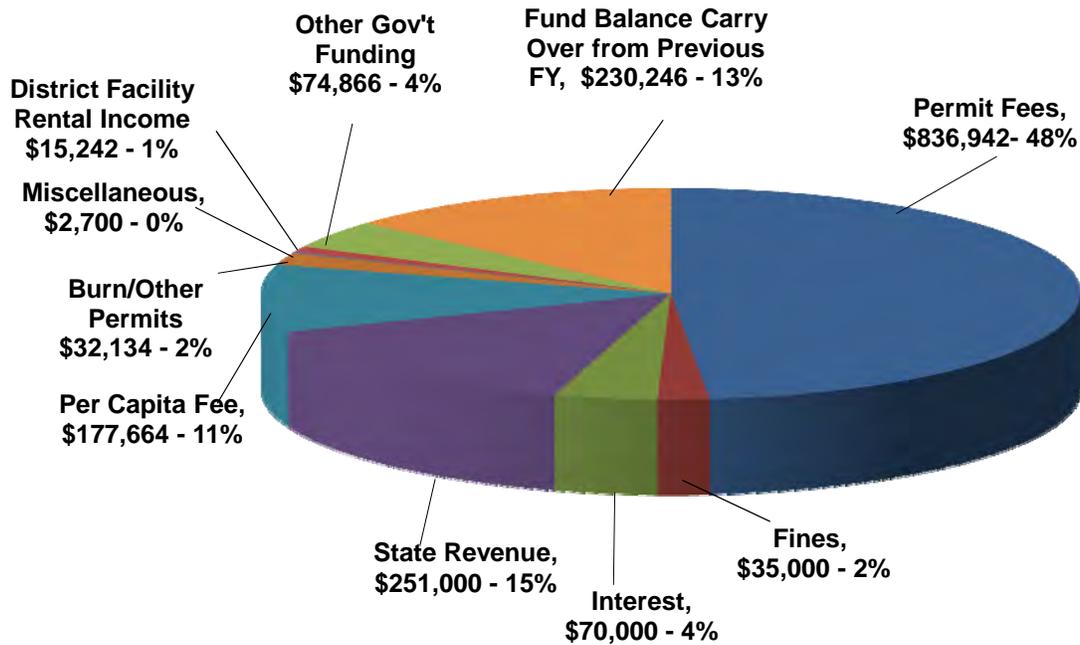
\*\*\*\*The District is proposing to expend \$180,000 from the Mitigation Fund and \$670,000 from the DMV Fund for CAGs in FY 2012-13.

| TOTALS FOR COLOR CODED SECTIONS: |           |                              |
|----------------------------------|-----------|------------------------------|
| \$                               | 52,888    | MONITORING / AQ PLAN SUPPORT |
|                                  | 65,000    | BIOMASS SUPPORT              |
|                                  | 80,000    | OPERATIONS SUPPORT           |
|                                  | 337,706   | COUNTY SERVICES              |
|                                  | 2,446,040 | LABOR & OVERHEAD COSTS       |
|                                  | 910,000   | CLEAN AIR GRANTS & TAP       |
| \$                               | 3,891,634 | TOTAL APPROVED EXPENDITURES  |

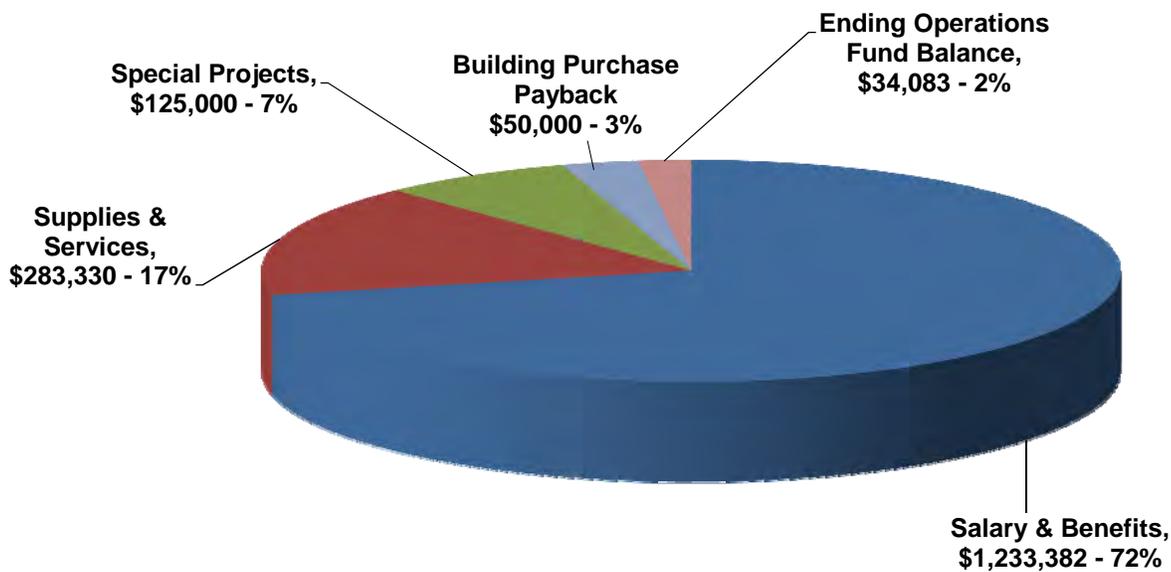
**PLACER COUNTY AIR POLLUTION CONTROL DISTRICT  
FY 2012-13 BUDGET SUMMARY COMPARISON  
OPERATIONS FUND**

|   | <b>APPROVED<br/>BUDGET<br/>OPERATIONS<br/>FY 2011-12</b> | <b>REVISED<br/>BUDGET<br/>OPERATIONS<br/>FY 2011-12</b> | <b>ACTUAL<br/>OPERATIONS<br/>FY 2011-12<br/>6/30/2012</b> | <b>APPROVED<br/>BUDGET<br/>OPERATIONS<br/>FY 2012-13</b> |
|---|--|---|---|--|
| <b>REVENUE:</b>                                 |  |   |   |  |
| Permit Fees                                     | 764,550  | 764,550   | 775,356   | 836,942  |
| Fines   | 35,000   | 35,000  | 54,094  | 35,000   |
| Interest  | 72,000   | 72,000  | 65,445  | 70,000   |
| State Revenue                                   | 241,325  | 241,325   | 255,686   | 251,000  |
| Per Capita Assessment                           | 176,190  | 176,190   | 176,190   | 177,664  |
| Burn /Other Permits                             | 38,707   | 38,707  | 34,699  | 32,134   |
| Miscellaneous                                   | 2,700  | 2,700   | 54  | 2,700  |
| Other Gov't Aid for Project Funding             |  |   | 94,682  | 74,866   |
| From Litigation Cost Recovery Fund              |  |   |   | -  |
| From Settlement Fund                            |  |   |   | -  |
| District Facility Rental Income                 | 14,862   | 14,862  | 20,191  | 15,242   |
| <b>Total Revenue:</b>                           | <b>1,345,334</b>   | <b>1,345,334</b>  | <b>1,476,397</b>  | <b>1,495,549</b>   |
| <b>Fund Balance Carry Over from Previous FY</b> | <b>449,583</b>   | <b>449,583</b>  | <b>449,583</b>  | <b>230,246</b>   |
| <b>TOTAL FUNDS AVAILABLE</b>                    | <b>1,794,917</b>   | <b>1,794,917</b>  | <b>1,925,980</b>  | <b>1,725,795</b>   |
| <b>EXPENSE:</b>                                 |  |   |   |  |
| Salary & Benefits                               | 1,233,021  | 1,233,021   | 1,179,235   | 1,233,382  |
| Supplies & Services                             | 317,321  | 317,321   | 432,386   | 283,330  |
| Special Non-DMV Projects                        | 70,450   | 70,450  | 84,114  | 125,000  |
| Building Contingency Fund - 110 Maple           | 50,000   | 50,000  |   | -  |
| Non-Tort Defense Fund                           |  |   |   |  |
| Reserve for Contingency Fund                    | 25,000   | 25,000  |   |  |
| Payback of Building Purchase                    |  |   |   | 50,000   |
| Equipment                                       |  |   |   |  |
| <b>Total Expense:</b>                           | <b>1,695,792</b>   | <b>1,695,792</b>  | <b>1,695,734</b>  | <b>1,691,712</b>   |
| <b>ENDING OPERATIONS FUND BALANCE</b>           | <b>99,125</b>  | <b>99,125</b>   | <b>230,246</b>  | <b>34,083</b>  |
| <b>Reserved for Encumbrance</b>                 |  |   | -   | -  |
| <b>TOTAL OPERATIONS FUND</b>                    | <b>99,125</b>  | <b>99,125</b>   | <b>230,246</b>  | <b>34,083</b>  |
| <b>Building Contingency Fund - 110 Maple</b>    | <b>50,000</b>  | <b>50,000</b>   | <b>50,000</b>   | <b>50,000</b>  |
| <b>Non-Tort Defense Fund</b>                    | <b>90,000</b>  | <b>90,000</b>   | <b>90,000</b>   | <b>90,000</b>  |
| <b>Vehicle Replacement Fund</b>                 | <b>45,000</b>  | <b>45,000</b>   | <b>45,000</b>   | <b>60,000</b>  |
| <b>Reserve (Contingency Fund)</b>               | <b>95,000</b>  | <b>95,000</b>   | <b>95,000</b>   | <b>95,000</b>  |

**Operations Fund Available  
for FY 2012-13 Approved Budget**  
**Total Operations Fund Available - \$1,725,795**



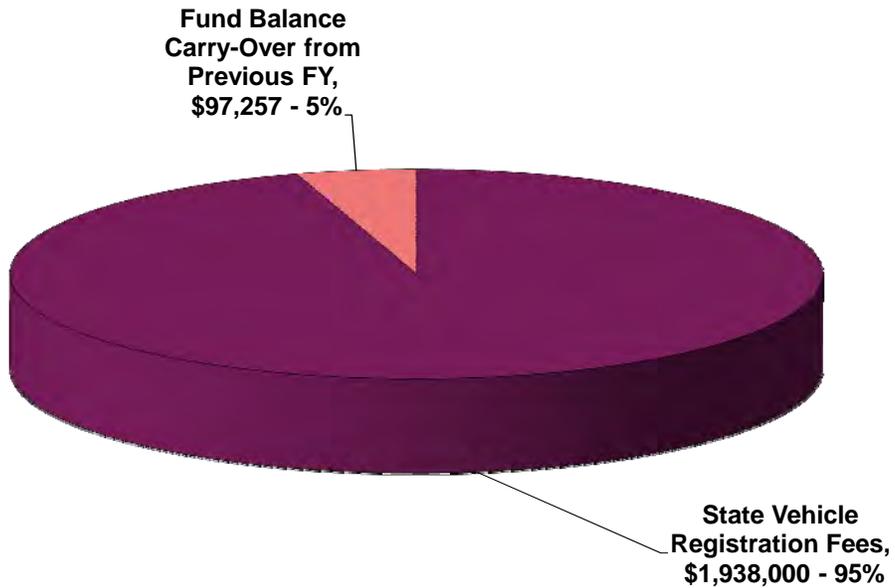
**Operations Fund Usage  
for FY 2012-13 Approved Budget**  
**Total Operations Fund Usage - \$1,725,795**



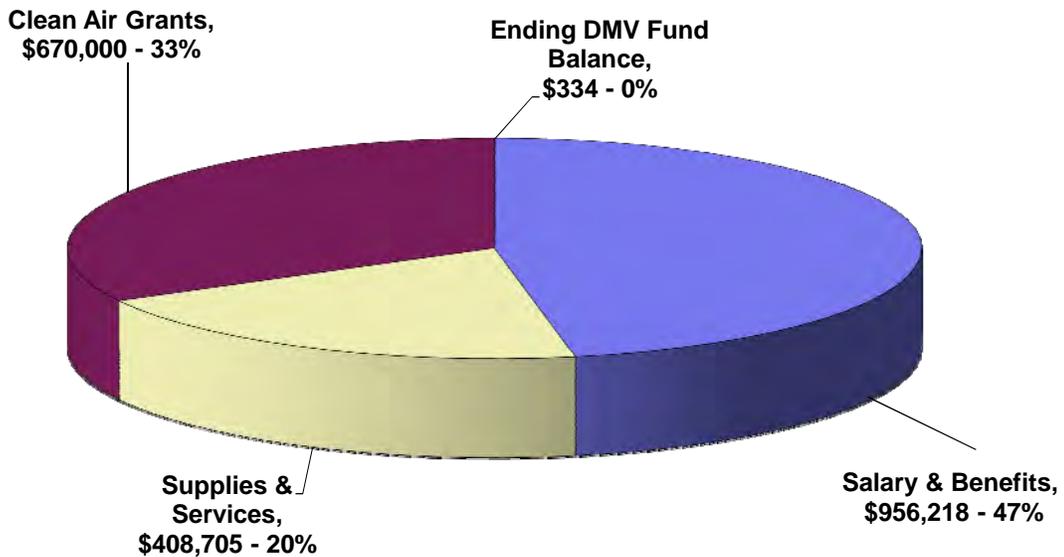
**PLACER COUNTY AIR POLLUTION CONTROL DISTRICT  
 FY 2012-13 BUDGET SUMMARY COMPARISON  
 DMV FUND**

|   | <b>APPROVED<br/>BUDGET<br/>DMV FUND<br/>FY 2011-12</b> | <b>REVISED<br/>BUDGET<br/>DMV FUND<br/>FY 2011-12</b> | <b>ACTUAL<br/>DMV FUND<br/>FY 2011-12<br/>6/30/2012</b> | <b>APPROVED<br/>BUDGET<br/>DMV FUND<br/>FY 2012-13</b> |
|---|--|---|---|--|
| <b>REVENUE:</b>                                 |  |   |   |  |
| Interest  | 48,000   | 48,000  |   |  |
| State Vehicle Registration Fees                 | 1,912,350  | 1,912,350   | 1,945,393   | 1,938,000  |
| Land & Environmental Use                        | 10,000   | 10,000  | 10,906  | -  |
| Other Gov't Assistance                          |  |   |   | -  |
| Private Sector Assistance in DMV project        |  |   |   |  |
| <b>Total Revenue:</b>                           | <b>1,970,350</b>                                       | <b>1,970,350</b>                                      | <b>1,956,299</b>  | <b>1,938,000</b>                                       |
| <b>Fund Balance Carry Over from Previous FY</b> | <b>281</b>   | <b>281</b>  | <b>281</b>  | <b>97,257</b>  |
| <b>TOTAL FUNDS AVAILABLE</b>                    | <b>1,970,631</b>                                       | <b>1,970,631</b>                                      | <b>1,956,580</b>  | <b>2,035,257</b>                                       |
| <b>EXPENSE:</b>                                 |  |   |   |  |
| Salary & Benefits                               | 1,009,839  | 968,453   | 1,006,645   | 956,218  |
| Supplies & Services                             | 360,382  | 401,768   | 252,678   | 408,705  |
| Clean Air Grants and DMV Approved Projects      | 600,000  | 600,000   | 600,000   | 670,000  |
| Equipment                                       |  |   | -   | -  |
| <b>Total Expense:</b>                           | <b>1,970,221</b>                                       | <b>1,970,221</b>                                      | <b>1,859,323</b>  | <b>2,034,923</b>                                       |
| <b>ENDING DMV FUND BALANCE</b>                  | <b>410</b>   | <b>410</b>  | <b>97,257</b>   | <b>334</b>   |
| <b>Reserved for Encumbrance</b>                 | <b>1,433,917</b>                                       | <b>1,433,917</b>                                      | <b>916,380</b>  | <b>916,380</b>   |
| <b>Total DMV Funds</b>                          | <b>1,434,327</b>                                       | <b>1,434,327</b>                                      | <b>1,013,637</b>  | <b>916,714</b>   |

**DMV Fund Available**  
**for FY 2012-13 Approved Budget**  
**Total DMV Fund Available - \$2,035,257**



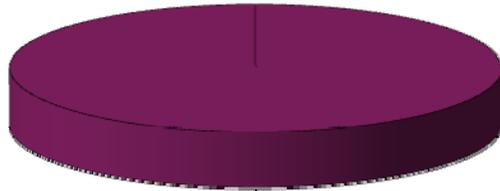
**DMV Fund Usage**  
**for FY 2012-13 Approved Budget**  
**Total DMV Fund Usage - \$2,035,257**



**PLACER COUNTY AIR POLLUTION CONTROL DISTRICT  
 FY 2012-13 BUDGET SUMMARY COMPARISON  
 MITIGATION FUND**

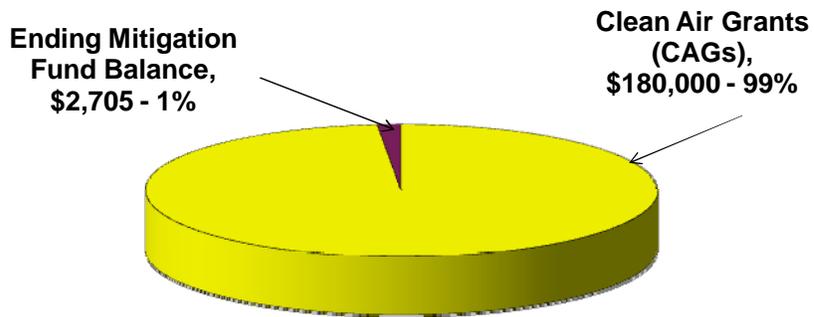
|   | <b>APPROVED<br/>MITIGATION<br/>FUND<br/>FY 2011-12</b> | <b>REVISED<br/>MITIGATION<br/>FUND<br/>FY 2010-12</b> | <b>ACTUAL<br/>MITIGATION<br/>FUND<br/>6/30/12</b> | <b>APPROVED<br/>MITIGATION<br/>FUND<br/>FY 2012-13</b> |
|---|--|---|---|--|
| <b>REVENUE:</b>                                 |  |   |   |  |
| Mitigation Fees                                 | 82,107   | 82,107  | 265,725   | -  |
| Interest from the Settlement Fund               |  |   | -   | -  |
| <b>Total Revenue:</b>                           | <b>82,107</b>  | <b>82,107</b>   | <b>265,725</b>                                    | <b>-</b>   |
| <b>Fund Balance Carry Over from Previous FY</b> | <b>156,909</b>   | <b>156,909</b>  | <b>156,909</b>                                    | <b>182,705</b>   |
| <b>TOTAL MITIGATION FUNDS AVAILABLE</b>         | <b>239,016</b>   | <b>239,016</b>  | <b>422,634</b>                                    | <b>182,705</b>   |
| <b>EXPENSE:</b>                                 |  |   |   |  |
| Salary & Benefits                               | 4,105  | 4,105   | 13,254  | -  |
| Mitigation Projects                             | 5,000  |   |   |  |
| Clean Air Grants + Incentive Programs           | 228,000  | 233,000   | 226,675   | 180,000  |
| Equipment                                       |  |   |   |  |
| <b>Total Expense:</b>                           | <b>237,105</b>   | <b>237,105</b>  | <b>239,929</b>                                    | <b>180,000</b>   |
| <b>ENDING MITIGATION FUND BALANCE</b>           | <b>1,911</b>   | <b>1,911</b>  | <b>182,705</b>                                    | <b>2,705</b>   |
| <b>Reserved for Encumbrance</b>                 | <b>527,064</b>   | <b>527,064</b>  | <b>635,195</b>                                    | <b>635,195</b>   |
| <b>TOTAL MITIGATION FUNDS</b>                   | <b>528,975</b>   | <b>528,975</b>  | <b>817,900</b>                                    | <b>637,900</b>   |

**Mitigation Fund Available  
for FY 2012-13 Approved Budget  
Total Mitigation Fund Available - \$182,705**



Fund Balance  
Carry-Over from  
Previous FY,  
\$182,705 - 100%

**Mitigation Fund Usage  
for FY 2012-13 Approved Budget  
Total Mitigation Fund Usage - \$182,705**





PLACER COUNTY AIR POLLUTION CONTROL DISTRICT  
 Approved Budget for FY 2012-13 comparison to Actual FY2011-12

**DETAIL OF CONSOLIDATED FUNDS**

|   | REF. # | 1,026<br>Program Split for Approved Budget FY 2012-13 |                            |                  |                  |                |   |   |                            |                                       |  | Notes | Program Split for Actual FY 2011-12 |     |            |                                |                              |                            |                               |   |
|---|--------|---|----------------------------|------------------|------------------|----------------|---|---|----------------------------|---------------------------------------|--|-------|-------------------------------------|-----|------------|--------------------------------|------------------------------|----------------------------|-------------------------------|---|
|   |        | Approved Budget FY 2011 12                            | Approved Budget FY 2012 13 | OPERATIONS       | DMV              | MITIGATION     | CON INGENCY & NON OR DEFENSE SUB O OPER | BUILDING CAPI AL MAIN ENANCE SUB O OPER | BIO MASS PRO EC SUB O OPER | ECHNOLOGY ASSESMEN PROGRAM SUB O OPER | Actual Consolidated FY 11 12 6/30/2012 |       | OPERATIONS                          | DMV | MITIGATION | CONTINGENCY & NON TORT DEFENSE | BUILDING CAPITAL MAINTENANCE | BIO MASS PRO EC SUB O OPER | ECHNOLOGY ASSESMEN SUB O OPER | % of Actual to Budget for the same time frame |
|   |        | <b>REVENUE:</b>                                       |                            |                  |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               |   |
| Initial Permits                         | 6764   | 102,500   | 76,990                     | 76,990           |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 12.12%  |
| Renewal Permits                         | 6765   | 615,000   | 694,600                    | 694,600          |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | -1.49%  |
| Burn Permits                            | 6771   | 5,125   | 5,643                      | 5,643            |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 29.70%  |
| Title V Permit Fees                     | 6769   | 45,000  | 63,813                     | 63,813           |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 8.60%   |
| Initial Permits - Title V               | 6764   | 2,050   | 1,539                      | 1,539            |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | -31.07%                                       |
| Ag Engine Registration                  | 8142   |   |                            |                  |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               |   |
| Regional Compliance Agreements          | 6861   |   |                            |                  |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               |   |
| Air Pollution Fines                     | 6860   | 35,000  | 35,000                     | 35,000           |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 53.73%  |
| <b>Total Permits &amp; Fines:</b>       |        | <b>804,675</b>  | <b>877,585</b>             | <b>877,585</b>   |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 3.90%   |
| State Subvention                        | 7228   | 91,000  | 95,000                     | 95,000           |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 8.38%   |
| State Aid Mandated Costs                | 7234   |   |                            |                  |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               |   |
| State Aid ARB Subvention (Supplemental) | 7232   | 11,000  | 11,000                     | 11,000           |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 0.00%   |
| Statewide PERP Program                  | 6865   | 43,675  | 43,000                     | 43,000           |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 0.00%   |
| State Vehicle Surcharge                 | 7383   | 2,013,000   | 2,040,000                  | 102,000          | 1,938,000        |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 1.73%   |
| <b>Total State Revenue:</b>             |        | <b>2,158,675</b>                                      | <b>2,189,000</b>           | <b>251,000</b>   | <b>1,938,000</b> |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 1.96%   |
| Per Capita Assessment                   | 8100   | 176,190   | 177,664                    | 177,664          |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 0.00%   |
| Federal Grants for Project Funding      | 7326   | 74,866  | 74,866                     | 74,866           |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 0.00%   |
| Other Govt Aid for Project Funding      | 7292   | 10,000  |                            |                  |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 98.16%  |
| District Facility Rental Income         | 6966   | 14,862  | 15,242                     | 15,242           |                  |                |   |   |                            |                                       |  |       |                                     |     |            | 19,816                         |                              |                            |                               | 35.86%  |
| Control Council Fees                    | 8105   | 5,000   | 6,000                      | 6,000            |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | -5.00%  |
| Interest                                | 6950   | 120,000   | 70,000                     | 10,000           |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | -45.46%                                       |
| Mitigation Fees                         | 6783   | 82,107  |                            |                  |                  |                |   |   |                            |                                       |  |       | 265,725                             |     |            |                                |                              |                            |                               | 223.63%                                       |
| Hearing Board Fees                      | 8145   | 5,000   | 5,000                      | 5,000            |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 34.42%  |
| Forms & Photo Copy                      | 8218   | 200   | 200                        | 200              |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | -73.00%                                       |
| Land Use Applications                   | 8260   | 10,000  |                            |                  |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 9.06%   |
| Air Toxic Hot Spots                     | 8182   | 17,544  | 9,335                      | 9,335            |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | -38.03%                                       |
| Misc. / Project Related Revenue         | 8764   | 2,500   | 2,500                      | 2,500            |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | -100.00%                                      |
| Burn Acreage Fees                       | 8193   | 6,038   | 6,156                      | 6,156            |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | -5.46%  |
| Project Related (Private Sector)        | 8776   |   |                            |                  |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               |   |
| <b>Total Other Revenue:</b>             |        | <b>524,307</b>  | <b>366,963</b>             | <b>306,963</b>   |                  |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 60,000  |
| <b>Total Revenue:</b>                   |        | <b>3,487,657</b>                                      | <b>3,433,549</b>           | <b>1,435,549</b> | <b>1,938,000</b> |                |   |   |                            |                                       |  |       |                                     |     |            |                                |                              |                            |                               | 60,000  |
| Fund Carry-Over From Previous FY        |        | 811,773   | 790,208                    | (168,412)        | 97,257           | 182,705        | 230,000                                 | 50,000                                  | 398,658                    |                                       |  |       |                                     |     |            |                                |                              |                            |                               |   |
| <b>TOTAL FUNDS AVAILABLE</b>            |        | <b>4,299,430</b>                                      | <b>4,223,757</b>           | <b>1,267,136</b> | <b>2,035,257</b> | <b>182,705</b> | <b>230,000</b>                          | <b>50,000</b>                           | <b>398,658</b>             | <b>60,000</b>                         |  |       |                                     |     |            |                                |                              |                            |                               |   |



| <b>FTE -- PROGRAM SUMMARY:</b>   |  |                                    |  |                   |             |
|--|--|------------------------------------|--|-------------------|-------------|
| <b>40.89% is DMV related</b>   | <b>FY 2012-2013 -- FTE DISTRIBUTION</b>  |                                    |  |                   |             |
|  | <b>STATIONARY<br/>SOURCE<br/>PROGRAM</b> | <b>LAND USE<br/>&amp; PLANNING</b> | <b>DMV<br/>PROGRAMS<br/>&amp; GRANTS</b> | <b>MITIGATION</b> | <b>BURN</b> |
| AIR POLLUTION CONTROL OFFICER  | 0.40                                     | 0.25                               | 0.25                                     | 0.05              | 0.05        |
| ADMIN TECH (ADMIN SECTION)   | 0.55                                     | 0.05                               | 0.30                                     | 0.05              | 0.05        |
| ACCOUNT CLERK JOURNEY  | 0.80                                     | 0.10                               | 0.05                                     | 0.05              | -           |
| SENIOR AIR POLLUTION ENGINEER  | 0.75                                     | -                                  | 0.20                                     | -                 | 0.05        |
| PRINCIPAL ENGINEER   | 0.40                                     | 0.20                               | 0.30                                     | 0.05              | 0.05        |
| AIR CONTROL SPECIALIST II  | 0.40                                     | -                                  | 0.25                                     | -                 | 0.35        |
| SENIOR PLANNER   | -  | 0.55                               | 0.35                                     | 0.10              | -           |
| AIR CONTROL SPECIALIST II  |  |                                    | 0.75                                     | 0.25              |             |
| ASSOCIATE PLANNER  |  | 0.80                               | 0.10                                     | 0.10              |             |
| AIR CONTROL SPECIALIST II  | 1.00                                     | -                                  | -  | -                 | -           |
| ACCOUNTANT AUDITOR II  | 0.40                                     | 0.05                               | 0.30                                     | 0.20              | 0.05        |
| SENIOR AIR POLLUTION ENGINEER  | 0.65                                     |                                    | 0.35                                     |                   |             |
| ASSOCIATE ENGINEER   | 0.65                                     |                                    | 0.30                                     |                   | 0.05        |
| AIR MONITORING SPECIALIST II   | 0.25                                     | 0.25                               | 0.50                                     |                   |             |
| ADMIN TECH (C & E SECTION)   | 0.55                                     | 0.10                               | 0.25                                     |                   | 0.10        |
| TITLE V AIR SPECIALIST II  | 0.90                                     |                                    |  |                   | 0.10        |
| IT TECH I  | 0.45                                     |                                    | 0.35                                     | 0.10              | 0.10        |
| <b>FTE:</b>  | <b>8.15</b>                              | <b>2.35</b>                        | <b>4.60</b>                              | <b>0.95</b>       | <b>0.95</b> |
| <b>TOTAL FTE:</b>  | <b>17.00</b>                             |                                    |  |                   |             |
| <b>EXTRA HELP: \$108,603 (nine Compliance &amp; Enforcement staff for 3,734 hours with a FTE exquivalence of 2).</b> |  |                                    |  |                   |             |

## Comparison of Rent and O&M Costs for 110 Maple Street Building

| Projected Rental Income: OL3 #6966                         | \$ 15,242                        | \$ 20,191                        | \$ 14,862                        |
|--|----------------------------------|----------------------------------|----------------------------------|
| DISTRICT FACILITY O & M #2405                              | APPROVED<br>BUDGET<br>FY 2012-13 | ACTUAL<br>FY 2011-12<br>06/30/12 | APPROVED<br>BUDGET<br>FY 2011-12 |
| PG & E   | 13,200                           | 14,792                           | 13,200                           |
| RECOLOGY (TRASH PICK-UP)                                   | 1,200                            | 1,760                            | 1,127                            |
| JANITORIAL SERVICE   | 6,825                            | 8,298                            | 10,650                           |
| JANITORIAL SUPPLIES & CONSUMABLES                          | 1,200                            | 472                              | 1,200                            |
| BROKERAGE FEE  | 1,270                            |                                  |                                  |
| LIABILITY INSURANCE  |                                  |                                  | 2,594                            |
| AT&T (ELEVATOR TELEPHONE)                                  | 560                              |                                  | 560                              |
| PCWA (WATER)   | 1,380                            | 1,156                            | 1,380                            |
| LANDSCAPING MAINTENANCE                                    | 2,400                            | 2,425                            | 2,400                            |
| ELEVATOR MAINTENANCE                                       |                                  | 2,240                            | 960                              |
| BUILDING REPAIR AND MAINTENANCE (includes minor purchases) | 15,000                           | 22,024                           | 28,000                           |
| SECURITY ALARM AND FIRE ALARM                              | 780                              | 780                              | 780                              |
| WAVE BROADBAND WIFI  | 1,079                            | 1,313                            | 1,079                            |
| SEWER ASSESSMENT   | 3,792                            | 4,061                            |                                  |
| CONTINGENCY  | 7,073                            |                                  | 5,973                            |
| TOTAL:   | <b>\$ 55,759</b>                 | <b>59,320</b>                    | <b>\$ 69,904</b>                 |
| <b>District Facility O &amp; M less Rental Income =</b>    | <b>\$ 40,517</b>                 | <b>39,129</b>                    | <b>\$ 55,042</b>                 |

**PRINTING/COPYING SERVICES #2511**

|                                 | APPROVED<br>BUDGET<br>FY 2012-13 | ACTUAL<br>FY 2011-12<br>6/30/2012 | APPROVED<br>BUDGET<br>FY 2011-12 |
|---------------------------------|----------------------------------|-----------------------------------|----------------------------------|
| DISTRICT DAILY PRINTING/COPYING | 10,000                           | 5,449                             | 10,000                           |
| PUBLIC EDUCATION/OUTREACH (DMV) | 5,000                            | 3,787                             | 5,000                            |
| <b>TOTALS:</b>                  | <b>15,000</b>                    | <b>9,236</b>                      | <b>15,000</b>                    |

**PROFESSIONAL / SPECIAL SERVICES #2555**

|   | APPROVED<br>BUDGET<br>FY 2012-13 | ACTUAL<br>FY 2011-12<br>06/30/12 | Encumbered<br>Balance as of<br>06/30/12 | APPROVED<br>BUDGET<br>FY 2011-12 |
|---|----------------------------------|----------------------------------|---|----------------------------------|
| PROCESS SERVER  | 500                              |                                  |   | 500                              |
| NORTHERN SIERRA AQMD  |                                  | 2,649                            | 2,679                                   | 2,146                            |
| AIR SAMPLING/LAB ANALYSIS-ENTEK<br>ENDICOTT (BIOMASS PROJECT) |                                  | 5,000                            | 7,000<br>7,329                          | 5,000                            |
| IT PROGRAMMING  | 45,000                           | 43,975                           |   | 55,000                           |
| IT CONSULTING   | 33,000                           |                                  |   |                                  |
| AIR PERMITTING SPECIALISTS ( \$15,000 BIOMASS SUPPORT INCL)   | -                                | 38,332                           | 29,142                                  | 38,332                           |
| TECHNOLOGY ASSESSMENT PROGRAM (TAP)                           | 60,000                           |                                  |   |                                  |
| SIG -- DAVID SAAH (BIOMASS SUPPORT)                           | 20,000                           | 20,000                           | 11,399                                  | 20,000                           |
| TSS ASSOCIATES (BIOMASS SUPPORT)                              | 25,000                           | 32,000                           | 938                                     | 32,000                           |
| <b>TOTALS:</b>  | <b>183,500</b>                   | <b>141,956</b>                   | <b>58,487</b>                           | <b>152,978</b>                   |
|   |                                  |                                  |   |                                  |

**PROFESSIONAL SERVICES - COUNTY #2556**

|                              | <b>APPROVED<br/>BUDGET<br/>FY 2012-13</b> | <b>ACTUAL<br/>6/30/12<br/>FY 2011-12</b> | <b>APPROVED<br/>BUDGET<br/>FY 2011-12</b> |
|------------------------------|---|--|---|
| WEIGHTS & MEASURES MOU       | 15,960                                    | 15,795                                   | 15,555                                    |
| RECORDS STORAGE              |   | 830                                      | 792                                       |
| AUDITOR SUPPORT              |   | 5,000                                    |   |
| PERSONNEL CHARGES            | 15,000                                    | 15,876                                   | 3,000                                     |
| COPIER/FAX MACHINE PRINTING  | 2,500                                     | 4,053                                    | 3,865                                     |
| COUNTY IT INTERFACE SERVICES | 12,000                                    |  |   |
| COUNTY DATA PROCESSING       | 70,560                                    | 68,946                                   | 72,862                                    |
| OPEB ANALYSIS                | 2,500                                     | 2,500                                    | 2,500                                     |
| SUPPLEMENTAL LEGAL SUPPORT   |   | 61,473                                   | 55,000                                    |
| COUNTY COUNSEL SERVICES      | 90,000                                    | 20,000                                   | 20,000                                    |
| DA SUPPORT SERVICES          | 10,000                                    |  | 10,000                                    |
| <b>TOTALS:</b>               | <b>218,520</b>                            | <b>194,472</b>                           | <b>183,574</b>                            |
|                              |   |  |   |

**SPECIAL DISTRICT EXPENSE #2840**

|  | <b>APPROVED<br/>BUDGET<br/>FY 2012-13</b> | <b>ACTUAL<br/>FY 2011-12<br/>6/30/2012</b> | <b>ENCUMBERED<br/>BALANCE AS OF<br/>6/30/2012</b> | <b>APPROVED<br/>BUDGET<br/>FY 2011-12</b> |
|--|---|--|---|---|
| SAC VALLEY BCC                         | 4,733                                     | 5,089                                      |   | 5,264                                     |
| PCs/LAPTOP/SERVER                      | 10,000                                    |  | -   | 5,010                                     |
| STATE REIMBURSEMENT AIR TOXIC HOT SPOT | 4,348                                     | 6,692                                      |   | 8,836                                     |
| CAP TO CAP MEETING - 1 DIRECTOR & APCO | 7,000                                     | 1,595                                      |   | 7,000                                     |
| MISCELLANEOUS - certification          | 350                                       | 271  |   |   |
| FISCAL AUDIT                           |   | 7,774                                      |   | 7,700                                     |
| <b>TOTALS</b>                          | <b>26,431</b>                             | <b>21,421</b>                              | <b>-</b>  | <b>33,810</b>                             |
|  |   |  |   |   |

**DMV FUNDED PROGRAMS AND GRANTS**

**#2855 & 2856**

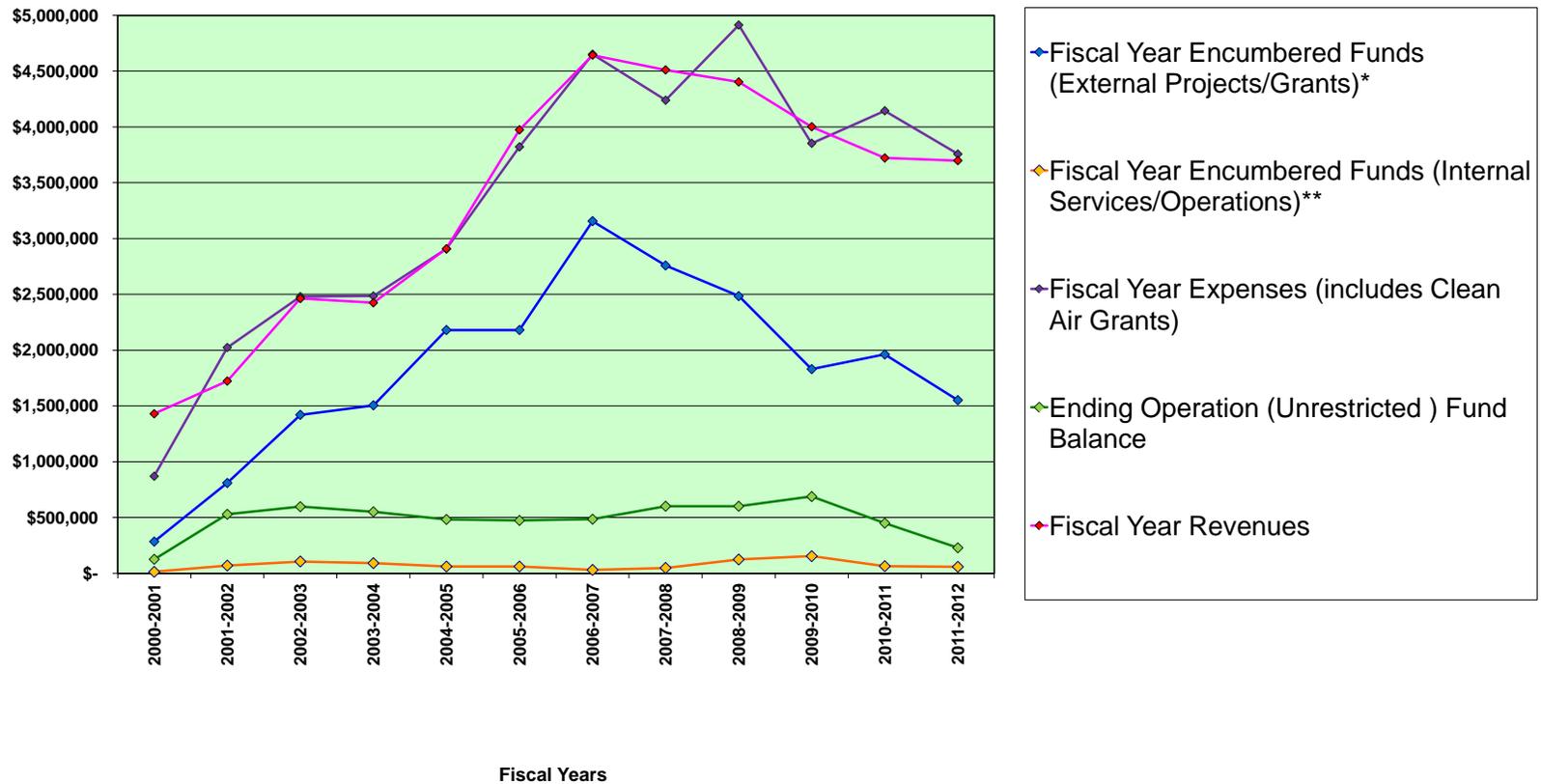
|   | APPROVED<br>BUDGET<br>FY2012-13 | ACTUAL<br>FY 2011-12<br>06/30/12 | ENCUMBERED<br>BALANCE AS OF<br>06/30/12 | APPROVED<br>BUDGET<br>FY2011-12 |
|---|---------------------------------|----------------------------------|---|---------------------------------|
| EXTERNAL PROJECTS - CAG                             | 670,000                         | 720,000 *                        |   | 600,000                         |
| PREVIOUS YEAR'S CAG                                 |                                 | (98,248) *                       | 866,354                                 |                                 |
| AIR MONITORING SITE (RENT AND CONSTRUCTION)         | 10,000                          | 4,121                            |   | 10,000                          |
| AIR PERMITTING SPECIALIST CONTRACT - PLANNING       | 30,000                          |                                  | 10,326                                  | 36,308                          |
| BREATHE CALIFORNIA - CLEAN AIR LUNCHEON             | 1,000                           | 1,000                            |   | 1,000                           |
| MOBILE SOURCE ANALYSIS (TIAX)                       |                                 |                                  | 20,000                                  |                                 |
| PUBLIC OUTREACH/RELATIONS/MEDIA - ENDICOTT CONTRACT |                                 |                                  | 19,700                                  | 8,675                           |
| CAG/MEDIA (STAFF)                                   | 2,500                           | 3,559                            |   | 2,000                           |
| SMAQMD - SPARE THE AIR (#7) CMAQ MATCH              | 7,888                           | 12,434                           |   | 12,434                          |
| PARTICIPATION FUND W/ AIR DISTRICTS                 | 10,000                          | 5,000 **                         |   | 20,000                          |
| <b>TOTALS:</b>                                      | <b>731,388</b>                  | <b>647,866</b>                   | <b>916,380</b>                          | <b>690,417</b>                  |

\* Disencumbered previous year CAG funding for a net \$621,752 DMV fund usage for CAGs in FY 2011-12

\*\* Includes \$5,000 for CALEEMOD Upgrades

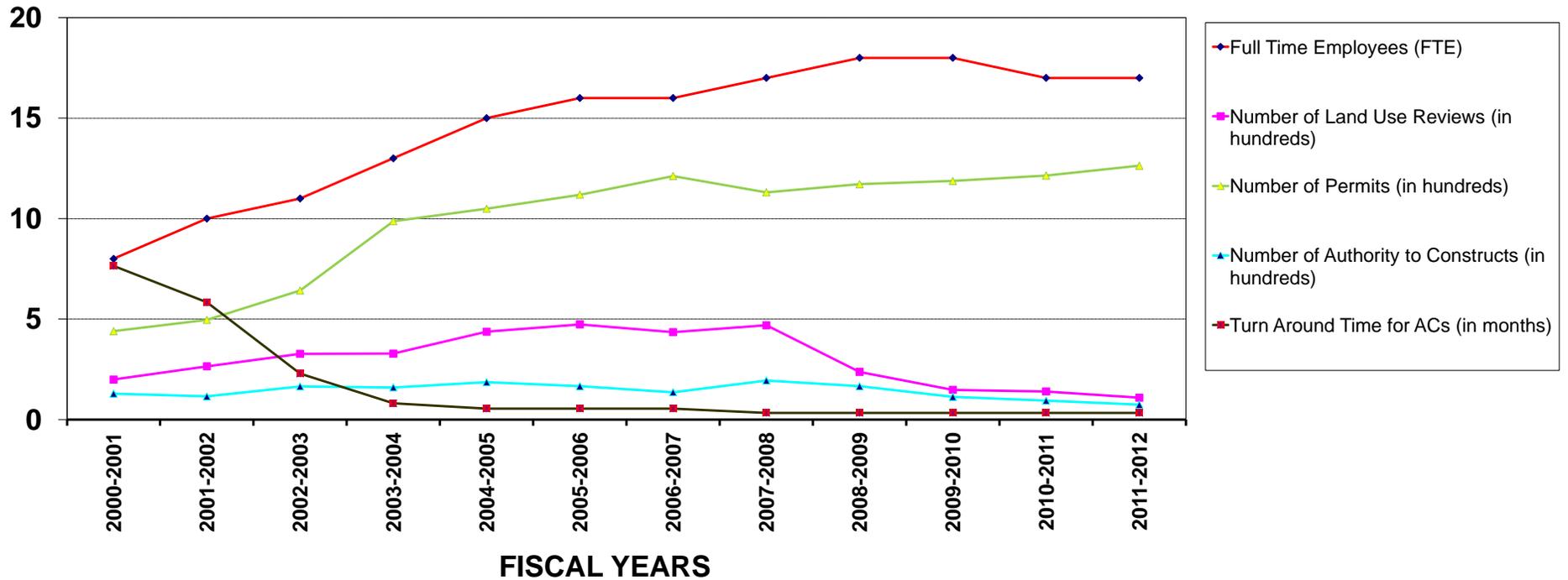


**Placer County APCD Fiscal Performance**  
**Total Fiscal Year Revenues and Expenses**  
(including ending operation fund balance and encumbered funds)



\*The actual FY2011-12 revenue exceeds the expenditures by \$152,106. This excess was rolled over into the FY 2012-13 beginning fund balance of \$788,545. The beginning fund balance for FY 2012-13 consists of the Contingency Fund that is currently at \$280,000 (and includes the \$90,000 for Non-tort Defense Fund) and an Operations Fund roll forward of \$228,582. The remainder of that roll forward is restricted by the DMV Fund and the Mitigation Fund and totals \$279,963.

## PCAPCD FISCAL PERFORMANCE INDICATORS



## Historical Fiscal Performance

| Fiscal year   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Performance Indicators  | 2000-2001       | 2001-2002       | 2002-2003       | 2003-2004       | 2004-2005       | 2005-2006       | 2006-2007       | 2007-2008       | 2008-2009       | 2009-2010       | 2010-2011       | 2011-2012       |
| Fiscal Year Encumbered Funds (External Projects/Grants)*      | \$ 284,414.00   | \$ 809,423.00   | \$ 1,420,130.00 | \$ 1,505,409.00 | \$ 2,180,103.00 | \$ 2,180,104.00 | \$ 3,156,032.00 | \$ 2,758,261.00 | \$ 2,484,010.00 | \$ 1,830,038.17 | \$ 1,960,980.50 | \$ 1,551,574.75 |
| Fiscal Year Encumbered Funds (Internal Services/Operations)** | \$ 13,194.31    | \$ 69,617.00    | \$ 106,284.38   | \$ 91,117.00    | \$ 61,030.00    | \$ 61,030.00    | \$ 30,675.00    | \$ 48,421.00    | \$ 124,006.00   | \$ 153,902.74   | \$ 64,345.37    | \$ 58,487.10    |
| Fiscal Year Expenses (includes Clean Air Grants)              | \$ 869,973.00   | \$ 2,023,449.00 | \$ 2,479,656.00 | \$ 2,484,975.00 | \$ 2,906,054.00 | \$ 3,821,362.00 | \$ 4,651,675.00 | \$ 4,239,188.00 | \$ 4,913,409.00 | \$ 3,853,122.00 | \$ 4,144,824.00 | \$ 3,756,940.00 |
| Ending Operation (Unrestricted ) Fund Balance                 | \$ 125,721.00   | \$ 528,880.00   | \$ 597,190.00   | \$ 551,254.00   | \$ 482,703.00   | \$ 473,710.00   | \$ 485,160.00   | \$ 601,304.00   | \$ 601,305.00   | \$ 687,866.00   | \$ 449,582.86   | \$ 228,585.00   |
| Fiscal Year Revenues  | \$ 1,429,809.00 | \$ 1,722,677.00 | \$ 2,462,289.00 | \$ 2,424,448.00 | \$ 2,908,658.00 | \$ 3,973,975.00 | \$ 4,643,756.00 | \$ 4,511,075.00 | \$ 4,402,956.00 | \$ 4,001,893.00 | \$ 3,721,718.31 | \$ 3,698,421.00 |
| Full Time Employees (FTE)                                     | 8               | 10              | 11              | 13              | 15              | 16              | 16              | 17              | 18              | 17              | 17              | 17              |
| Number of Land Use Reviews                                    | 199             | 265             | 327             | 328             | 445             | 474             | 435             | 469             | 237             | 148             | 140             | 109             |
| Number of Permits To Operate ***                              | 440             | 496             | 642             | 987             | 1,049           | 1,119           | 1,212           | 1,131           | 1,171           | 1,187           | 1,214           | 1,263           |
| Number of Authority to Construct                              | 129             | 115             | 165             | 160             | 186             | 166             | 136             | 194             | 166             | 113             | 94              | 74              |
| Turn Around Time for ACs (in days)                            | 237             | 181             | 71              | 25              | 17              | 17              | 17              | 10              | 10              | 10              | 10              | 10              |

\* Clean Air Grants are offered and awarded to public agencies and private citizens within Placer County towards projects that demonstrate cost effective emission reductions. Historically, over 96% of all encumbered funds are applied towards Clean Air Grant Projects.

\*\*Internal service contracts are used to enhance District operations and leverage resources, which average a little less than 3.5% of the total amount of the encumbered funds.

\*\*\* Number of Permits to Operate is the actual number of permits, and is not the same as the number of permits renewed in 3A Annual Permit Renewal.



## Clean Air Grant Summary 2012

Since 2001 the District has managed the Clean Air Grant (CAG) Program annually. This program is incentive driven and makes funds available to public or private agencies, groups or individuals for projects that can cost effectively reduce criteria pollutant emissions or for projects which help to aid the District in meeting its attainment goals. The primary objectives of this grant program are:

1. To fund projects that cost-effectively achieve nitrogen oxide (NO<sub>x</sub>), reactive organic gas (ROG), and diesel particulate matter (DPM) emission reductions from on and off road motor vehicles, and area-wide and stationary sources that are not required by law to reduce their emissions.
2. To assist the six county Sacramento Federal Ozone Non-attainment Area in attaining health based ambient air quality standards.
3. To assist the Sacramento Federal Ozone Non-attainment Area in meeting transportation conformity determinations required by the Clean Air Act.

The District has two sources of funding available for the District's CAG Program; the DMV Surcharge Fund and the Air Quality Offsite Mitigation Fund. These funds are outlined below.

DMV Surcharge Fund: On September 30, 1990, Governor Pete Wilson signed into law Assembly Bill (AB) 2766 (Sher). This bill provides authority to the District to impose a \$4.00 surcharge fee on vehicles registered within its jurisdiction. The surcharge revenues are to be used solely to reduce air pollution from on and off-road motor vehicles and for related planning, monitoring, enforcement and technical studies necessary for the implementation of the California Clean Air Act of 1988. In addition, AB 923 (Firebaugh) was signed by Governor Schwarzenegger on September 23, 2004, which authorized the District to increase the total DMV Surcharge fee from \$4 to \$6. AB 923 will be repealed on January 1, 2015, if legislation to continue the fee is not passed.

Air Quality Offsite Mitigation Fund: The District receives funding from developers within Placer County through the District's Offsite Mitigation Program. Developers of land use projects that cannot mitigate air quality impacts on-site can participate in this program to offset air quality impacts resulting from their project (if required by the local jurisdictions). The District uses these funds to provide incentives to entities that are able to reduce air pollutant emissions from sources that are not required by law or regulation to do so. Incentive funds generated from mitigation are broken up into Eastside and Westside funding categories. Mitigation funds generated in the Tahoe area (Eastside) for example cannot be applied to projects in Roseville (Westside) and vice versa.

The CAG program is designed to reduce criteria pollutant emissions through the provision of incentive funds as described above. Typical projects include, 1) heavy duty fleet modernizations, repowers, and exhaust retrofits that do not fall under a state emission compliance deadline within the next three years; 2) diesel agriculture pump repowers; 3) alternative fuel infrastructure; 4) transit programs; and 5) public information/education projects related to air quality issues.

Figure 1 below displays the amount of funding that has been awarded for each fiscal year since the beginning of the grant program. Fluctuations in the amount budgeted (and awarded) annually are based primarily on the amount of land use mitigation funds the District receives, the amount of DMV (AB 2766 and AB 923) funding received, and the amount of AB2766 funds that are programmed for internal vs. external grant uses. A large jump in funding occurred in Fiscal Year 2005/06 due to an increase in the amount of motor vehicle registration fees collected by the passage of AB 923 (from \$4 to \$6). The highest year of awarded funds, 2006/07, is much higher than the

other years due to the District receiving a larger than usual amount of land use mitigation funds and from receiving a one-time grant from the State in order to help fund the replacement of school buses. Looking forward to year 2015, the CAG budget may be significantly reduced if State legislators do not extend the allowance of the collection of the \$2 DMV fee (AB 923). If this were to occur, the District will need to re-evaluate how it implements the CAG Program.

Figure 1: Awarded CAG funding for Each Program Cycle for Years 2001 to 2012

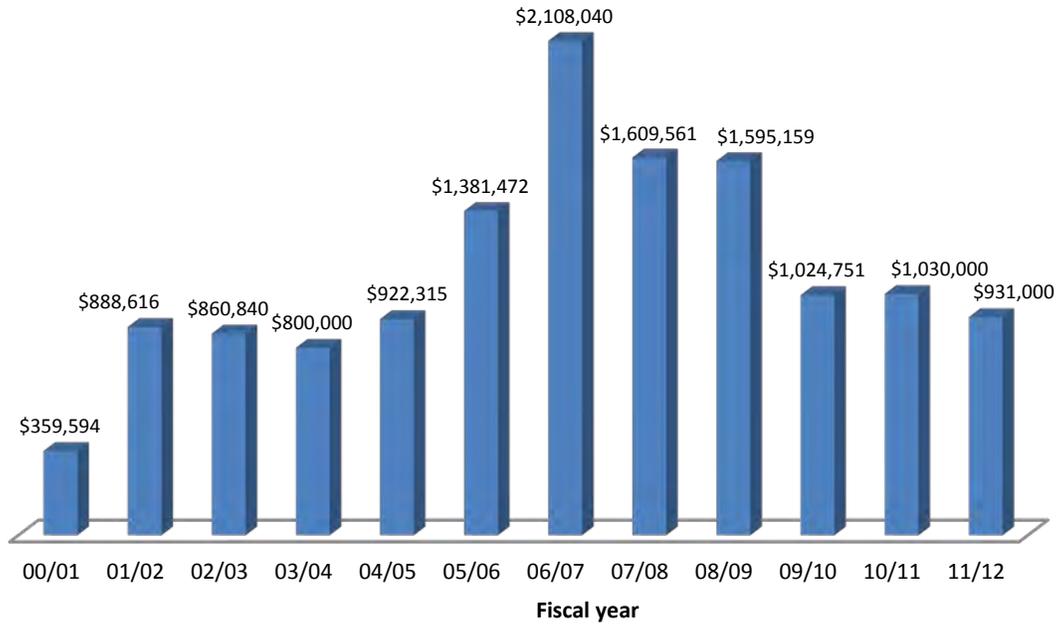
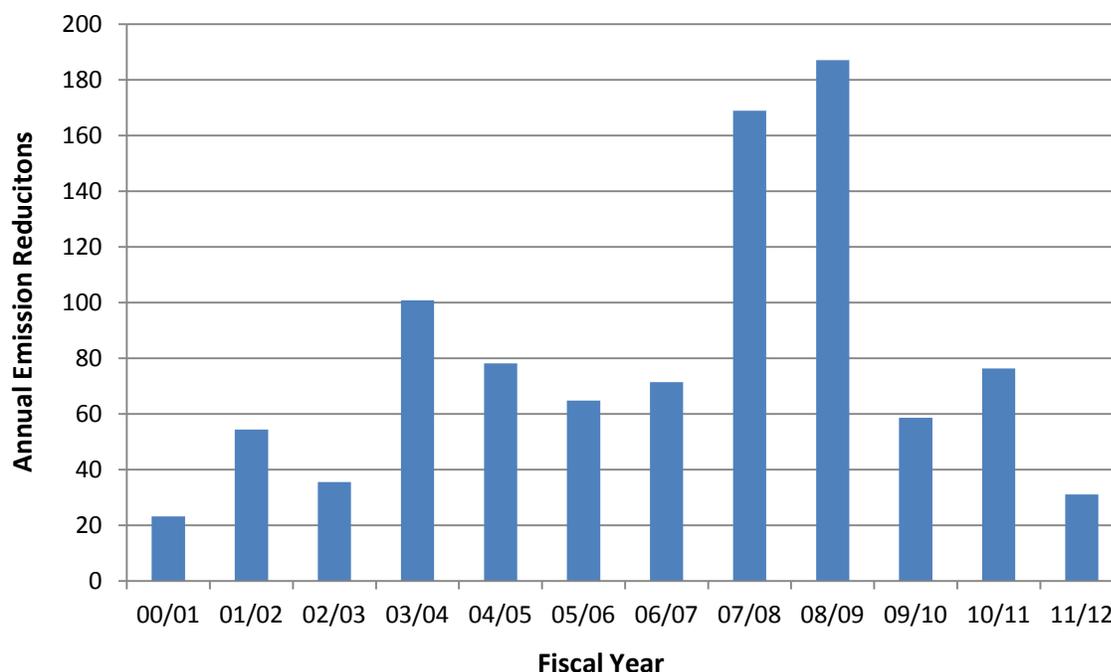


Figure 2 below displays the amounts of combined annual emission reductions (NO<sub>x</sub>, ROG, and PM) claimed based on the amount of funds awarded per fiscal year as previously discussed under Figure 1. In general, the trend is consistent; the more funds awarded, the more emission reductions achieved. General fluctuations shown in this trend are due to the 1) the types and nature of funded projects; 2) the amount of funds awarded to projects which do not have quantifiable emission reductions (e.g., public education/outreach); 3) the impact of state regulations which limit the amounts of surplus emission reductions that can be claimed, and 4) the improved accuracy of measuring emission reductions over the life of the grant program.

Figure 2: Estimated Annual Emission Reductions based on Awarded Funds for Each Program Cycle for Years 2001 to 2012

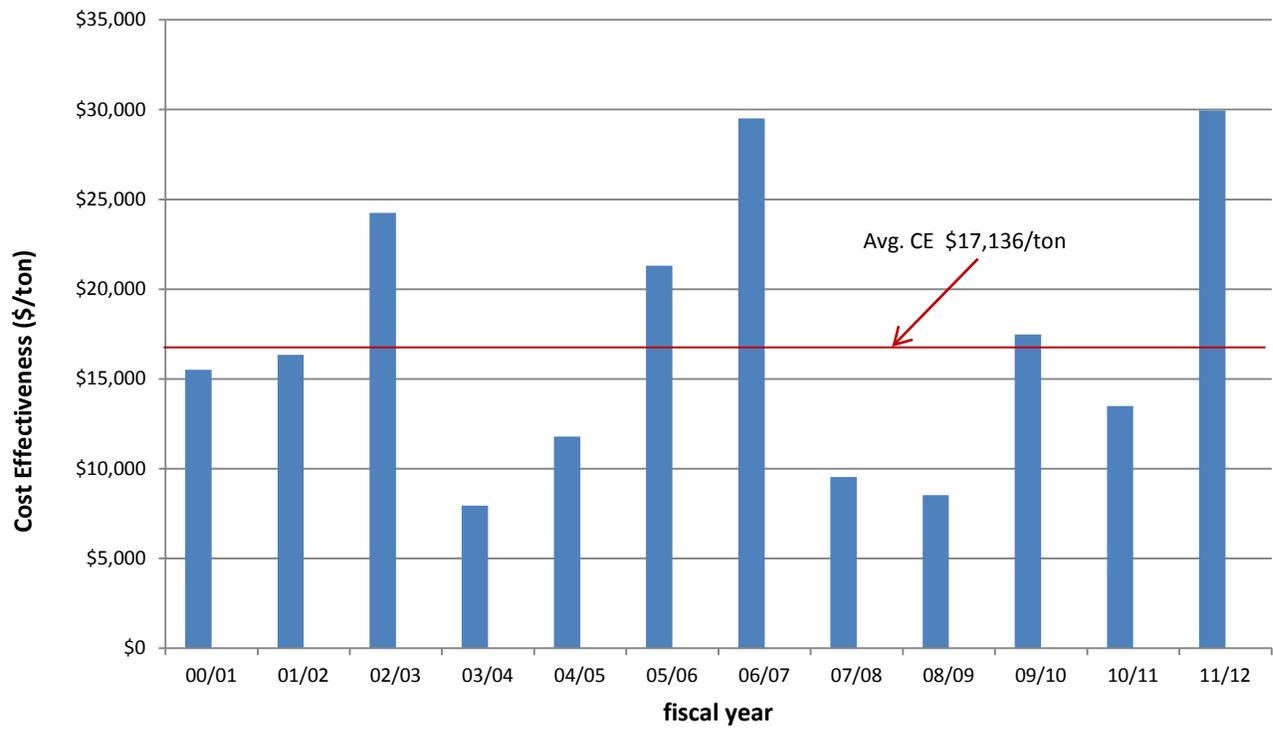


Despite these year to year fluctuations in the trend, as discussed above, the CAG Program has been very successful as is revealed by its overall cost-effectiveness. Cost-effectiveness (CE) is a measure of grant dollars provided to a project for each ton of reduced emission reductions. Figure 3, below, displays the average annual CE and the programs overall CE based on a twelve year average (years 2001 through 2012).

Since 2001, the District’s CAG Program has awarded \$13.4 million in grant funds and has reduced an estimated 950 tons of NOx, ROG, and PM emissions from mobile and other sources. As shown above in Figure 3, this breaks down to an average cost effectiveness of \$17,136 per ton of reduced emissions. Compared to the state’s incentive program which sets the cost-effectiveness limit by statute<sup>1</sup>, the District’s CAG program has proven to be very competitive. It demonstrates that the District uses the grant funds effectively and operates the CAG Program successfully in order to improve the air quality in Placer County.

<sup>1</sup>The State’s Carl Moyer Program, which is similar to the District’s Program, requires that individual projects not exceed a cost-effectiveness of **\$16,400** per ton of reduced emissions.

Figure 3: Cost-Effectiveness for Each Program Cycle for Years 2001 to 2012



# PERMITTING AND INSPECTION PERFORMANCE FOR 2012

## **Stationary Source Permitting:**

The Permitting and Engineering Section is responsible for issuing permits for stationary sources of emissions in accordance with applicable state and federal laws and District regulations.

Permits are required of commercial or manufacturing businesses or government agencies that emit air pollutants in their operations. All businesses that discharge air pollution, except those below minimum levels, require permits. Some of the types of businesses that require permits include power plants, emergency engine generators, gasoline dispensing facilities (i.e. gasoline stations), dry cleaners, mills, mines, automobile re-finishers, wood processing businesses, print shops, and many manufacturing facilities.

The District's permitting program works to reduce emissions from these sources by evaluating new or modified sources for potential toxic impacts, as well as implementation of regulations, Best Available Control Technology (BACT) requirements and, in some cases, requiring offsets to mitigate air pollutant emissions increases.

Authority to Construct (AC) permits are issued for new or modified emission units. The number of AC permits each year is shown in the Annual Authority to Construct Table. The number of AC permits each year peaked in the period of 2006 – 2010 and since then has declined to less than half those levels, which is likely a reflection of the slowed economy.

The Table, Permit Applications Taking More than 180 Days To Process, indicates the number of permits which were filed but

not processed in a timely manner due to lack of staff resources to issue permits. A District rule requires a final decision on an application within 180 days of the application being deemed complete. As of 2007 there have been no applications where the review and processing were not completed on time. In practice, most applications are processed and a permit issued within a week or two of the receipt of the application and almost all permits are now issued within 30 days, if the application is complete.

## **Burn Permits:**

The California Health and Safety Code provides for the types of burning allowed under state law. Burning is divided into Agricultural and Non-Agricultural Burning with the District's rules further defining each category and the conditions under which burning may be conducted. Except for residential allowable burning, the District issues burn permits for the different types of burning allowed.

Since 2000-01, the District has tracked the number of burn permits issued by type, along with the burn permit fees charged. The number of burn permits issued increased to nearly 160 annually by 2002-03. By 2007-08 and thereafter, the number issued has leveled off to 80 to 90 permits annually.

The decrease in permits issued and fees may be attributed to three reasons. The first is the decrease in agricultural burning, mandated by the 1992 Rice Straw Reduction Act, which has resulted in fewer permits being required and a reduction in the number of acres burned. The second reason is that there has been a decrease in land development activities, with a corresponding decline in the District issuing burn permits for land

development burning, forest management burning, and burning by a public officer. The permits issued for burning by a public officer were for live fire training exercises in a structure where the use of the building was donated. Finally, it is likely that there are fewer people seeking to burn than in the past: there are now alternatives to burning, such as green-waste cans; a prohibition on the burning of residential rubbish and the use of burn barrels that became effective in 2004; and there has been a change in the culture of the county towards less burning, that is reflected in the fact that many jurisdictions ban all burning.

The District supports the retention of the public's ability to burn vegetative material as a necessary vegetation management option, where such burning is the best or only practical means of disposal and when the burning is conducted so it will not cause a worsening of air pollution with the smoke managed. In many instances, burning for fire hazard reduction purposes is the only economical means of wood-waste disposal. On the other hand, the District encourages and has supported with grant funding alternatives to burning, such as chipping and the use of vegetative wastes for energy.

### **Inspections:**

The Compliance and Enforcement Section is responsible for the inspection of all permitted stationary sources of air pollution. Inspections are conducted to ensure compliance with District operating permit conditions and related District, state, and federal rules and regulations, and to maintain the accuracy of the permits. Inspections are conducted on an unannounced basis and include an on-site visit to review the compliance status of the operation. This includes an evaluation of the

equipment condition and operation, and recordkeeping and reporting requirements.

For Major or Title V sources which are the largest potential emitters of air pollutants, the District annually conducts both a full compliance evaluation and a partial inspection. Additional inspections at Major and Title V sources are typically performed to evaluate complaints and other potential non-compliance events. For the lower emitting synthetic minor sources, as well as for most of the minor sources, the District attempts to conduct a single inspection each year. For the lowest emitting sources, including the smallest boilers and all emergency backup generator engines, the District conducts inspections once every three years, which is consistent with their use.

The District has an agreement with the Placer County Agricultural Commissioner/Weights and Measures staff to inspect gasoline dispensing facility permits on an annual basis. As part of the Weights and Measures program gasoline pumps are tested and the air pollution inspection is conducted during the same visit. The District pays the Placer County Agricultural Commissioner/Weights and Measures Department an agreed upon amount each year. The District receives inspection reports, oversees enforcement cases, and collects annual renewal fees and re-inspection fees (a portion of which is also passed through). This is a cost effective and efficient use of the resources of both agencies.

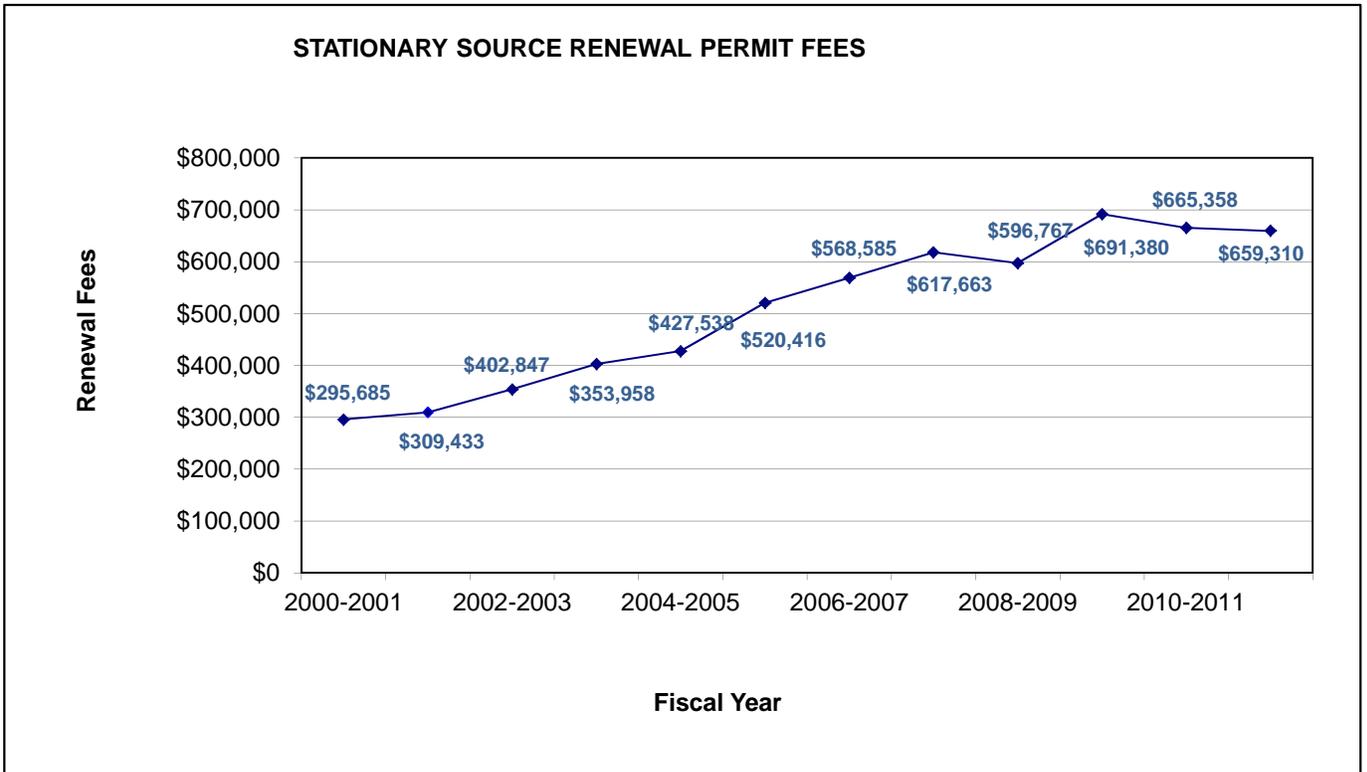
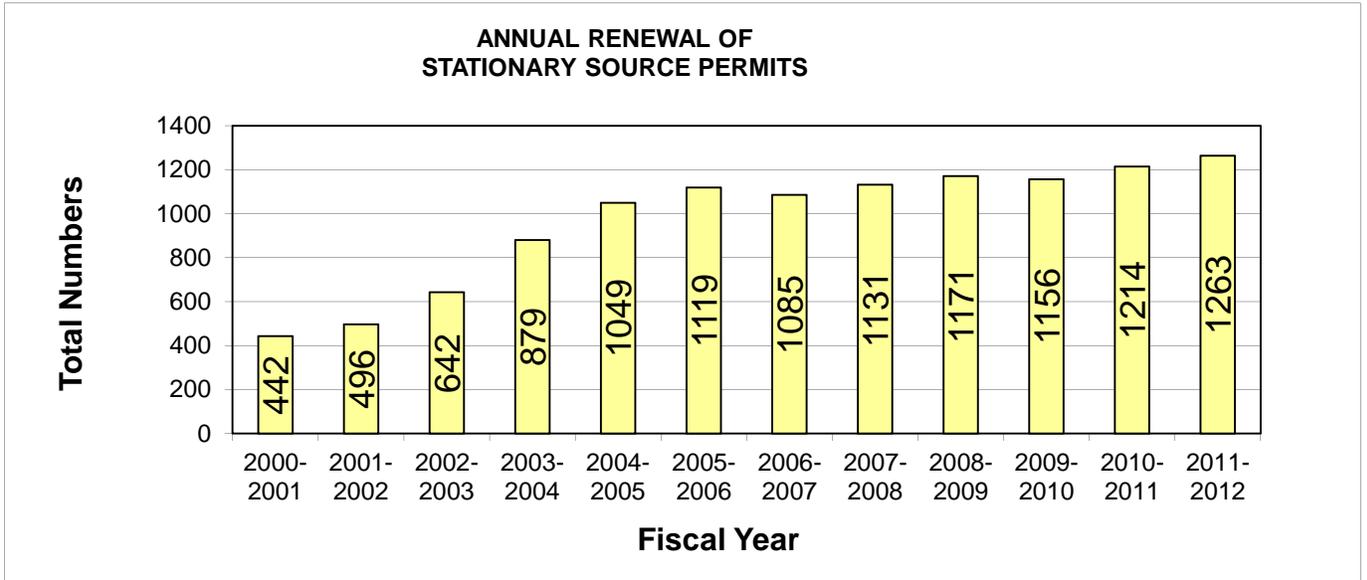
The Inspection Performance Table shows the District inspection productivity for both individual permits and facilities (which typically contain multiple individual permits) for year 2012. The District was able to inspect all major and Title V sources,

conducting both a full compliance evaluation and at least one additional partial inspection. All synthetic minor sources were inspected as well. For minor sources, the District inspected approximately half of the permits. The District has a small number of permits (89) in which inspections are overdue compared to previous years, where there was a higher backlog of overdue permits. This has been accomplished even though there has been an increase in the number of total minor source permits (1,257 in year 2012 compared with 1,043 in year 2006). Gas station permit inspections are on schedule.

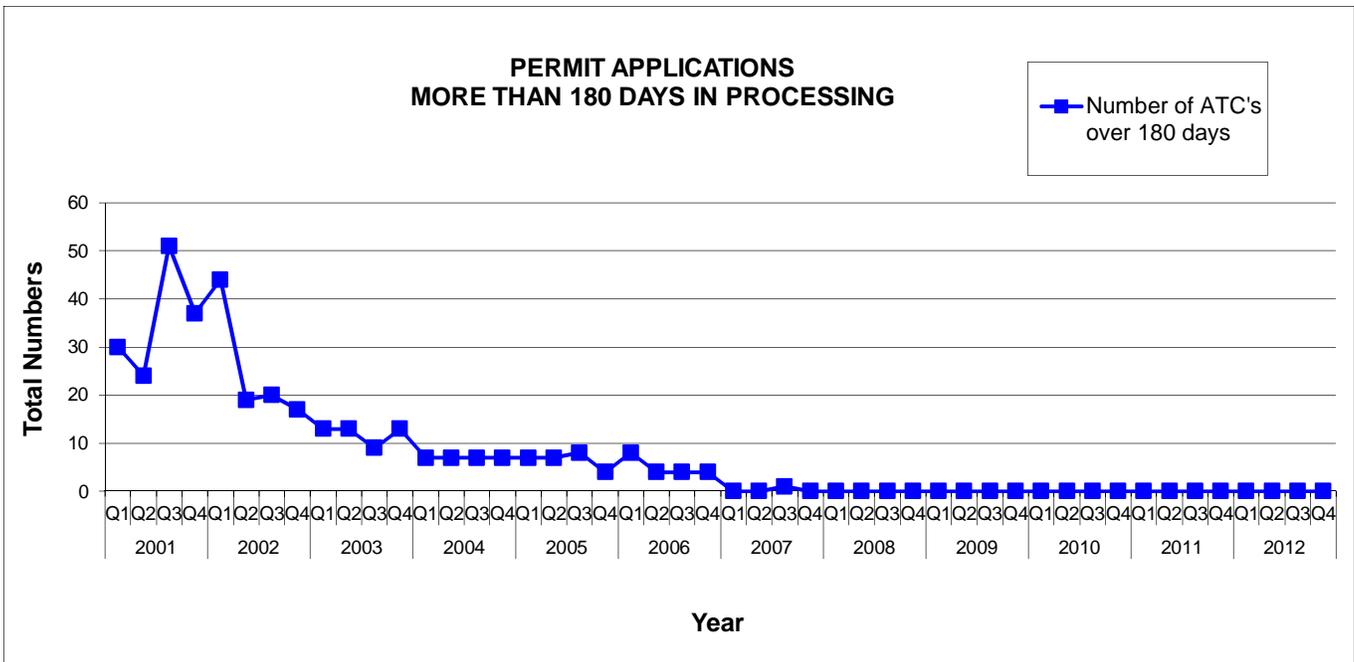
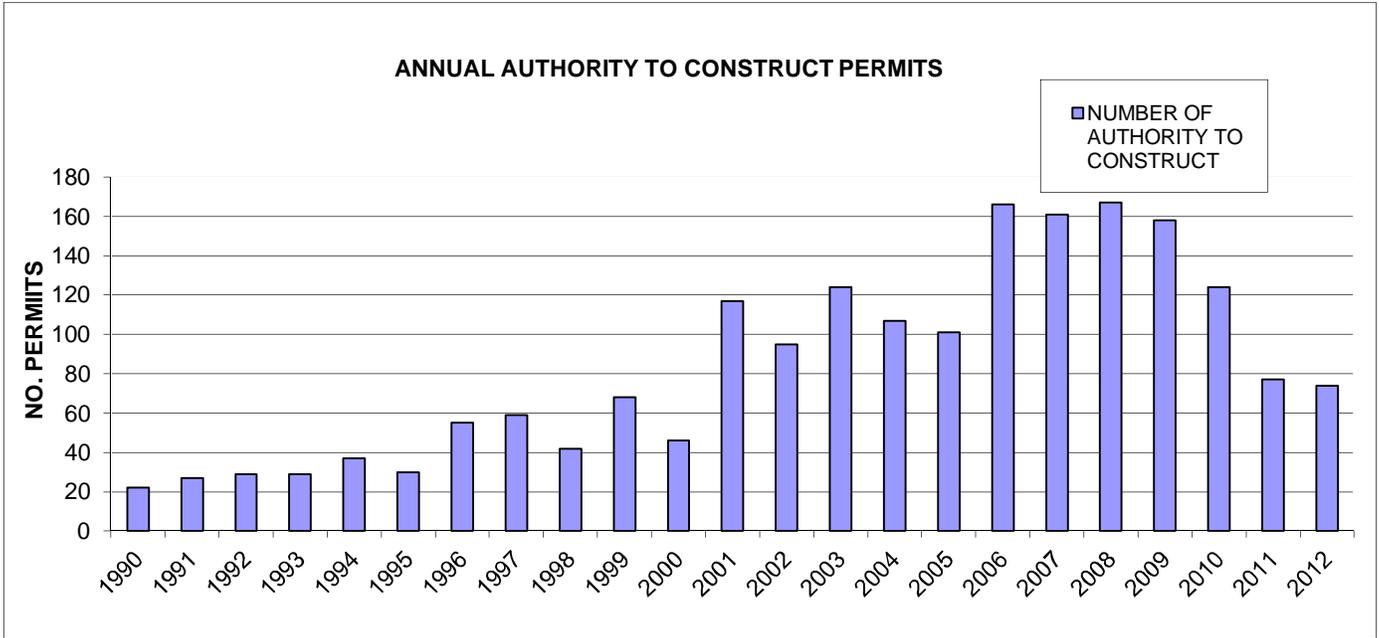
District staff also has the responsibility to inspect portable equipment and engines that are stationed within the District's jurisdiction and are registered as part of the State Portable Equipment Registration Program (PERP). This includes the separate inspection of over 500 pieces of equipment on a frequency of once every three years, in accordance with the requirements of PERP.



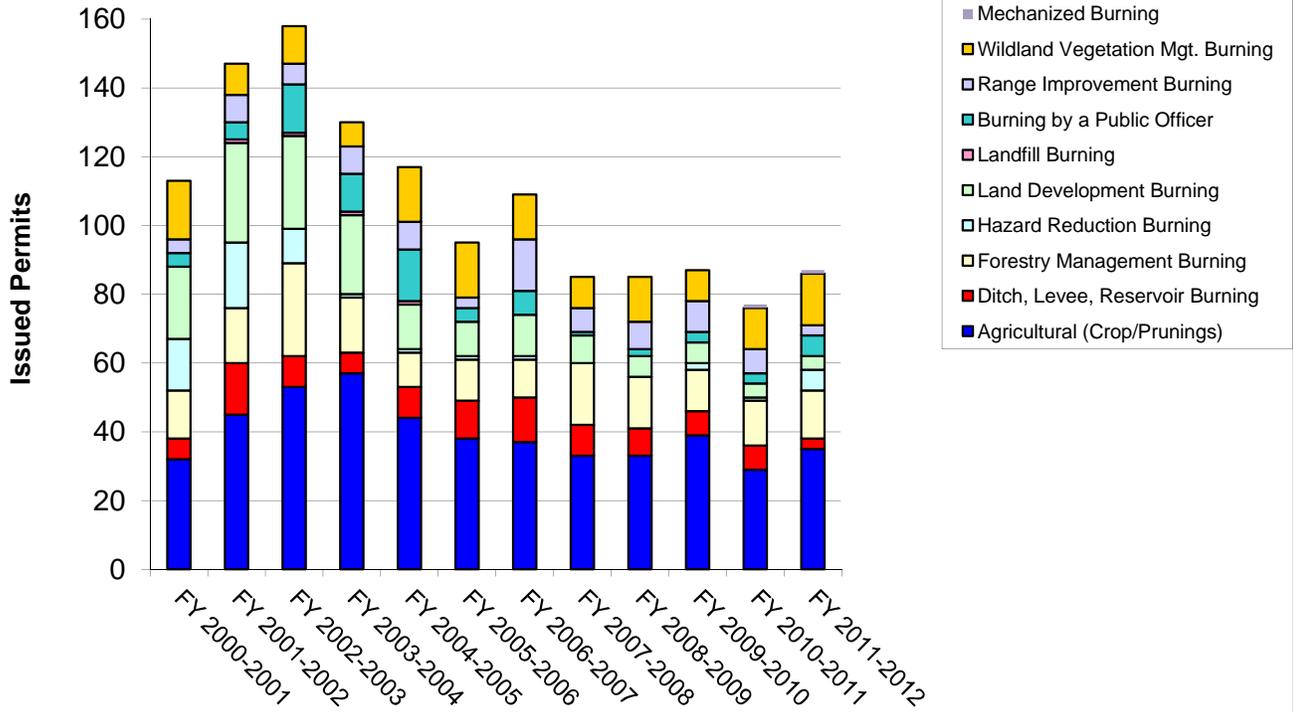
## ANNUAL PERMIT RENEWAL



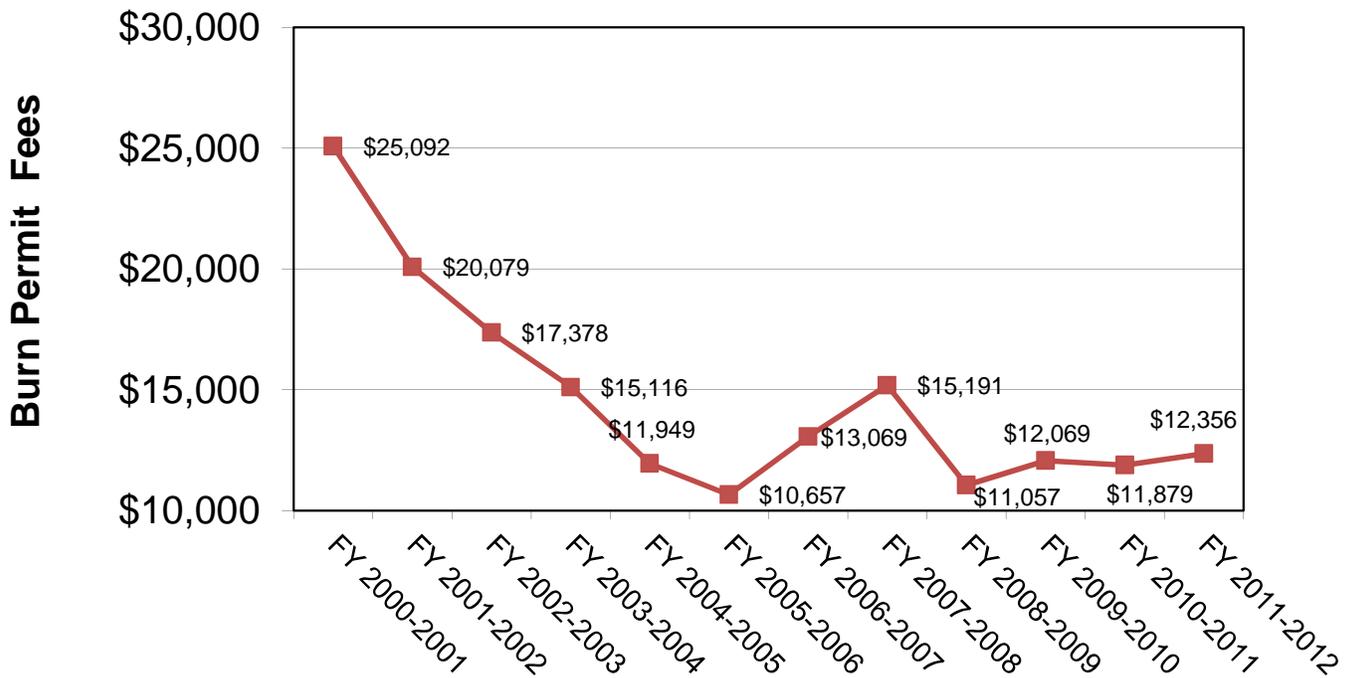
## PERMIT APPLICATIONS



### BURN PERMITS ISSUED BY BURNING TYPE



### BURN PERMIT FEES



## INSPECTION PERFORMANCE

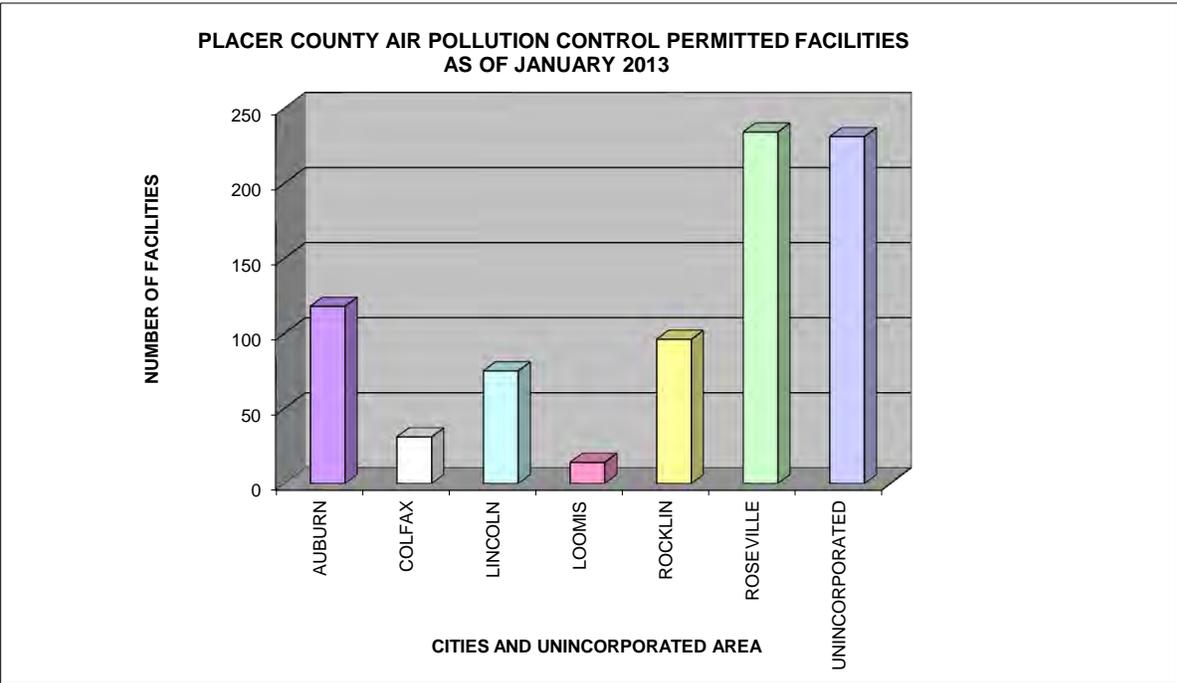
### Calendar Year 2012 (End of Year) Inspection Status by Facility

|                     | Number of Facilities | Number of Facilities Inspected | Facility Inspections Past Due | Not Inspected Not Due |
|---------------------|----------------------|--------------------------------|-------------------------------|-----------------------|
| Major or Title V    | 4                    | 4                              | 0                             | 0                     |
| Synthetic Minor     | 9                    | 9                              | 0                             | 0                     |
| Minor               | 578                  | 277                            | 56                            | 245                   |
| Gasoline Dispensing | 208                  | 178                            | 26                            | 4                     |
|                     |                      |                                |                               |                       |
| <b>Totals</b>       | <b>799</b>           | <b>468</b>                     | <b>82</b>                     | <b>249</b>            |

### Calendar Year 2012 (End of Year) Inspection Status by Permit Unit

|                     | Number of Permits | Number of Permits Inspected | Permit Inspections Past Due | Not Inspected Not Due |
|---------------------|-------------------|-----------------------------|-----------------------------|-----------------------|
| Major or Title V    | 46                | 46                          | 0                           | 0                     |
| Synthetic Minor     | 61                | 61                          | 0                           | 0                     |
| Minor               | 946               | 471                         | 63                          | 412                   |
| Gasoline Dispensing | 208               | 178                         | 26                          | 4                     |
|                     |                   |                             |                             |                       |
| <b>Totals</b>       | <b>1257</b>       | <b>756</b>                  | <b>89</b>                   | <b>412</b>            |

Permitted Facilities Chart



**PERMITTED FACILITIES AS OF 2013:**

\* Locations are based on Postal Address

| <b>CITY *</b>           | <b>TOTAL FACILITIES IN EACH AREA</b> |
|-------------------------|--------------------------------------|
| AUBURN                  | 118                                  |
| COLFAX                  | 31                                   |
| LINCOLN                 | 75                                   |
| LOOMIS                  | 14                                   |
| ROCKLIN                 | 96                                   |
| ROSEVILLE               | 234                                  |
| UNINCORPORATED          | 231                                  |
| <b>TOTAL FACILITIES</b> | <b>799</b>                           |



Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                               | ADDRESS   |
|---|---|
| ----- JURISDICTION AUBURN -----             |   |
| AT&T - AUBURN (CA9572)                      | 13158 LINCOLN WAY AUBURN CA 95603               |
| AT&T - AUBURN (TB005)                       | 1125 LINCOLN WAY AUBURN CA 95603                |
| AT&T - AUBURN OA                            | 1725 AUBURN RAVINE RD AUBURN CA 95603           |
| AUBURN AIRPORT                              | 13630 NEW AIRPORT ROAD AUBURN CA 95602          |
| AUBURN ARCO AM/PM                           | 13405 LINCOLN WAY AUBURN CA 95603               |
| AUBURN BEACON                               | 13400 BOWMAN RD AUBURN CA 95603                 |
| AUBURN BODY SHOP                            | 196 NEVADA STREET AUBURN CA 95602               |
| AUBURN COLLISION CENTER                     | 560 NEVADA STREET AUBURN CA 95603               |
| AUBURN FOOD AND GAS                         | 1110 HIGH ST AUBURN CA 95603                    |
| AUBURN GAS AND SHOP                         | 13380 LINCOLN WAY AUBURN CA 95603               |
| AUBURN JOURNAL                              | 1030 HIGH STREET AUBURN CA 95603                |
| AUBURN PRINTERS                             | 13020 EARHART AVE AUBURN CA 95602               |
| AUBURN RAVINE TERRACE                       | 750 AUBURN RAVINE RD AUBURN CA 95603            |
| AUBURN RIDGE ALZHEIMER                      | 3265 BLUE OAKS DRIVE AUBURN CA 95602            |
| AUBURN VALERO                               | 1650 LINCOLN WAY AUBURN CA 95603                |
| AUBURN VALLEY COMMUNITY SERVICE DISTRICT    | 8815 AUBURN VALLEY RD AUBURN CA 95602           |
| AUBURN VALLEY COUNTRY CLUB                  | 8800 AUBURN VALLEY RD AUBURN CA 95602           |
| BEAR RIVER READY MIX                        | 890 GRASS VALLEY HIGHWAY AUBURN CA 95603        |
| BELL ROAD CHEVRON                           | 3005 GRASS VALLEY HWY #8 AUBURN CA 95602        |
| CALFIRE - STATION 182                       | 9405 WISE ROAD AUBURN CA 95603                  |
| CALFIRE AUBURN - STATION 10                 | 13760 LINCOLN WAY AUBURN CA 95603               |
| CALFIRE/PLACER COUNTY FIRE - STATION 180    | 11645 ATWOOD ROAD AUBURN CA 95603               |
| CALIFORNIA CONSERV CORP PLACER CENTER       | 3710 CHRISTIAN VALLEY ROAD AUBURN CA 95602      |
| CALTRANS - AUBURN                           | 1050 GRASS VALLEY HWY AUBURN CA 95603           |
| CHEVRON - CARDLOCK - BLOCKER ROAD           | 200 BLOCKER DR AUBURN CA 95603                  |
| CHEVRON - LINCOLN WAY - #9-9375             | 13381 LINCOLN WAY AUBURN CA 95603               |
| CITY OF AUBURN - CANYON COURT               | CANYON COURT AUBURN CA 95603                    |
| CITY OF AUBURN - FALCONS POINT              | EAGLES NEST DRIVE/BLACKSTONE CT AUBURN CA 95603 |
| CITY OF AUBURN - FAWN CREEK LIFT STATION    | FAWN CREEK DR AUBURN CA 95603                   |
| CITY OF AUBURN - INDIAN HILLS LIFT STATION  | 12050 MONT VISTA DR AUBURN CA 95603             |
| CITY OF AUBURN - LOWER VINTAGE OAKS         | 10700 SUNRISE RIDGE CIRCLE AUBURN CA 95603      |
| CITY OF AUBURN - MAIDU LIFT STATION         | 901 AUBURN FOLSOM RD AUBURN CA 95603            |
| CITY OF AUBURN - MONTECIELO LIFT STATION    | MAIDU DR & PAST FALCONS POINT O AUBURN CA 95603 |
| CITY OF AUBURN - POLICE DEPT                | 1215 LINCOLN WAY AUBURN CA 95603                |
| CITY OF AUBURN - WASTEWATER TREATMENT PLANT | 10441 OPHIR RD AUBURN CA 95603                  |
| DAMON - THREE STAR RANCH CO                 | 7180 WISE RD AUBURN CA 95603                    |
| DAWSON OIL - CARDLOCK - BOWMAN              | 13730 BOWMAN RD AUBURN CA 95603                 |
| DAWSON OIL CO                               | AUBURN BULK PLANT AUBURN CA 95603               |
| DEL & JOE'S BODY SHOP, INC                  | 155 BORLAND AVENUE AUBURN CA 95603              |
| DEPOE BAY COFFEE ROASTERS, INC.             | 893 HIGH ST AUBURN CA 95604                     |
| DIAMOND WELL DRILLING                       | 1660 OLD AIRPORT RD AUBURN CA 95602             |
| DRY CREEK 76                                | 3690 GRASS VALLEY HWY AUBURN CA 95602           |
| DRY CREEK AM/PM                             | 11911 DRY CREEK ROAD AUBURN CA 95602            |
| ELM DRY CLEANERS                            | 365 ELM AVENUE AUBURN CA 95603                  |
| FD THOMAS, INC.                             | 13101 FOREST HILL ROAD AUBURN CA 95603          |
| FORMER KEN'S AUTOMOTIVE REPAIR              | 13155 LINCOLN WAY AUBURN CA 95604               |
| FORTY-NINER SHELL #135065                   | 390 GRASS VALLEY HWY AUBURN CA 95603            |
| GOLD COUNTRY SHELL                          | 13210 LINCOLN WAY AUBURN CA 95603               |
| GOLDEN GAS                                  | 13190 LINCOLN WAY AUBURN CA 95603               |
| HOLTS AUTOBODY                              | 420 LINCOLN WAY AUBURN CA 95603                 |
| J.D. TOMLINSON & CO.                        | 13810 LINCOLN WAY AUBURN CA 95603               |
| LEVEL 3 COMMUNICATION - AUBURN              | 1725 AUBURN RAVINE RD AUBURN CA 95603           |
| MAIDU MARKET                                | 631 AUBURN-FOLSOM ROAD AUBURN CA 95603          |
| MCI WORLDCOM - AUBURN                       | I - 80 NORTH & WEST OFF APPLE S AUBURN CA 95603 |
| MERITAGE MOTOR                              | 1145 LINCOLN WAY AUBURN CA 95603                |
| MID-PLACER PUBLIC SCHOOLS                   | 13121 BILL FRANCIS DR AUBURN CA 95603           |
| MILTENYI BIOTEC, INC.                       | 2303 LINDBERGH ST AUBURN CA 95602               |

Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                                   | ADDRESS  |
|---|--|
| MORGAN TECHNICAL CERAMICS, AUBURN, INC          | 13079 EARHART AVE AUBURN CA 95602              |
| NEXTEL - CA0640 NORTH AUBURN                    | CHANNEL HILL RD AUBURN CA 95603                |
| OLIVER'S GROCERY                                | 15701 LAKE ARTHUR RD AUBURN CA 95602           |
| ONE STOP EXXON - NELLA OIL #4                   | 2280 DRIVE IN WAY AUBURN CA 95603              |
| ONE STOP EXXON - NELLA OIL #5                   | 13461 BOWMAN RD AUBURN CA 95603                |
| PACIFIC GAS & ELECTRIC CO. - AUBURN SERVICE     | C343 SACRAMENTO STREET AUBURN CA 95603         |
| PACIFIC GAS & ELECTRIC CO. - PORTABLE           | VARIOUS LOCATIONS AUBURN CA 95603              |
| PACIFIC GAS & ELECTRIC CO. - WISE PWRHOUSE      | 1475 MERRY KNOLL ROAD AUBURN CA 95603          |
| PLACER COUNTY - AUBURN HISTORIC COURTHOUSE      | 101 MAPLE STREET AUBURN CA 95603               |
| PLACER COUNTY - AUBURN JUSTICE CENTER           | 2929 RICHARDSON DR AUBURN CA 95603             |
| PLACER COUNTY - BUILDING 208                    | 11510 C AVE AUBURN CA 95603                    |
| PLACER COUNTY - BUILDING 210                    | 11476 C AVE AUBURN CA 95603                    |
| PLACER COUNTY - BUILDING 303                    | 11441 F AVE AUBURN CA 95603                    |
| PLACER COUNTY - CDRC                            | 3091 COUNTY CENTER DR AUBURN CA 95603          |
| PLACER COUNTY - CHILDREN'S EMERGENCY SHELTER    | 11084 B AVE AUBURN CA 95603                    |
| PLACER COUNTY - DPW                             | 11448 F AVE AUBURN CA 95603                    |
| PLACER COUNTY - FAB                             | FINANCE ADMIN BUILDING AUBURN CA 95603         |
| PLACER COUNTY - HHS COMMUNITY CLINIC            | HHS COMMUNITY CLINIC AUBURN CA 95603           |
| PLACER COUNTY - HHS ENTERPRISE                  | HHS ENTERPRISE AUBURN CA 95603                 |
| PLACER COUNTY - JAIL                            | 2775 RICHARDSON DR AUBURN CA 95603             |
| PLACER COUNTY - JUVENILE DETENTION CENTER       | JUVENILE DETENTION CENTER AUBURN CA 95603      |
| PLACER COUNTY - OFFICE OF EDUCATION             | 360 NEVADA ST AUBURN CA 95603                  |
| PLACER COUNTY - PUBLIC HEALTH LAB               | 11475 C AVE AUBURN CA 95603                    |
| PLACER COUNTY - SEWER MAINT DIST #1             | 11755 JOEGER RD AUBURN CA 95602                |
| PLACER COUNTY - SMD #1 - ATWOOD III             | 2498 RICHARDSON DR. AUBURN CA 95603            |
| PLACER COUNTY COMM\I.T. - BUILDING 501          | 11295 B AVE AUBURN CA 95603                    |
| PLACER COUNTY COMM\I.T. - IRON MINE             | 3122 IRON MINE ROAD AUBURN CA 95602            |
| PLACER COUNTY UTILITIES - AIRPORT SEWER         | BILL FRANCIS DR. & NEW AIRPORT AUBURN CA 95603 |
| PLACER COUNTY UTILITIES - ALPINE SEWER          | 1745 LILAC LN AUBURN CA 95603                  |
| PLACER COUNTY UTILITIES - AUBURN RAVINE SEWERSE | CORNER OF AUBURN RAVINE & AP AUBURN CA 95603   |
| PLACER COUNTY UTILITIES - CHILDREN'S EMERGENC   | 11106 B AVE AUBURN CA 95603                    |
| PLACER COUNTY UTILITIES - EDGEWOOD SEWER        | NEAR EDGEWOOD & LIVE OAK LN AUBURN CA 95603    |
| PLACER COUNTY WATER - BOWMAN                    | 595 CHRISTIAN VALLEY RD AUBURN CA 95602        |
| PLACER COUNTY WATER - FERG.                     | 185 FERGUSON RD AUBURN CA 95603                |
| PLACER COUNTY WATER AGENCY - FERGUSON           | 185 FERGUSON RD AUBURN CA 95603                |
| PLACER COUNTY WATER AGENCY - MAIDU DR           | 496 MAIDU DR AUBURN CA 95603                   |
| PLACER HIGH SCHOOL                              | 275 ORANGE STREET AUBURN CA 95603              |
| RALEY'S SUPERMARKET #229                        | 13384 LINCOLN WAY AUBURN CA 95603              |
| ROWDY RANDY'S                                   | 650 HIGH ST AUBURN CA 95603                    |
| SAVE MART #600                                  | 386 ELM AVE AUBURN CA 95603                    |
| SIENA CARE CENTER                               | 11600 EDUCATION STREET AUBURN CA 95602         |
| SIERRA AUTO                                     | 120 BORLAND AVE STE A AUBURN CA 95603          |
| SIERRA ELM UNION 76                             | 401 GRASS VALLEY HWY AUBURN CA 95603           |
| SUTTER AUBURN FAITH HOSPITAL                    | 11815 EDUCATION ST. AUBURN CA 95602            |
| SUTTER AUBURN SURGERY CENTER                    | 3123 PROFESSIONAL DR AUBURN CA 95603           |
| T&J CLEANERS, INC.                              | 437 GRASS VALLEY HWY AUBURN CA 95603           |
| TARGET STORE T-1097                             | 2700 BELL RD AUBURN CA 95603                   |
| TESORO USA 63176                                | 13435 BOWMAN RD AUBURN CA 95603                |
| THE ABBEY CO. - 12840 BILL CLARK                | 12840 BILL CLARK WAY AUBURN CA 95602           |
| THE ABBEY CO. - 2301 LINDBERGH                  | 2301 LINDBERGH ST AUBURN CA 95602              |
| THE HOME DEPOT #8597                            | 11755 WILLOW CREEK DR AUBURN CA 95602          |
| THE RIDGE GOLF COURSE                           | 2020 GOLF COURSE ROAD AUBURN CA 95602          |
| THE STORE                                       | 4000 GRASS VALLEY HWY AUBURN CA 95602          |
| TJ ENTERPRISES                                  | 12405 LOCKSLEY LANE AUBURN CA 95603            |
| TOMS SIERRA #24 - LINCOLN WAY                   | 13190 LINCOLN WAY AUBURN CA 95603              |
| VALET CLEANERS                                  | 2975 BELL ROAD AUBURN CA 95603                 |
| VERIZON WIRELESS - AUBURN RELO                  | COLLINS DR & MT. VERNON RD AUBURN CA 95603     |
| VERIZON WIRELESS - BOWMAN                       | 363-B CHANNEL HILL RD AUBURN CA 95603          |

Facility Jurisdiction Report as of 12/31/2012

FACILITY NAME

ADDRESS

|                                  |                                      |
|----------------------------------|--------------------------------------|
| VERIZON WIRELESS - CLIPPER GAP   | 15600 APPLGATE ROAD AUBURN CA 95603  |
| VERIZON WIRELESS - ELDERS CORNER | 12122 DRY CREEK RD AUBURN CA 95602   |
| WESTVIEW HEALTHCARE CENTER       | 12225 SHALE RIDGE RD AUBURN CA 95602 |

Total Number of Facilities for AUBURN is 118

----- JURISDICTION COLFAX -----

|                                     |  |
|-------------------------------------|--|
| CALFIRE COLFAX - STATION 30         | 24020 FOWLER AVE COLFAX CA 95713             |
| CALFIRE STATION 30 COLFAX           | 24020 FOWLER AVE COLFAX CA 95713-9001        |
| CHEVRON FOOD MART                   | 400 SOUTH CANYON WAY COLFAX CA 95713         |
| CITY OF COLFAX - LIFT STATION 1     | 24995 BEN TAYLOR ROAD COLFAX CA 95713        |
| CITY OF COLFAX - LIFT STATION 2     | ALPINE WAY & BEN TAYLOR COLFAX CA 95713      |
| CITY OF COLFAX - LIFT STATION 3     | 555 PINE STREET COLFAX CA 95713              |
| CITY OF COLFAX - LIFT STATION 5     | 1900 S. CANYON WAY COLFAX CA 95713           |
| CITY OF COLFAX - WWTP               | 23550 GRANDVIEW AVE COLFAX CA 95713          |
| COLFAX CHEVRON                      | 400 S CANYON WAY COLFAX CA 95713             |
| COLFAX CLEANERS                     | 228 S AUBURN COLFAX CA 95713                 |
| COLFAX FOOD & GAS                   | 240 S. AUBURN ST COLFAX CA 95713             |
| COLFAX HIGH SCHOOL                  | 24995 BEN TAYLOR ROAD COLFAX CA 95713        |
| COLFAX VALERO                       | 300 CANYON WAY COLFAX CA 95713               |
| E2C REMEDIATION - COLFAX 76 STATION | 400 SOUTH AUBURN COLFAX CA 95713             |
| FORMER ARCO COLFAX SERVICE ST.      | 504 SOUTH AUBURN STREET COLFAX CA 95713-9038 |
| GKM CORPORATION                     | 152 WHITCOMB AVE COLFAX CA 95713             |
| HANSEN BROTHERS ENTERPRISES         | 44 CENTRAL STREET COLFAX CA 95713            |
| HICKEY'S AUTO BODY & PAINT          | 300 S AUBURN ST COLFAX CA 95713              |
| HILLS FLAT LUMBER CO.               | 1000 S CANYON WAY COLFAX CA 95713            |
| NEVADA IRRIGATION DISTRICT - C      | 28311 SECRET TOWN ROAD COLFAX CA 95713       |
| NEVADA IRRIGATION DISTRICT- LONG    | 26909 ROLLINS LAKE ROAD COLFAX CA 95713      |
| NEVADA IRRIGATION DISTRICT-COLFAX   | 28311 SECRET TOWN ROAD COLFAX CA 95713       |
| NEXTEL - CA0541 FROST HILL          | 30300 MAGRA ROAD COLFAX CA 95713             |
| PLACER COUNTY WATER - COLFAX        | 449 PLEASANT ST COLFAX CA 95703              |
| QWEST COMMUNICATIONS - COLFAX       | 2909 MT HOWELL RD COLFAX CA 95722            |
| R.J. MILES COMPANY                  | 212 RAILROAD STREET COLFAX CA 95713          |
| SIERRA ENERGY #15 - SOUTH AUBURN    | 400 SO AUBURN ST COLFAX CA 95713             |
| VERIZON CALIFORNIA, INC - COLFAX    | 10 AUBURN ST COLFAX CA 95713                 |
| VERIZON WIRELESS - MT. HOWELL       | 700 MOUNT HOWELL RD COLFAX CA 95713          |
| VERIZON WIRELESS - ROLLINS LAKE     | 27197 NORON GRADE RD COLFAX CA 95713         |
| WINNER CHEVROLET BODY SHOP          | 22 WEST GRASS VALLEY ST COLFAX CA 95713      |

Total Number of Facilities for COLFAX is 31

----- JURISDICTION LINCOLN -----

|   |   |
|---|---|
| A&A CONCRETE                                  | 2230 ATHENS LINCOLN CA 95648                  |
| ALLEN'S CABINET AND FIXTURE                   | 140 FLOCCHINI CR LINCOLN CA 95648             |
| AT&T - LINCOLN (TB040)                        | 566 F ST LINCOLN CA 95648                     |
| BALDWIN CONTRACT. CO. DBA KNIFE RIVER CONSTRU | 1250 GLADDING RD LINCOLN CA 95648             |
| BEALE AIR FORCE BASE                          | 5750 MOORE RD LINCOLN CA 95648                |
| CALIFORNIA CLEANERS                           | 586 MCBEAN PARK DRIVE LINCOLN CA 95648        |
| CARLIN C. COPPIN ELEM. SCHOOL                 | 150 EAST 12TH STREET LINCOLN CA 95648         |
| CASES PLUS, INC.                              | 700 BUSINESS PARK DR LINCOLN CA 95648         |
| CEMEX CMP, LLC - LINCOLN                      | 2680 ATHENS RD LINCOLN CA 95631               |
| CHEVRON - TWELVE BRIDGES - #21-0284           | 945 TWELVE BRIDGES LINCOLN CA 95648           |
| CINGULAR WIRELESS - LINCOLN                   | 1445 STATE HWY 65 LINCOLN CA 95648            |
| CITY OF LINCOLN - UNIT #203                   | POLICE DEPARTMENT LINCOLN CA 95648            |
| CITY OF LINCOLN - UNIT #303                   | FIRE STATION #35 LINCOLN CA 95648             |
| CITY OF LINCOLN - UNIT #304                   | 17 MCBEAN PARK DR LINCOLN CA 95648            |
| CITY OF LINCOLN - UNIT #305                   | 126 JOINER PARKWAY LINCOLN CA 95648           |
| CITY OF LINCOLN - UNIT #880                   | WELL #2 LINCOLN CA 95648                      |
| CITY OF LINCOLN - UNIT #882                   | LINCOLN PARKWAY LIFT STATION LINCOLN CA 95648 |
| CITY OF LINCOLN - UNIT #885                   | WESTWOOD WELL LINCOLN CA 95648                |

Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                                 | ADDRESS   |
|---|---|
| CITY OF LINCOLN - UNIT #886                   | 1203 FIDDYMENT RD LINCOLN CA 95648              |
| CITY OF LINCOLN - UNIT #887                   | RAVINE MEADOWS PUMP STATION LINCOLN CA 95648    |
| CITY OF LINCOLN - UNIT #889                   | OLD WASTE WATER TREATMENT PLAN LINCOLN CA 95648 |
| CITY OF LINCOLN - UNIT #890                   | MARKEM RAVINE LIFT STATION LINCOLN CA 95648     |
| CITY OF LINCOLN - UNIT #894                   | TWELVE BRIDGES & STONERIDGE DR LINCOLN CA 95648 |
| CITY OF LINCOLN - UNIT #896                   | MOORE RD LIFT STATION LINCOLN CA 95648          |
| CITY OF LINCOLN - WWTP                        | 1245 FIDDYMENT LINCOLN CA 95648                 |
| COLLEDGEWOOD                                  | 1951 AVIATION BLVD LINCOLN CA 95648             |
| DEL WEBB CALIFORNIA CORP.                     | LINCOLN HILLS GOLF COURSE LINCOLN CA 95648      |
| DESILVA GATES CONSTRUCTION                    | 654 BELLA BREEZE DRIVE LINCOLN CA 95648         |
| ENERGY 2001, INC                              | 3195 ATHENS RD LINCOLN CA 95648                 |
| EXPRESS MART/ LINCOLN                         | 151 JOINER PKWY LINCOLN CA 95648                |
| FOSKETT RANCH ELEMENTARY SCHOOL               | 1561 JOINER PARKWAY LINCOLN CA 95648            |
| GENPOWER                                      | 3155 ATHENS AVE LINCOLN CA 95648                |
| GOLDEN STATE COLLISION CENTERS, LINCOLN       | 100 FLOCCHINI CIRCLE LINCOLN CA 95648           |
| HOLIDAY INN EXPRESS & SUITES                  | 155 FERRARI RANCH ROAD LINCOLN CA 95648         |
| KAISER - LINCOLN MEDICAL OFFICE               | 1900 DRESDEN DR LINCOLN CA 95648                |
| LINCOLN AUTO BODY                             | 584 G STREET LINCOLN CA 95648                   |
| LINCOLN CROSSING ELEMENTARY SCHOOL            | 635 GROVELAND AVE LINCOLN CA 95648              |
| LINCOLN HIGH SCHOOL                           | 790 J STREET LINCOLN CA 95648                   |
| LINCOLN MANOR                                 | 1550 THIRD ST LINCOLN CA 95648                  |
| LINCOLN REGIONAL AIRPORT                      | 1480 FLIGHTLINE DR LINCOLN CA 95648             |
| LIVINGSTON CONCRETE SERVICES                  | 2915 LESVOS CT LINCOLN CA 95648                 |
| LOWE'S OF NORTH LINCOLN                       | 535 HWY 65 LINCOLN CA 95648                     |
| NEXTEL - CA1831 LINCOLN                       | 1445 HIGHWAY 65 NORTH LINCOLN CA 95648          |
| O.K. & B. - LINCOLN AIR CENTER                | 2975 VENTURE DR LINCOLN CA 95648                |
| OATES INVESTMENTS, INC                        | 1721 AVIATION BLVD LINCOLN CA 95648             |
| PABCO CLAY PRODUCTS LLC DBA GLADDING MCBEAN   | 601 7TH STREET LINCOLN CA 95648                 |
| PABCO CLAY PRODUCTS LLC DBA LINCOLN CLAY      | 1500 HIGHWAY 65 LINCOLN CA 95648                |
| PLACER COUNTY COMM\I.T. - THERMALAND RADIO SI | 8800 VISTA WAY LINCOLN CA 95648                 |
| RALEY'S #280                                  | 43 LINCOLN BLVD LINCOLN CA 95648                |
| RALEY'S SUPERMARKET #230                      | 39 LINCOLN BLVD LINCOLN CA 95648                |
| RAMOS OIL - SHELL SELF-SERVE                  | 210 G STREET LINCOLN CA 95648                   |
| RAMOS OIL COMPANY, INC.                       | 1185 HWY 65 LINCOLN CA 95648                    |
| RIO BRAVO-ROCKLIN                             | 3100 THUNDER VALLEY CT LINCOLN CA 95648         |
| ROGERS FAMILY COMPANY                         | 1731 AVIATION BLVD LINCOLN CA 95648             |
| ROSS HAY                                      | 3761 NICOLAUS RD LINCOLN CA 95648               |
| SAFeway, INC. #1761                           | 405 S. HIGHWAY 65 LINCOLN CA 95648              |
| SAFeway, INC. #1761/LINCOLN                   | 71 LINCOLN BLVD LINCOLN CA 95648                |
| SIERRA FOOD MART                              | 320 G ST LINCOLN CA 95648                       |
| SIERRA PACIFIC INDUSTRIES - LINCOLN           | 1440 LINCOLN BLVD LINCOLN CA 95648              |
| SYAR CONCRETE - LINCOLN                       | 960 GLADDING ROAD LINCOLN CA 95648              |
| TARGET STORE T-2214                           | 950 GROVELAND LN LINCOLN CA 95648               |
| THE HOME DEPOT #8571                          | 1000 GROVELAND LN LINCOLN CA 95648              |
| TOWER MART #134 - NICOLAUS                    | 2330 NICOLAUS RD LINCOLN CA 95648               |
| TOWER MART #138 - G STREET                    | 671 G ST LINCOLN CA 95648                       |
| TURKEY CREEK GOLF CLUB                        | 1525 STATE HIGHWAY 193 LINCOLN CA 95648         |
| TWELVE BRIDGES ELEM. SCH.                     | 2450 EASTRIDGE DR LINCOLN CA 95648              |
| TWELVE BRIDGES GOLF CLUB                      | 3075 TWELVE BRIDGES DRIVE LINCOLN CA 95648      |
| TWELVE BRIDGES MIDDLE SCHOOL                  | 770 WESTVIEW DR LINCOLN CA 95648                |
| UNITED AUBURN INDIAN COMMUNITY DBA THUNDER VA | 3110 THUNDER VALLEY CT LINCOLN CA 95648         |
| VERIZON WIRELESS - LINCOLN                    | 1490 GLADDING RD LINCOLN CA 95648               |
| VERIZON WIRELESS - SHERIDAN                   | 4221 DOWD RD LINCOLN CA 95648                   |
| VERIZON WIRELESS - WEST LINCOLN               | 570 NELSON LN LINCOLN CA 95648                  |
| WALTER FICKEWORTH                             | 2780 NORTH DOWD ROAD LINCOLN CA 95648           |
| WESTERN PLACER UNIFD SCHOOL- BUS TRANS.       | 2701 NICOLAUS ROAD LINCOLN CA 95648             |
| WESTERN PLACER WASTE MGMT. - LINCOLN          | WESTERN REGIONAL SANITARY LAND LINCOLN CA 95648 |

Total Number of Facilities for LINCOLN is 75

Facility Jurisdiction Report as of 12/31/2012

FACILITY NAME

ADDRESS

----- JURISDICTION LOOMIS -----

|                                 |  |
|---------------------------------|--|
| AT&T - LOOMIS (TB043)           | 5916 WALNUT STREET LOOMIS CA 95650         |
| CLYDE G. STEAGALL, INC          | 6030 KING ROAD LOOMIS CA 95650             |
| DEL ORO HIGH SCHOOL             | 3301 TAYLOR RD LOOMIS CA 95650             |
| HITECH COLLISION CENTER         | 3245 SWETZER ROAD LOOMIS CA 95650          |
| LAUSMANN LUMBER & MOULDING CO.  | 3370 RIPPEY ROAD LOOMIS CA 95650           |
| LOOMIS SENIOR CARE VILLA        | 3400 CHISOM TRAIL LOOMIS CA 95650          |
| MCI WORLDCOM - LOOMIS           | TAYLOR RD, AND KING RD. LOOMIS CA 95650    |
| PLACER COUNTY - LOOMIS LANDFILL | 3660 WINTERS LOOMIS CA 95650               |
| PLACER COUNTY - SMD3 WWTP       | 4928 AUBURN FOLSOM RD LOOMIS CA 95650      |
| RALEY'S SUPERMARKET #231/LOOMIS | 6119 HORSESHOE BAR RD LOOMIS CA 95650      |
| RECOATING WEST                  | 6200 ANGELO CT LOOMIS CA 95650             |
| USA PETROLEUM #68158 - LOOMIS   | 3430 TAYLOR RD LOOMIS CA 95650             |
| VERIZON WIRELESS - LOOMIS       | 3664 MAGNOLIA ST LOOMIS CA 95650           |
| VERIZON WIRELESS - PENRYN       | 3350 SUGARLOAF MOUNTAIN DR LOOMIS CA 95650 |

Total Number of Facilities for LOOMIS is 14

----- JURISDICTION ROCKLIN -----

|  |   |
|--|---|
| 7-ELEVEN STORE #32636 - SIERRA COLLEGE     | 4281 SIERRA COLLEGE BLVD ROCKLIN CA 95677     |
| 7-ELEVEN STORE #32867 - SUNSET             | 2101 SUNSET BLVD ROCKLIN CA 95677             |
| ACE HARDWARE RETAIL SUPPORT CENTER         | 3305 INDUSTRIAL AVE ROCKLIN CA 95765          |
| ADDISON AVENUE FEDERAL CREDIT UNION        | 1011 SUNSET BLVD ROCKLIN CA 95765             |
| ARCO #5647 - FAIRWAY DR.                   | 6550 FAIRWAY DR ROCKLIN CA 95677              |
| AT&T - MIDAS & MT. VIEW                    | MIDAS AVE & MOUNTAIN VIEW DR ROCKLIN CA 95677 |
| AT&T - ROCKLIN (TB068)                     | 5115 HIGH STREET ROCKLIN CA 95677             |
| AT&T - ROCKLIN (TB1NV)                     | 3535 INDUSTRIAL AVE ROCKLIN CA 95765          |
| AUTO BODY PEOPLE                           | 6027 PACIFIC ST ROCKLIN CA 95677              |
| BAINS OIL, INC                             | 2801 SUNSET BLVD ROCKLIN CA 95677             |
| CELL MARQUE CORP.                          | 6600 SIERRA COLLEGE BLVD. ROCKLIN CA 95677    |
| CHEVRON - SIERRA COLLEGE BLVD - #20-5777   | 4211 SIERRA COLLEGE BLVD ROCKLIN CA 95677     |
| CITY OF ROCKLIN - CITY CORP YARD           | 4081 ALVIS CT ROCKLIN CA 95677                |
| CITY OF ROCKLIN - POLICE DEPT              | 4080 ROCKLIN RD ROCKLIN CA 95677              |
| CITY OF ROSEVILLE - ROSEVILLE PWR PLANT #2 | 2151 NICHOLS BLVD ROCKLIN CA 95677            |
| COLOR CUSTOM CREATION                      | 3626 CINCINNATI AVE ROCKLIN CA 95765          |
| CRLLC #5432                                | 6700 FIVE STAR BLVD ROCKLIN CA 95677          |
| CRLLC #5434                                | 2325 SUNSET BLVD ROCKLIN CA 95677             |
| CROSSROADS FAMILY FINAL CARE, INC.         | 1001 NICHOLS DR STE 5 ROCKLIN CA 95765        |
| DAWSON OIL - CARDLOCK - ROCKLIN            | 4325 PACIFIC ST ROCKLIN CA 95677              |
| EDUCATIONAL MEDIA FOUNDATION               | 5700 WEST OAKS BLVD ROCKLIN CA 95765          |
| EDWIN'S                                    | 2600 SUNSET BLVD, STE 108 ROCKLIN CA 95677    |
| ENERGY ABSORPTION SYSTEMS, INC             | 3617 CINCINNATI AVENUE ROCKLIN CA 95765       |
| EVERGREEN S.R. 1011 L.P.                   | 1011 SUNSET BLVD ROCKLIN CA 95765             |
| EXPRESS CLEANERS                           | 6671 STANFORD RANCH ROAD ROCKLIN CA 95977     |
| FREEDOM INDUSTRIAL COATINGS INC.           | 4020 ALVIS CT ROCKLIN CA 95677                |
| GAP - DATA CENTER                          | 695 MENLO DR ROCKLIN CA 95765                 |
| GAP - CALL CENTER                          | 3830 ATHERTON DR ROCKLIN CA 95765             |
| GREENHECK FAN COPORATION                   | 170 CYBER CT ROCKLIN CA 95765                 |
| HEMINOVER ENTERPRISES                      | 3620 CINCINNATI AVE ROCKLIN CA 95765          |
| HOWARD JOHNSON O'CAIRNS INN                | 4420 ROCKLIN RD ROCKLIN CA 95677              |
| J & M PRINTING                             | 4321 ANTHONY CT. #1 ROCKLIN CA 95677          |
| JELD-WEN, INC.                             | 3901 CINCINNATI AVENUE ROCKLIN CA 95677       |
| JR PIERCE PLUMBING CO. INC                 | 3610 CINCINNATI AVE ROCKLIN CA 95765          |
| KNIESELS AUTO COLLISION CENTER             | 4680 PACIFIC ST ROCKLIN CA 95677              |
| MALLARD CREEK                              | 4095 DULUTH AVE ROCKLIN CA 95765              |
| MERCEDES BENZ OF ROCKLIN                   | 4747 GRANITE DR ROCKLIN CA 95677              |
| ORACLE ROCK I                              | 1001 SUNSET BLVD ROCKLIN CA 95765             |
| PACIFIC MDF PRODUCTS, INC.                 | 4315 DOMINGUEZ ROAD ROCKLIN CA 95677          |

Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                           | ADDRESS                                    |
|---|--|
| PACIFIC PRIDE - CARDLOCK/ROCKLIN        | 4000 CINCINNATI AVE ROCKLIN CA 95677       |
| PARK DRIVE CLEANERS                     | 2221 SUNSET BLVD #107 ROCKLIN CA 95765     |
| PLACER CENTER FOR HEALTH                | 550 WEST RANCHVIEW DR ROCKLIN CA 95765     |
| PLACER COUNTY WATER - SUNSET TOWER      | 3525 PARK DR ROCKLIN CA 95756              |
| PLACER COUNTY WATER - SUNSET WTP        | SUNSET WTP ROCKLIN CA 95765                |
| PLACER COUNTY WATER - TINKER RD.        | TINKER RD/ PUMP STATION ROCKLIN CA 95765   |
| PLACER COUNTY WATER - WHITNEY RESERVOIR | 1410 CAPERTON CT ROCKLIN CA 95765          |
| PROGRESSIVE TECHNOLOGY INC.             | 4130 CITRUS AVE #17 ROCKLIN CA 95677       |
| PROGRESSIVE VANGUARD CORPORATION        | 3909 CINCINNATI AVE ROCKLIN CA 95765       |
| PROPEL BIOFUELS, INC                    | 6700 FIVE STAR BLVD ROCKLIN CA 95691       |
| QUIK STOP #103                          | 2850 SUNSET BLVD ROCKLIN CA 95677          |
| R.C. WILLEY                             | 6636 LONETREE BLVD ROCKLIN CA 95765        |
| ROCKLIN 7-11                            | 6001 STANFORD RANCH BLVD ROCKLIN CA 95677  |
| ROCKLIN AM/PM                           | 4500 ROCKLIN RD ROCKLIN CA 95677           |
| ROCKLIN CHEVRON                         | 6555 FAIRWAY DR ROCKLIN CA 95677           |
| ROCKLIN CORPORATE CENTER - A            | 6020 WEST OAKS BLVD. ROCKLIN CA 95765      |
| ROCKLIN CORPORATE CENTER - B            | 6030 WEST OAKS BLVD. ROCKLIN CA 95765      |
| ROCKLIN FOOD - MART                     | 3800 ROCKLIN RD ROCKLIN CA 95677           |
| ROCKLIN GAS                             | 4450 ROCKLIN RD ROCKLIN CA 95677           |
| ROCKLIN HIGH SCHOOL                     | 5301 VICTORY LANE ROCKLIN CA 95765         |
| ROCKLIN SQUARE CLEANERS                 | 4797 GRANITE DRIVE ROCKLIN CA 95677        |
| SAFARI MORNING COFFEE                   | 4011 ALVIS CT STE 4 ROCKLIN CA 95677       |
| SAFEMART #1866/ROCKLIN STORE            | 2220 SUNSET BLVD. ROCKLIN CA 94588         |
| SAFEMART, INC. #1866/ROCKLIN - SUNSET   | 2240 SUNSET BLVD ROCKLIN CA 94588          |
| SAK CONSTRUCTION LLC                    | 4253 DULUTH AVE ROCKLIN CA 95765           |
| SAVE MART #616                          | 3021 STANFORD RANCH RD ROCKLIN CA 95765    |
| SFPP, L.P.                              | 6050 PACIFIC STREET ROCKLIN CA 95677       |
| SIERRA ENERGY - ROCKLIN RD              | 4395 ROCKLIN RD ROCKLIN CA 95677           |
| SIERRA JT. COMM. COLLEGE DIST.          | 5000 ROCKLIN RD ROCKLIN CA 95677           |
| SIERRAPINE, LTD-ROCKLIN PLANT           | 4300 DOMINGUEZ ROAD ROCKLIN CA 95677       |
| SOUTH PLACER M.U.D.                     | 5805 SPRINGVIEW DR. ROCKLIN CA 95677       |
| SOUTH PLACER M.U.D. - LIFT STATION #5   | CAMEO ST. ROCKLIN CA 95677                 |
| SPORTSMAN'S WAREHOUSE                   | 6640 LONETREE BLVD ROCKLIN CA 95765        |
| STANFORD CLEANERS                       | 2351 SUNSET BLVD #100 ROCKLIN CA 95765     |
| STRAUCH ARCO - ROCKLIN                  | 2201 SUNSET BLVD ROCKLIN CA 95677          |
| SUNRISE ASSISTED LIVING                 | 6100 SIERRA COLLEGE BLVD ROCKLIN CA 95677  |
| TOWER MART #141 - SUNSET                | 1050 SUNSET BOULEVARD ROCKLIN CA 95765     |
| TRIBEX                                  | 4171 CITRUS AVE. ROCKLIN CA 95677          |
| UNITED NATURAL FOODS                    | 1101 SUNSET BLVD ROCKLIN CA 95765          |
| UNITED PARCEL SERVICE                   | 2275 SIERRA MEADOWS DRIVE ROCKLIN CA 95677 |
| UNITED RENTALS NORTHWEST, INC.          | 4700 PACIFIC ST ROCKLIN CA 95677           |
| UNITED RENTALS, INC.                    | 4700 PACIFIC ST ROCKLIN CA 95677           |
| VANELI'S, INC.                          | 4125 DEL MAR AVE #2 ROCKLIN CA 95677       |
| VERIZON WIRELESS - LONE TREE PARK       | 6101 WEST OAKS BLVD ROCKLIN CA 95765       |
| VERIZON WIRELESS - ROCKLIN              | 6100 SIERRA COLLEGE BLVD ROCKLIN CA 95677  |
| VERIZON WIRELESS - ROCKLIN MTSO         | ONE CYBER COURT ROCKLIN CA 95765           |
| VERIZON WIRELESS - STANFORD & SUN       | 2650 SUNSET BLVD ROCKLIN CA 95677          |
| VERIZON WIRELESS - STANFORD RANCH       | 1160 TARA CT. ROCKLIN CA 95765             |
| VERIZON WIRELESS - VICTORY LN           | ROCKLIN HIGH SCHOOL ROCKLIN CA 95785       |
| VERIZON WIRELESS - WHITNEY              | 5540 3RD STREET ROCKLIN CA 95677           |
| WEST COAST CABINETS                     | 3740 CINCINNATI AVE ROCKLIN CA 95765       |
| WEST OAKS CHEVRON                       | 6001 WEST OAKS BLVD ROCKLIN CA 95765       |
| WESTERN SIERRA COLLEGIATE ACADEMY       | 660 MENLO DRIVE ROCKLIN CA 95765           |
| WHITNEY HIGH SCHOOL                     | 701 WILDCAT BLVD. ROCKLIN CA 95765         |
| WHITNEY OAKS GOLF CLUB                  | 4301 PEBBLE BEACH DR ROCKLIN CA 95765      |
| WILLIAM JESSUP UNIVERSITY               | 333 SUNSET BLVD ROCKLIN CA 95765           |
| WILLIAMS-SONOMA, INC - DATA CENTER      | 3750 ATHERTON RD ROCKLIN CA 95765          |

Total Number of Facilities for ROCKLIN is 96

Facility Jurisdiction Report as of 12/31/2012

FACILITY NAME

ADDRESS

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----- JURISDICTION ROSEVILLE -----
7-ELEVEN - BLUE OAKS                9151 FOOTHILLS BLVD ROSEVILLE CA 95678
7-ELEVEN STORE #35290 - RIVERSIDE   604 RIVERSIDE AVE ROSEVILLE CA 95678
ADVANCE METAL FINISHING, LLC        2130 MARCH ROAD ROSEVILLE CA 95747
ADVENTIST HEALTH                    2100 DOUGLAS BLVD ROSEVILLE CA 95678
ADVENTIST HEALTH - CREEKSIDE RIDGE  1101 CREEKSIDE RIDGE ROSEVILLE CA 95678
ADVENTURE CHRISTIAN CHURCH          6401 STANFORD RANCH ROAD ROSEVILLE CA 95678
AGILENT TECHNOLOGIES                10050 FOOTHILLS BLVD ROSEVILLE CA 95747
ALL STARS AUTO WORKS                7311 GALILEE RD #165 ROSEVILLE CA 95678
ALTA SIERRA BODY SHOP, INC.         2020 TAYLOR ROAD ROSEVILLE CA 95678
AMIR DEVELOPMENT COMPANY            10000 ALANTOWN DRIVE ROSEVILLE CA 95678
ARCADIS U.S., INC                   FORMER ARCO STATION #1334 ROSEVILLE CA 95661
ARCO AM/PM - 1139 DOUGLAS           1139 DOUGLAS BLVD ROSEVILLE CA 95678
ARCO AM/PM - FOOTHILLS              2998 FOOTHILLS BLVD ROSEVILLE CA 95747
ARCO AM/PM - RIVERSIDE ROAD         998 RIVERSIDE AVE ROSEVILLE CA 95678
AUERNIG AUTO BODY & PAINT           1780 PFE RD ROSEVILLE CA 95747
BEST CLEANERS                       1911 DOUGLAS BLVD. #86 ROSEVILLE CA 95661
BJ'S RESTAURANT BREWERY              1200 ROSEVILLE PARKWAY ROSEVILLE CA 95678
BOB'S ROSEVILLE CARWASH           808 SUNRISE AVE ROSEVILLE CA 95661
BSB - ROSEVILLE, LLC               101 CIRBY HILLS WAY ROSEVILLE CA 95678
BUD'S FABRICARE                      323 JUDAH STREET ROSEVILLE CA 95678
CABINET MILL INC                    215 KENROY AVE ROSEVILLE CA 95661
CAIRNY PROPERTY                     412 LINCOLN STREET ROSEVILLE CA 95678
CAL MAT CO. DBA IND. ASPHALT         9800 DEL ROAD ROSEVILLE CA 95747
CALFIRE/PLACER COUNTY FIRE - DRY CREEK  8350 COOK RIOLO ROAD ROSEVILLE CA 95747
CALIFORNIA-AMERICAN WATER - WALERGA  WALERGA RD ROSEVILLE CA 95677
CALTRANS - DOUGLAS TUNNEL           1401 DOUGLAS BLVD ROSEVILLE CA 95678
CALTRANS - ROSEVILLE               1000 ATLANTIC ST ROSEVILLE CA 95678
CAPITAL DRUM, INC.                  749 GALLERIA BLVD ROSEVILLE CA 95678
CARMAX #7147                         1450 EUREKA RD ROSEVILLE CA 95661
CARMAX #7147                         1450 EUREKA RD ROSEVILLE CA 95661
CHEVRON - 10291 FAIRWAY - #21-0283  10291 FAIRWAY DR ROSEVILLE CA 95678
CHEVRON - BLUE OAKS BLVD - #20-8066  1400 BLUE OAKS BLVD ROSEVILLE CA 95678
CHEVRON - E. ROSEVILLE PKWY - #20-9657  1400 EAST ROSEVILLE PARKWAY ROSEVILLE CA 95661
CHEVRON - FOOTHILLS BLVD            3001 FOOTHILLS BLVD ROSEVILLE CA 95678
CHEVRON - WASHINGTON BLVD - #20-8398  8001 WASHINGTON BLVD ROSEVILLE CA 95678
CIRBY VALERO                         701 CIRBY WAY ROSEVILLE CA 95678
CIRCLE K STORE #5733 - ROSEVILLE    998 SUNRISE BLVD ROSEVILLE CA 95678
CITY OF ROSEVILLE - 4TH & D         4TH & D STREET ROSEVILLE CA 95678
CITY OF ROSEVILLE - CENTRAL PARK POOL, FAC  10210 FAIRWAY ROSEVILLE CA 95678
CITY OF ROSEVILLE - CENTRAL PARK POOL, PNR  10210 FAIRWAY DR ROSEVILLE CA 95678
CITY OF ROSEVILLE - CIVIC CTR. PARKING GAR.  405 VERNON ST ROSEVILLE CA 95678
CITY OF ROSEVILLE - CORP YARD       2090 HILLTOP CIRCLE ROSEVILLE CA 95747
CITY OF ROSEVILLE - ELECTRIC SERVICE CENTER  2090 HILLTOP CIRCLE ROSEVILLE CA 95747
CITY OF ROSEVILLE - EUD             1401 E. ROSEVILLE PARKWAY ROSEVILLE CA 95678
CITY OF ROSEVILLE - FIRE DEPARTMENT  401 OAK STREET ROSEVILLE CA 95678
CITY OF ROSEVILLE - FIRE STATION #1  401 OAK STREET ROSEVILLE CA 95678
CITY OF ROSEVILLE - FIRE STATION 6   1430 E. ROSEVILLE PARKWAY ROSEVILLE CA 95747
CITY OF ROSEVILLE - HILLTOP CIRCLE  2075 HILLTOP CIRCLE ROSEVILLE CA 95747
CITY OF ROSEVILLE - PGWWTTP         PLEASANT GROVE WASTE WATER ROSEVILLE CA 95747
CITY OF ROSEVILLE - POLICE DEPT     1051 JUNCTION BLVD ROSEVILLE CA 95678
CITY OF ROSEVILLE - WOODCREEK OAKS BLVD  PARKS & RECREATION ROSEVILLE CA 95747
CITY OF ROSEVILLE- 1800 BOOTH RD    1800 BOOTH ROAD ROSEVILLE CA 95747
CLARK AUTO BODY                      209 KENROY LANE, STE #2 ROSEVILLE CA 95678
COKEVA, INC                          9000 FOOTHILLS BLVD ROSEVILLE CA 95747
CONTINENTAL CLEANERS                1079-A SUNRISE AVENUE ROSEVILLE CA 95661
COOKS COLLISION INC.                2018 TAYLOR RD ROSEVILLE CA 95678

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Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                           | ADDRESS   |
|---|---|
| CROWN CLEANERS                          | 5015 FOOTHILLS BLVD, STE 2B ROSEVILLE CA 95747  |
| DENIO'S ROSEVILLE FARMERS MARKET        | 1551 VINEYARD ROAD ROSEVILLE CA 95678           |
| DIAMOND OAKS GOLF COURSE                | 349 DIAMOND OAKS RD ROSEVILLE CA 95678          |
| DOUGLAS PARK                            | 2270 DOUGLAS BLVD ROSEVILLE CA 95661            |
| DOUGLAS SHELL                           | 1000 DOUGLAS BLVD ROSEVILLE CA 95678            |
| DSS ROSEVILLE                           | 1640 E. ROSEVILLE PKWY ROSEVILLE CA 95661       |
| E2C REMEDIATION - VERNON STREET         | FORMER DELUX CLEANERS ROSEVILLE CA 95678        |
| EUREKA DEVELOPMENT CO LLC               | 2250 DOUGLAS BLVD ROSEVILLE CA 95661            |
| EXTENDED STAY AMERICA                   | 1000 LEAD HILL BLVD ROSEVILLE CA 95661          |
| FOLSOM READY MIX, INC. - #2 PLANT       | 9700 DEL RD ROSEVILLE CA 95747                  |
| FOOTHILLS SHELL                         | 3998 FOOTHILLS BLVD ROSEVILLE CA 95678          |
| FRATCHER AUTO BODY SHOP                 | 118 WILLS RD ROSEVILLE CA 95678                 |
| FRY'S ELECTRONICS #26                   | 180 N. SUNRISE ROSEVILLE CA 95678               |
| GALLERIA @ WESTFIELD                    | 1151 GALLERIA BLVD STE 254 ROSEVILLE CA 95678   |
| GALLERIA SHELL                          | 1216 GALLERIA BLVD ROSEVILLE CA 95678           |
| GAMBOA'S BODY & FRAME                   | 965 RIVERSIDE AVENUE ROSEVILLE CA 95678         |
| GAWFCO USA/CIRCLE K                     | 1398 BLUE OAKS BLVD ROSEVILLE CA 95747          |
| GOLDEN STATE COLLISION CENTERS, INC.    | 841 GALLERIA ROSEVILLE CA 95678                 |
| GREGORY M. BRICCA M.D., INC.            | 9269 SIERRA COLLEGE BLVD ROSEVILLE CA 95661     |
| H.B. FULLER COMPANY                     | 10500 INDUSTRIAL AVENUE ROSEVILLE CA 95678      |
| HANFORD READY MIX, INC.                 | 97 BERRY STREET ROSEVILLE CA 95678              |
| HARRIS & BRUNO INTERNATIONAL            | 8555 WASHINGTON BLVD ROSEVILLE CA 95678         |
| HERRMANN EQUIPMENT CO.                  | 9220 VIKING PLACE ROSEVILLE CA 95747            |
| HERTZ CORPORATION                       | 10680 INDUSTRIAL AVE ROSEVILLE CA 95678         |
| HEWLETT-PACKARD - FOOTHILL BLVD         | 8000 FOOTHILLS BLVD ROSEVILLE CA 95747          |
| HINES - DOUGLAS CORP CENTER I           | 2999 DOUGLAS BLVD ROSEVILLE CA 95661            |
| HINES - DOUGLAS CORP CENTER II          | 2901 DOUGLAS BLVD ROSEVILLE CA 95661            |
| HINES - OLYMPUS CORP CENTER I           | 3001 DOUGLAS BLVD ROSEVILLE CA 95661            |
| HINES - OLYMPUS CORP CENTER II          | 3009 DOUGLAS BLVD ROSEVILLE CA 95661            |
| HINES - ROSEVILLE CORP CENTER           | 2998 DOUGLAS BLVD ROSEVILLE CA 95661            |
| HINES - THE SUMMIT I                    | 3721 DOUGLAS BLVD ROSEVILLE CA 95661            |
| HINES - THE SUMMIT II                   | 3741 DOUGLAS BLVD ROSEVILLE CA 95661            |
| HIRA'S BEACON                           | 510 WASHINGTON BLVD ROSEVILLE CA 95678          |
| HYATT PLACE ROSEVILLE                   | 220 CONFERENCE CENTER DRIVE ROSEVILLE CA 95678  |
| INLAND WESTERN MDS PORTFOLIO, LLC       | 1815 DOUGLAS BLVD ROSEVILLE CA 95661            |
| J & J AUTO BODY                         | 50 DARLING WAY ROSEVILLE CA 95678               |
| JC PENNY CO. - GALLERIA                 | 1125 GALLERIA BLVD ROSEVILLE CA 95678           |
| JENSEN LANDSCAPE SERVICES               | 9350 VIKING PL ROSEVILLE CA 95747               |
| JOHNSON RANCH RACQUET CLUB              | 2501 EUREKA ROAD ROSEVILLE CA 95661             |
| KAISER PERMANENTE                       | 1600 EUREKA ROAD ROSEVILLE CA 95661             |
| LAVA RIDGE BUSINESS CENTER - 2281       | 2281 LAVA RIDGE COURT ROSEVILLE CA 95661        |
| LAVA RIDGE BUSINESS CENTER - 2990       | 2990 LAVA RIDGE COURT ROSEVILLE CA 95661        |
| LAVA RIDGE BUSINESS CENTER - 3000       | 3000 LAVA RIDGE COURT ROSEVILLE CA 95661        |
| LAVA RIDGE BUSINESS CENTER - 3010       | 3010 LAVA RIDGE COURT ROSEVILLE CA 95661        |
| LOWE'S HOME IMPROVEMENT                 | 10201 FAIRWAY DR ROSEVILLE CA 95678             |
| MAACO COLLISION REPAIR & AUTO PAINTING  | 801 RIVERSIDE AVE ROSEVILLE CA 95678            |
| MACY'S FURNITURE                        | 1152 GALLERIA BLVD. ROSEVILLE CA 95678          |
| MACY'S ROSEVILLE                        | 1197 GALLERIA BLVD ROSEVILLE CA 95678           |
| MAIDU VILLAGE II, L.P.                  | 101 STERLING CT. ROSEVILLE CA 95661             |
| MAIDU VILLAGE PHASE III                 | 109 STERLING CT ROSEVILLE CA 95661              |
| MANZANITA PLACE APTS                    | 1019 MADDEN LN ROSEVILLE CA 95661               |
| MASTER COLOR                            | 1780 VERNON ST. #7 ROSEVILLE CA 95678           |
| MISTYWOOD RETIREMENT RESIDENCE          | 1275 PLEASANT GROVE BLVD ROSEVILLE CA 95747     |
| MORGAN CREEK GOLF COURSE                | 8721 MORGAN CREEK LANE ROSEVILLE CA 95747       |
| MOTHER LODE HOLDING COMPANY             | 9083 FOOTHILLS BLVD. #300 ROSEVILLE CA 95661    |
| MOURIER LAND INVEST CORP - HIGHLAND PT. | 925 HIGHLAND POINTE, BUILDIN ROSEVILLE CA 95747 |
| NCPA DISPATCH CENTER                    | 651 COMMERCE DRIVE ROSEVILLE CA 95678           |
| NEFF RENTALS                            | 8455 SIERRA COLLEGE BLVD ROSEVILLE CA 95661     |

Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                                  | ADDRESS   |
|--|---|
| NELLA OIL COMPANY #64                          | 8660 AUBURN BLVD ROSEVILLE CA 95661             |
| NORDSTROM #434                                 | 1131 GALLERIA BLVD ROSEVILLE CA 95678           |
| NORTHERN CALIFORNIA FERTILITY MED CENTER       | 1130 CONROY LANE #100 ROSEVILLE CA 95661        |
| NUGGET MARKET                                  | 771 PLEASANT GROVE BLVD ROSEVILLE CA 95747      |
| OAKMONT HIGH SCHOOL                            | 1710 CIRBY WAY ROSEVILLE CA 95661               |
| OLD REPUBLIC TITLE                             | 524 GIBSON DR STE 201 ROSEVILLE CA 95678        |
| ORCHID SUITES                                  | 130 N. SUNRISE AVE ROSEVILLE CA 95661           |
| PACIFIC GAS & ELECTRIC CO. - ROSEVILLE         | 126 E STREET ROSEVILLE CA 95678                 |
| PACIFIC PRIDE - CARDLOCK/ROSEVILLE             | 609 RIVERSIDE AVE ROSEVILLE CA 95678            |
| PARKWAY CORPORATE PLAZA 1620                   | 1620 EAST ROSEVILLE PARKWAY ROSEVILLE CA 95661  |
| PARKWAY CORPORATE PLAZA 1660                   | 1660 EAST ROSEVILLE PARKWAY ROSEVILLE CA 95661  |
| PAUL BAKER PRINTING COMPANY                    | 220 RIVERSIDE AVE ROSEVILLE CA 95678            |
| PINE CREEK CARE CENTER                         | 1139 CIRBY WAY ROSEVILLE CA 95661               |
| PLACER COUNTY - DRY CREEK SEWER LIFT STATION   | CSA ZONE 173 ROSEVILLE CA 95747                 |
| PLACER COUNTY - FAIRGROUNDS                    | 800 ALL AMERICA CITY BLVD ROSEVILLE CA 95678    |
| PLACER COUNTY WATER - STONERIDGE               | STONERIDGE PUMP STATION ROSEVILLE CA 95765      |
| PRIDE INDUSTRIES, INC.                         | 10030 FOOTHILLS BLVD ROSEVILLE CA 95747         |
| PROPEL ROSEVILLE SUNRISE CARDLOCK              | 999 SUNRISE AVENUE ROSEVILLE CA 95661           |
| QIP ROSEVILLE                                  | 9100 FOOTHILLS BLVD, BLDG R2 ROSEVILLE CA 95747 |
| QWEST COMMUNICATIONS - ROSEVILLE               | 100 ROSEVILLE RD ROSEVILLE CA 95678             |
| RAINBOW CLEANERS                               | 4010 FOOTHILLS BLVD #107 ROSEVILLE CA 95747     |
| RALEY'S SUPERMARKET #227                       | 1915 DOUGLAS BLVD ROSEVILLE CA 95661            |
| RENAISSANCE @ SIERRA POINTE                    | 5161 FOOTHILLS BLVD ROSEVILLE CA 95747          |
| ROSE FOOD AND LIQUOR/HARDING                   | 215 HARDING BLVD ROSEVILLE CA 95678             |
| ROSE LIQUOR FOOD AND GAS/RIVERSIDE             | 108 RIVERSIDE AVE ROSEVILLE CA 95678            |
| ROSEVILLE 76                                   | 21 WHYTE AVE ROSEVILLE CA 95661                 |
| ROSEVILLE AUTO MALL                            | 900 AUTOMALL DR ROSEVILLE CA 95678              |
| ROSEVILLE AUTOMALL CHEVRON                     | 1505 EUREKA RD ROSEVILLE CA 95661               |
| ROSEVILLE CARE CENTER                          | 1161 CIRBY WAY ROSEVILLE CA 95661               |
| ROSEVILLE CEMETERY                             | 421 BERRY ST ROSEVILLE CA 95678                 |
| ROSEVILLE CLEANERS                             | 5098 FOOTHILLS BLVD #4 ROSEVILLE CA 95747       |
| ROSEVILLE DEVELOPMENT I                        | 8855 WASHINGTON BLVD ROSEVILLE CA 95678         |
| ROSEVILLE ENERGY PARK                          | 5120 PHILLIP RD ROSEVILLE CA 95747              |
| ROSEVILLE FUEL PLAZA                           | 9077 FOOTHILLS BLVD ROSEVILLE CA 95678          |
| ROSEVILLE GALLERIA 76                          | 1119 GALLERIA BLVD ROSEVILLE CA 95678           |
| ROSEVILLE GATEWAY                              | 333 SUNRISE AVE ROSEVILLE CA 95661              |
| ROSEVILLE GOLFLAND LTD.                        | 1893 TAYLOR RD ROSEVILLE CA 95661               |
| ROSEVILLE HIGH SCHOOL                          | 1 TIGER WAY ROSEVILLE CA 95678                  |
| ROSEVILLE JNT UNION H.S. DIST.                 | 129 BERRY STREET ROSEVILLE CA 95678             |
| ROSEVILLE POINT HEALTH & WELLNESS CTR.         | 600 SUNRISE AVE ROSEVILLE CA 95661              |
| ROSEVILLE SURGERY CENTER                       | 1420 EAST ROSEVILLE PKWY, ST ROSEVILLE CA 95661 |
| SAFEWAY #1899                                  | 1205 CIRBY WAY ROSEVILLE CA 95678               |
| SAFEWAY #2620                                  | 9045 WOODCREEK OAKS BLVD ROSEVILLE CA 95474     |
| SAFEWAY, INC #1617/ROSEVILLE - DOUGLAS         | 3998 DOUGLAS BLVD ROSEVILLE CA 95661            |
| SAFEWAY, INC. #1617                            | 8640 SIERRA COLLEGE BLVD ROSEVILLE CA 95661     |
| SAFEWAY, INC. #1890                            | 1080 PLEASANT GROVE ROSEVILLE CA 95678          |
| SAFEWAY, INC. #1899/ROSEVILLE - CIRBY          | 1205 CIRBY WAY ROSEVILLE CA 95678               |
| SAFEWAY, INC. #2620/ROSEVILLE - WOODCREEK      | 9085 WOODCREEK OAKS BLVD ROSEVILLE CA 95747     |
| SAM'S CLUB # 6621                              | 932 PLEASANT GROVE BLVD ROSEVILLE CA 95678      |
| SAVE MART #617                                 | 5060 FOOTHILL BLVD ROSEVILLE CA 95678           |
| SAVE MART DISTRIBUTION CENTER                  | 9999 NIBLICK DR ROSEVILLE CA 95678              |
| SIERRA FOOD & GAS                              | 999 SUNRISE AVE ROSEVILLE CA 95661              |
| SIERRA SHELL #135831                           | 3999 DOUGLAS BLVD ROSEVILLE CA 95678            |
| SIERRA VIEW COUNTRY CLUB                       | 105 ALTA VISTA ROSEVILLE CA 95678               |
| SIMS RECYCLING SOLUTIONS                       | 8855 WASHINGTON BLVD ROSEVILLE CA 95678         |
| SIR SPEEDY PRINTING                            | 151 N SUNRISE AVE STE 703 ROSEVILLE CA 95661    |
| SOUTH PLACER ADULT CORRECTIONAL (MAIN JAIL)    | 11801 GO FOR BROKE ROAD ROSEVILLE CA 95678      |
| SOUTH PLACER ADULT CORRECTIONAL (MIN SECURITY) | 11701 GO FOR BROKE ROAD ROSEVILLE CA 95678      |

Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                             | ADDRESS   |
|---|---|
| SOUTH PLACER JUSTICE CENTER BUILDING B    | 10810 JUSTICE CENTER DR ROSEVILLE CA 95678      |
| SOUTH PLACER JUSTICE CENTER RADIO SITE    | 10851 VETERANS DRIVE ROSEVILLE CA 95678         |
| SOUTH PLACER JUSTICE CENTER, JCC/AOC      | 10820 JUSTICE CENTER DR ROSEVILLE CA 95678      |
| SOUTH PLACER SURGERY CENTER               | 8723 SIERRA COLLEGE BLVD ROSEVILLE CA 95661     |
| SOUTHWEST FUEL MANAGEMENT, INC            | 290 N. SUNRISE BLVD ROSEVILLE CA 95661          |
| SPORTS AUTHORITY, STORE #785              | 6740 STANFORD RANCH ROAD ROSEVILLE CA 95678     |
| STANFORD RANCH SHELL STATION              | 6720 STANFORD RANCH ROAD ROSEVILLE CA 95678     |
| STONE POINT PHASE 3                       | 1478 STONE POINT DR ROSEVILLE CA 95661          |
| SUN CITY GOLF AND LANDSCAPE MAINT OPS CTR | 6501 FIDDYMENT RD ROSEVILLE CA 95747            |
| SUNBELT RENTALS - ROSEVILLE               | 10005 ALANTOWN DR ROSEVILLE CA 95678            |
| SUNRISE VALERO, LLC                       | 601 SUNRISE AVE ROSEVILLE CA 95661              |
| SUNSTATE EQUIPMENT CO., LLC               | 8200 INDUSTRIAL AVENUE ROSEVILLE CA 95678       |
| SUREWEST TELEPHONE - INDUSTRIAL AVE       | 8150 INDUSTRIAL AVE C ROSEVILLE CA 95678        |
| SUREWEST TELEPHONE - VERNON               | 114 VERNON ST ROSEVILLE CA 95678                |
| SUTTER MEDICAL FOUNDATION                 | 3 MEDICAL PLAZA DR STE 200 ROSEVILLE CA 95661   |
| SUTTER ROSEVILLE MEDICAL CENT.            | ONE MEDICAL PLAZA ROSEVILLE CA 95661            |
| TARGET STORE T-1502                       | 10451 FAIRWAY DR, BLDG A ROSEVILLE CA 95678     |
| TARGET STORE T-267                        | 1925 DOUGLAS BLVD ROSEVILLE CA 95661            |
| TASQ TECHNOLOGIES                         | 8875 WASHINGTON BLVD ROSEVILLE CA 95678         |
| TAYLOR ROAD SHELL                         | 1813 TAYLOR ROAD ROSEVILLE CA 95678             |
| TEICHERT READY MIX                        | 721 BERRY STREET ROSEVILLE CA 95678             |
| TELEFUNKEN SEMICONDUCTORS AMERICA LLC     | 7501 FOOTHILLS BOULEVARD ROSEVILLE CA 95747     |
| TELEPLAN INTERNATIONAL-INDUSTRIAL BLVD    | 8660 INDUSTRIAL BLVD STE 100 ROSEVILLE CA 95678 |
| TELEPLAN INTERNATIONAL-WASHINGTON BLVD    | 8875 WASHINGTON BLVD STE B ROSEVILLE CA 95678   |
| TESORO STATION NO. 67100                  | 601 SUNRISE AVENUE ROSEVILLE CA 95661           |
| THE HOME DEPOT # 6688                     | 10001 FAIRWAY DR ROSEVILLE CA 95678             |
| THE HOME DEPOT #0636 N. SUNRISE           | 324 NORTH SUNRISE BLVD ROSEVILLE CA 95661       |
| THE PALMS ASSISTED LIVING                 | 100 STERLING CT ROSEVILLE CA 95661              |
| THE ROSEVILLE STATION                     | 1300 E ROSEVILLE PKWY ROSEVILLE CA 95661        |
| THE TERRACES OF ROSEVILLE SENIOR LIVING   | 707 SUNRISE AVE ROSEVILLE CA 95661              |
| TOP NOTCH AUTO BODY - INDUSTRIAL AVE      | 10640 INDUSTRIAL AVE ROSEVILLE CA 95747         |
| TOWER MART #136 - FAIRWAY                 | 10545 FAIRWAY DR ROSEVILLE CA 95678             |
| TOWER MART #878 - ATLANTIC                | 750 ATLANTIC AVE ROSEVILLE CA 95678             |
| TOYS'R'US                                 | 6780 STANFORD RANCH RD ROSEVILLE CA 95678       |
| UNION 76 ROSEVILLE SQUARE                 | 445 ROSEVILLE SQUARE ROSEVILLE CA 95678         |
| UNION PACIFIC / ROSEVILLE                 | UPPR ROSEVILLE YARD ROSEVILLE CA 95678          |
| UNION PACIFIC RAILROAD - FOOTHILLS BLVD   | 10031 FOOTHILLS BLVD ROSEVILLE CA 95747         |
| UNION PACIFIC RAILROAD COMPANY            | 9451 ATKINSON STREET, STE 10 ROSEVILLE CA 95747 |
| USA CLEANERS                              | 199 CIRBY WAY #8 ROSEVILLE CA 95678             |
| VERIZON WIRELESS - BLUE OAKS              | 10320 WOODCREEK BLVD ROSEVILLE CA 95747         |
| VERIZON WIRELESS - DOUGLAS                | 1111 SMITH LANE ROSEVILLE CA 95747              |
| VERIZON WIRELESS - DRY CREEK              | 3480 PFE RD ROSEVILLE CA 95747                  |
| VERIZON WIRELESS - FIDDYMENT              | 2150 BLUE OAKS BLVD ROSEVILLE CA 95747          |
| VERIZON WIRELESS - FOOTHILL BASELINE      | 3000 BRADY LANE ROSEVILLE CA 95747              |
| VERIZON WIRELESS - INDUSTRIAL             | 8150 INDUSTRIAL AVENUE ROSEVILLE CA 95678       |
| VERIZON WIRELESS - LEAD HILL              | 312 NORTH SUNRISE AVE ROSEVILLE CA 95661        |
| VERIZON WIRELESS - ROSE ROCK              | 2020 TAYLOR RD ROSEVILLE CA 95678               |
| VERIZON WIRELESS - ROSEVILLE WEST         | 8000 CROWDER LANE ROSEVILLE CA 95678            |
| VILLAGE R.V.                              | 1039 ORLANDO AVENUE ROSEVILLE CA 95661          |
| VINTAGE PARK LLC                          | 1508 EUREKA RD STE 230 ROSEVILLE CA 95661       |
| VULCAN MATERIALS COMPANY                  | 9801 DEL ROAD ROSEVILLE CA 95747                |
| WASHINGTON MINIMART                       | 999 WASHINGTON BLVD ROSEVILLE CA 95678          |
| WELLS FARGO BANK                          | 201 N. SUNRISE AVE ROSEVILLE CA 95661           |
| WELLS FARGO BANK - E. ROSEVILLE PRKY      | 1620 EAST ROSEVILLE PARKWAY ROSEVILLE CA 95661  |
| WESTERN PLACER WASTE MGMT. - ROSEVILLE    | 3033 FIDDYMENT ROAD ROSEVILLE CA 95747          |
| WHOLE FOODS MARKET                        | 1001 GALLERIA BLVD ROSEVILLE CA 95678           |
| WINCO FOODS, INC.                         | STORE #31, 10151 FAIRWAY DR. ROSEVILLE CA 95678 |
| WOODCREEK GOLF CLUBHOUSE                  | 6050 WOODCREEK OAKS ROSEVILLE CA 95747          |

Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                                   | ADDRESS   |
|---|---|
| WOODCREEK GOLF COURSE                           | 6050 WOODCREEK OAKS BLVD ROSEVILLE CA 95747     |
| WOODCREEK HIGH SCHOOL                           | 2551 WOODCREEK OAKS BLVD. ROSEVILLE CA 95747    |
| WOODCREEK OAKS AM/PM                            | 1261 PLEASANT GROVE BLVD ROSEVILLE CA 95747     |
| XO COMMUNICATIONS                               | 1390 LEAD HILL BLVD ROSEVILLE CA 95661          |
| Total Number of Facilities for ROSEVILLE is 234 |   |
| ----- JURISDICTION UNINCORPORATED -----         |   |
| ALPINE MEADOWS SKI CORP                         | 2600 ALPINE MEADOWS ROAD TAHOE CITY CA 96145    |
| ALPINE MEADOWS SKI RESORT                       | 2600 ALPINE MEADOWS RD TAHOE CITY CA 96145      |
| ALPINE SPRINGS COUNTY WATER DIST                | 270 ALPINE MEADOWS RD ALPINE MEADOWS CA 96146   |
| APPLEGATE STATION                               | 17875 LAKE ARTHUR RD APPLEGATE CA 95703         |
| ARCO AM/PM - DOUGLAS BLVD.                      | 4021 DOUGLAS BLVD GRANITE BAY CA 95746          |
| AT&T - BLUE CANYON                              | 40211 BLUE CANYON RD BLUE CANYON CA 95715       |
| AT&T - BROCKWAY (TB010)                         | 8739 N. LAKE BLVD BROCKWAY CA 95730             |
| AT&T - CARNELIAN BAY (TB011)                    | 230 CARNELIAN BAY RD CARNELIAN BAY CA 96140     |
| AT&T - DUTCH FLAT (TB121)                       | 911 STOCKTON ST DUTCH FLAT CA 95714             |
| AT&T - DUTCH FLAT (TB521)                       | 444 SACRAMENTO ST DUTCH FLAT CA 95714           |
| AT&T - HOMEWOOD (TB038)                         | 5455 WESTLAKE BLVD HOMEWOOD CA 95718            |
| AT&T - MARTIS PEAK (TB519)                      | 19900 MARTIS PEAK RD TRUCKEE CA 96161           |
| AT&T - MEADOW VISTA (TB120)                     | 985 LIVINGSTON RD MEADOW VISTA CA 95722         |
| AT&T - NEWCASTLE (TB058)                        | 9051 OLD HWY 80 NEWCASTLE CA 95658              |
| AT&T - TAHOE CITY (TB079)                       | 298 GROVE ST TAHOE CITY CA 95730                |
| AT&T - TRUCKEE (TB303)                          | 55 TRIMONT LN TRUCKEE CA 95734                  |
| BEAR RIVER AGGREGATE - MEADOW VISTA             | 2701 COMBIE RD MEADOW VISTA CA 95722            |
| BEAR RIVER AGGREGATE - MV                       | END OF COMBIE RD MEADOW VISTA CA 95722          |
| BIG CHIEF PUMP HOUSE                            | 7370 RIVER ROAD OLYMPIC VALLEY CA 96146         |
| BIG TREE CLEANERS                               | 531 NORTH LAKE BLVD TAHOE CITY CA 96145         |
| CALCLEAN INC.                                   | VARIOUS LOCATIONS IN PLACER COU TUSTIN CA 92780 |
| CALIFORNIA HIGHWAY PATROL/GOLD RUN              | 50 CANYON CREEK ROAD GOLD RUN CA 95717          |
| CALIFORNIA HIGHWAY PATROL/NEWCASTLE             | 9440 INDIAN HILL RD NEWCASTLE CA 95658          |
| CALIFORNIA PACIFIC ELECTRIC - KINGS BEACH       | End of Deer Road KINGS BEACH CA 96143           |
| CALIFORNIA PACIFIC ELECTRIC - TAHOE VISTA       | 7001 NATIONAL AVE TAHOE VISTA CA 95732          |
| CALTRANS - TAHOE CITY                           | 555 RIVER ROAD TAHOE CITY CA 96145              |
| CALTRANS - TAHOE MTCE STATION                   | 553 RIVER RD (HWY 89) TAHOE CITY CA 96145       |
| CALTRANS - WHITMORE                             | WHITMORE/ I-80 BLUE CANYON CA 95715             |
| CALTRANS - WHITMORE MAINTENANCE FAC.            | I-80 (4 MILES EAST OF BAXTER) ALTA CA 95701     |
| CATAMOUNT                                       | 8001 NORTHSTAR DRIVE TRUCKEE CA 96160           |
| CEMEX CMP, LLC - PATTERSON                      | 8705 CAMP FAR WEST ROAD SHERIDAN CA 95681       |
| CINGULAR WIRELESS - BLUE CANYON                 | DRUM FOREBAY RD ALTA CA 95701                   |
| CINGULAR WIRELESS - BREWER 135                  | 4691 S. BREWER RD PLEASANT GROVE CA 95668       |
| CINGULAR WIRELESS - CARNELIAN BAY               | NORTHSTAR SKI AREA - N. CARNELIAN BAY CA 96140  |
| CINGULAR WIRELESS - GOLD RUN (14595)            | GOLD RUN (242) GOLD RUN CA 95717                |
| CINGULAR WIRELESS - NEWCASTLE                   | 9691 OPHIR RD NEWCASTLE CA 95658                |
| CISCO BUTTE COMMUNICATIONS SITE                 | NE 1/4 SW 1/4; SEC 30, T. EMIGRANT GAP CA 95959 |
| CISCO FOOD AND GAS                              | 85 CISCO ROAD SODA SPRINGS CA 95728             |
| CISCO GAS & FOOD                                | 85 CISCO RD UNIT B EMIGRANT GAP CA 95728        |
| CITY OF ROSEVILLE - ENV. UTILITIES DEPT         | 9595 BARTON RD GRANITE BAY CA 95746             |
| COFFEE CONNEXION ROASTERS                       | 2980 ROSE AVE TAHOE CITY CA 96145               |
| EASTERN REGIONAL LANDFILL                       | 900 CABIN CREEK RD TRUCKEE CA 96145             |
| EDWIN F. VOGT                                   | 9360 SUNSET BLVD. W PLEASANT CA 95668           |
| ELITE CLEANERS                                  | 4060 DOUGLAS BLVD STE 111 GRANITE BAY CA 95746  |
| ESTHER J. RICHIE- D.C. GRANITE                  | 1960 AUBURN-FOLSOM ROAD NEWCASTLE CA 95658      |
| EUREKA UNION SCHOOL DIST.                       | 5477 EUREKA RD GRANITE BAY CA 95746             |
| FEDERAL AVIATION ADMINISTRATION                 | SQUAW VALLEY (TOP SQUAW VALLEY SKI RES CA 96145 |
| FLEUR DU LAC ESTATES                            | PO BOX 628 HOMEWOOD CA 96141                    |
| FORESTHILL EXPLOR & MINING-HOFFMAN MINE         | GORMAN RANCH RD MICHIGAN BLUFF CA 95631         |
| FORESTHILL EXPLORATION & MINING-BLACK CANYON    | 15 MILES WEST OF FORESTHILL FORESTHILL CA 95631 |
| FORESTHILL HIGH SCHOOL                          | 23319 FORESTHILL ROAD FORESTHILL CA 95631       |

Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                                 | ADDRESS  |
|---|--|
| FORESTHILL PUD                                | 25985 FORESTHILL ROAD FORESTHILL CA 95631        |
| FORESTHILL TELEPHONE CO.                      | NETWORK OPERATIONS CENTER FORESTHILL CA 95631    |
| FORESTHILL VALERO                             | 23970 FORESTHILL RD FORESTHILL CA 95631          |
| FOWLER NURSERIES INC                          | 525 FOWLER RD NEWCASTLE CA 95658                 |
| GRANITE BAY AM PM ARCO #2140                  | 8555 AUBURN-FOLSOM RD GRANITE BAY CA 95746       |
| GRANITE BAY GOLF CLUB                         | 9580 BARTON RD GRANITE BAY CA 95746              |
| GRANITE BAY HIGH SCHOOL                       | 1 GRIZZLY WAY GRANITE BAY CA 95678               |
| GRANLIBAKKEN RESORT                           | 725 GRANLIBAKKEN RD TAHOE CITY CA 96145          |
| GREAT BEAR LODGE                              | 5001 NORTHSTAR DRIVE TRUCKEE CA 96160            |
| HOMEWOOD MOUNTAIN RESORT                      | 5145 WEST LAKE BLVD HOMEWOOD CA 96141            |
| IRON HORSE                                    | 4001 NORTHSTAR DRIVE TRUCKEE CA 96160            |
| JOY ENGINEERING - PORTABLE                    | MARTIS CAMP SITE TRUCKEE CA 96160                |
| KINGS BEACH CHEVRON                           | 8369 NORTH LAKE BLVD KINGS BEACH CA 95719        |
| KINGS BEACH ELEM. SCHOOL                      | 8125 STEELHEAD KINGS BEACH CA 96143              |
| KINGVALE SHELL SERVICE                        | 53102 DONNER PASS RD SODA SPRINGS CA 95728       |
| LAHONTAN GOLF CLUB - MAINTENANCE              | 7041 LAHONTAN DR TRUCKEE CA 96161                |
| LEVEL 3 COMMUNICATION - BLUE CANYON           | 40211 BLUE CANYON RD BLUE CANYON CA 95715        |
| MARTIS CAMP - GOLF OPERATIONS                 | 8945 SCHAFFER MILL ROAD TRUCKEE CA 96161         |
| MARTIS CAMP FAMILY BARN                       | 7901 FLUER DU LAC DRIVE TRUCKEE CA 96161         |
| MARTIS CAMP LODGE                             | 7951 FLEUR DU LAC TRUCKEE CA 96161               |
| MCI WORLDCOM - BLUE CANYON                    | BLUE CANYON RD AND SPRR EMIGRANT GAP CA 95715    |
| MCI WORLDCOM - WEIMAR                         | CROSSROAD WEIMAR CA 95713                        |
| MEADOW VISTA CHEVRON                          | 16707 PLACER HILLS RD MEADOW VISTA CA 95722      |
| MEADOW VISTA COUNTY WATER DIST.               | VISTA RIDGE PRESSURE STATION APPELEGATE CA 95703 |
| MEADOW VISTA WATER TREATMENT PLANT            | 142 HILLSIDE DR APPELEGATE CA 95703              |
| MT. JUDAH CONDOMINIUM OWNERS ASSOCIATION      | 600 SUGAR BOWL RD NORDEN CA 95724                |
| NEVADA IRRIGATION DISTRICT - N                | 1900 GOLDHILL RD NEWCASTLE CA 95658              |
| NEWCASTLE SEWER PUMP STATION                  | IRISH LANE - 1/2 MILE FROM T NEWCASTLE CA 95658  |
| NEWCASTLE VALERO                              | 9300 CHANTRY HILL RD NEWCASTLE CA 95658          |
| NEXTEL - BLUE CANYON                          | 245 DRUM FOREBAY ALTA CA 95715                   |
| NEXTEL - CA0650 VOLCANO HILL                  | 5847 EUREKA RD GRANITE BAY CA 95746              |
| NORTH TAHOE BEACON                            | 8070 NORTH LAKE BLVD KINGS BEACH CA 96143        |
| NORTH TAHOE FPD - NEW STATION 51              | 222 FAIRWAY DRIVE TAHOE CITY CA 96145            |
| NORTH TAHOE FPD - STATION 52                  | 288 HWY 267 KINGS BEACH CA 96143                 |
| NORTH TAHOE FPD - STATION 52                  | 288 NORTH SHORE BLVD KINGS BEACH CA 96143        |
| NORTH TAHOE FPD - STATION 53                  | 5425 WESTLAKE BLVD HOMEWOOD CA 96145             |
| NORTH TAHOE FPD - STATION 54                  | 159 OBSERVATION DRIVE DOLLAR HILL CA 96145       |
| NORTH TAHOE FPD - STATION 55                  | 240 CARNELIAN BAY CARNELIAN BAY CA 95614         |
| NORTH TAHOE HIGH/ MIDDLE SCHOOLS              | 2945 POLARIS RD TRUCKEE CA 96161                 |
| NORTH TAHOE PUD                               | 875 NATIONAL AVE TAHOE VISTA CA 96148            |
| NORTH TAHOE PUD - N-1 MOON DUNES SPS          | 7496 NORTH LAKE TAHOE BLVD TAHOE VISTA CA 96148  |
| NORTH TAHOE PUD - SECLINE MAIN SPS            | 141 SECLINE STREET KINGS BEACH CA 96143          |
| NORTH TAHOE PUD - UNIT #989                   | PARKWELL TAHOE VISTA CA 96148                    |
| NORTH TAHOE PUD - UNIT #992                   | C-2 GARWOODS CARNELIAN CA 96140                  |
| NORTH TAHOE PUD - UNIT #994                   | NATIONAL MAIN TAHOE VISTA CA 96148               |
| NORTH TAHOE PUD - UNIT #995                   | CARNELIAN MAIN CARNELIAN BAY CA 96140            |
| NORTH TAHOE PUD - UNIT #996                   | DOLLAR HILL MAIN TAHOE VISTA CA 96148            |
| NORTH TAHOE PUD-GDF                           | 875 NATIONAL AVE BOX 139 TAHOE VISTA CA 96148    |
| NORTHSTAR @ TAHOE                             | 200 NORTHSTAR ROAD TRUCKEE CA 96160              |
| NORTHSTAR C.S.D. - FIREHOUSE                  | 910 NORTHSTAR DR TRUCKEE CA 96161                |
| NORTHSTAR C.S.D. - HWY 267 SEWER LIFT STATION | HWY 267 TRUCKEE CA 96161                         |
| NORTHSTAR C.S.D. - INDIAN HILL SEWER LIFT STA | UNKNOWN TRUCKEE CA 96161                         |
| NORTHSTAR C.S.D. - MAINTENANCE BUILDING       | 51 TRIMONT LN TRUCKEE CA 96161                   |
| NORTHSTAR C.S.D. - RESERVOIR D PUMP STATION   | UNKNOWN TRUCKEE CA 96161                         |
| NORTHSTAR C.S.D. - RETREAT LIFT STATION       | END OF CROSS CUT COURT TRUCKEE CA 96161          |
| NORTHSTAR C.S.D. - WTP                        | 9150 HIGHLANDS VIEW RD TRUCKEE CA 96161          |
| NORTHSTAR HIGHLANDS FIRE STATION              | 9100 HIGHLANDS VIEW RD TRUCKEE CA 96161          |
| NORTHSTAR VILLAGE                             | NORTHSTAR VILLAGE TRUCKEE CA 96160               |

Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                                   | ADDRESS   |
|---|---|
| NYACK SHELL SERVICE                             | 1 NYACK RD EMIGRANT GAP CA 95715                |
| ONE STOP EXXON - NELLA OIL #51                  | 601 NEWCASTLE RD NEWCASTLE CA 95658             |
| PACIFIC GAS & ELECTRIC CO. - ALTA               | 33995 ALTA BONNY NOOK RD ALTA CA 95701          |
| PACIFIC GAS & ELECTRIC CO. - CISCO BUTTES       | CISCO BUTTES STANDBY FACI CISCO BUTTES CA 95728 |
| PENRYN TOSCO 76                                 | 3142 BOYINGTON RD PENRYN CA 95663               |
| PENRYN VALERO FOOD & GAS                        | 3145 PENRYN RD PENRYN CA 95663                  |
| PLACER COUNTY - BURTON CREEK DPW                | 2501 NORTH LAKE BLVD TAHOE CITY CA 96145        |
| PLACER COUNTY - EASTERN REGIONAL LANDFILL       | EASTERN REGIONAL SANITARY LAND TRUCKEE CA 96161 |
| PLACER COUNTY - MEADOW VISTA LANDFILL           | MEADOW VISTA SANITARY LAN MEADOW VISTA CA 95722 |
| PLACER COUNTY - SHERIDAN WELL #1                | IN BETWEEN 12TH AND SCHOOL SHERIDAN CA 95681    |
| PLACER COUNTY - TART                            | 870 CABIN CREEK RD TRUCKEE CA 96161             |
| PLACER COUNTY COMM\I.T. - FORESTHILL BATH RD    | CORNER OF FORESTHILL ROAD A FORESTHILL CA 95631 |
| PLACER COUNTY COMM\I.T. - TAHOE SHERIFF         | 2501 NORTH LAKE BLVD TAHOE CITY CA 96145        |
| PLACER COUNTY UTILITIES - APPLGATE LIFT STN     | 17605 APPLGATE ROAD APPLGATE CA 95703           |
| PLACER COUNTY UTILITIES - PORTABLE              | VARIOUS LOCATIONS PLACER COUNTY CA 00000        |
| PLACER COUNTY UTILITIES - SHERIDAN SEWER        | NEAR HWY 65 & E ST SHERIDAN CA 95681            |
| PLACER COUNTY UTILITIES - WEDGEWOOD/WEXFORD     | S GRANITE HOLLOW GRANITE BAY CA 95746           |
| PLACER COUNTY WATER - APPLGATE                  | 100 BON VUE DR APPLGATE CA 95703                |
| PLACER COUNTY WATER - FORESTHILL FACILITIES     | 5825 SUNSET DRIVE FORESTHILL CA 95631           |
| PLACER COUNTY WATER - FRENCH MEADOWS DAM        | SECTION 36, T.15N, R.13E PLACER COUNTY CA 95631 |
| PLACER COUNTY WATER - FRENCH MEADOWS POWERHOUSE | FRENCH MEADOWS POW HELL HOLE RESERVOIR CA 95631 |
| PLACER COUNTY WATER - LAHONTAN                  | 7041 LAHONTAN DR TRUCKEE CA 96161               |
| PLACER COUNTY WATER - MARTIS CAMP NEWHALL       | SCHAFFER MILL ROAD @ NEWHALL D TRUCKEE CA 96161 |
| PLACER COUNTY WATER - MIDDLE FORK POWERHOUSE    | 3500 MOSQUITO RIDGE RD FORESTHILL CA 95631      |
| PLACER COUNTY WATER - MONTE VISTA               | 32180 RIDGE RD MONTE VISTA CA 95714             |
| PLACER COUNTY WATER - NEWCASTLE                 | 9200 POWERHOUSE RD NEWCASTLE CA 95658           |
| PLACER COUNTY WATER - OLANA DR.                 | 10919 OLANA DR TRUCKEE CA 96161                 |
| PLACER COUNTY WATER - RALSTON AFTERBAY DAM      | SECTION 4, T13N, R11E PLACER CO CA 95631        |
| PLACER COUNTY WATER - RALSTON POWERHOUSE        | 9600 BLACKSMITH ROAD PLACER COUNTY CA 95631     |
| PLACER COUNTY WATER - SCHAFFER MILL             | SILLER RANCH BOOSTER PUMP STAT TRUCKEE CA 96161 |
| PLACER COUNTY WATER - WELL #3                   | 0 CARSON RANGE ROAD TRUCKEE CA 96161            |
| PLACER COUNTY WATER AGENCY - FORESTHILL - SUN   | 5825 SUNSET DRIVE FORESTHILL CA 95631           |
| PLACER COUNTY WATER AGENCY- SODA SPRINGS/RIVE   | 20775 SODA SPRINGS RIVERTON FORESTHILL CA 95631 |
| PLEASANT GROVE RANCH                            | 17759 CALLE DE PALER PACIFIC PALISADES CA 90272 |
| PLUMP JACK SQUAW VALLEY INN                     | 1920 SQUAW VALLEY ROAD OLYMPIC VALLEY CA 96146  |
| PQ CORPORATION                                  | VARIOUS LOCATIONS VARIOUS IN 47129              |
| RALEY'S SUPERMARKET #412                        | 6845 DOUGLAS BLVD GRANITE BAY CA 95746          |
| REASON FARMS                                    | 6368 SOUTH TOWNSHIP YUBA CITY CA 95991          |
| REPLACON, INC                                   | 5875 CAMP FAR WEST ROAD SHERIDAN CA 95681       |
| RESORT AT SQUAW CREEK                           | 400 SQUAW CREEK RD OLYMPIC VALLEY CA 96146      |
| RIDEOUT SCHOOL                                  | 740 TIMBERLAND TRUCKEE CA 96161                 |
| RIEGO MARKET & DELI                             | 8000 PLEASANT GROVE RD ELVERTA CA 95626         |
| RITZ CARLTON CLUB LAKE TAHOE                    | 13051 HIGHLANDS DR TRUCKEE CA 96161             |
| RITZ CARLTON HOTEL - TRUCKEE                    | 13031 RITZ CARLTON HIGHLANDS C TRUCKEE CA 96161 |
| ROBBER'S ROOST                                  | 23990 FORESTHILL RD FORESTHILL CA 95631         |
| ROBINSON SAND & GRAVEL, INC./ NEWCASTLE         | 9691 OPHIR ROAD NEWCASTLE CA 95658              |
| SAFWAY, INC./STORE #1592                        | 7815 N. LAKE BLVD KINGS BEACH CA 96143          |
| SAN JUAN WATER DISTRICT                         | 9935 AUBURN-FOLSOM RD GRANITE BAY CA 95746      |
| SCHAFFER'S CAMP                                 | 6805 500 TRAIL (MID MT. NORTHS TRUCKEE CA 96161 |
| SIERRA ENERGY SUPERSTOP #13 - GOLD RUN          | 25 CANYON CREEK RD GOLD RUN CA 95717            |
| SIERRA LAKES COUNTY WATER - SHORT WTP           | 7305 SHORT RD SODA SPRINGS CA 95728             |
| SIERRA LAKES COUNTY WATER- BALES                | 5000 BALES ROAD SODA SPRINGS CA 95728           |
| SIERRA LAKES COUNTY WATER- HEMLOCK              | 5415 HEMLOCK DR SODA SPRINGS CA 95728           |
| SIERRA LAKES COUNTY WATER- SERENE               | 1003 SERENE DR SODA SPRINGS CA 95728            |
| SIERRA MINI MART                                | 23010 FORESTHILL RD FORESTHILL CA 95631         |
| SOUTH PLACER FPD #17                            | 6900 EUREKA RD GRANITE BAY CA 95661             |
| SOUTH PLACER FPD #19                            | 7070 AUBURN-FOLSOM RD GRANITE BAY CA 95746      |
| SOUTH PLACER M.U.D. - LIFT STATION #1           | 6800 MUNOZ AVE PENRYN CA 95663                  |

Facility Jurisdiction Report as of 12/31/2012

| FACILITY NAME                                 | ADDRESS   |
|---|---|
| SQUAW VALLEY PSD - FIRE STATION               | 305 SQUAW VALLEY RD OLYMPIC VALLEY CA 96146     |
| SQUAW VALLEY PSD - OFFICE                     | OFFICE/FIRE DEPT OLYMPIC VALLEY CA 96146        |
| SQUAW VALLEY PSD - WELL HOUSE                 | WELL HOUSE SITE OLYMPIC VALLEY CA 96146         |
| SQUAW VALLEY RESORT, LLC                      | OLYMPIC VALLEY LODGE OLYMPIC VALLEY CA 96146    |
| SQUAW VALLEY RESORT, LLC - GDF                | 1960 SQUAW VALLEY ROAD OLYMPIC VALLEY CA 96146  |
| SUGAR BOWL                                    | 415 SUGAR BOWL RD NORDEN CA 95724               |
| SUGAR BOWL ACADEMY INTERIM MODULAR CLASSROOMS | 629 SUGAR BOWL ROAD NORDEN CA 95724             |
| SUGAR BOWL CORPORATION                        | 629 SUGAR BOWL ROAD NORDEN CA 95724             |
| SUNNYSIDE MARINA                              | 1850 WEST LAKE BLVD. TAHOE CITY CA 96145        |
| SUREWEST TELEPHONE - BARTON RD                | 8430 BARTON RD GRANITE BAY CA 95746             |
| TAHOE CITY CHEVRON                            | 310 RIVER ROAD TAHOE CITY CA 96145              |
| TAHOE CITY LUMBER                             | 715 W RIVER ROAD TAHOE CITY CA 96145            |
| TAHOE CITY PUD                                | 221 FAIRWAY DR. TAHOE CITY CA 95145             |
| TAHOE CITY PUD - ADMINISTRATION BLDG          | 221 FAIRWAY DR TAHOE CITY CA 96145              |
| TAHOE CITY PUD - BLACKWOOD SEWER              | EAGLE ROCK RD HOMEWOOD CA 96141                 |
| TAHOE CITY PUD - COAST GUARD SEWER            | 2500 LAKE FOREST RD TAHOE CITY CA 96145         |
| TAHOE CITY PUD - CRYSTAL VALLEY WELL          | CRYSTAL WAY HOMEWOOD CA 96141                   |
| TAHOE CITY PUD - DOLLAR 2                     | 215 OBSERVATION DR TAHOE CITY CA 96145          |
| TAHOE CITY PUD - HARBORMASTER SEWER           | 700 N. LAKE BLVD TAHOE CITY CA 96145            |
| TAHOE CITY PUD - HIGHLANDS WELLS              | APN 93-160-29 TAHOE CITY CA 96145               |
| TAHOE CITY PUD - HWY 89 LOWER YARD            | 400 HWY89 TAHOE CITY CA 96145                   |
| TAHOE CITY PUD - HWY 89 SEWER                 | APN 094 540 019 TAHOE CITY CA 96145             |
| TAHOE CITY PUD - MADDEN SEWER                 | TROUT ST & W. LAKE BLVD HOMEWOOD CA 96141       |
| TAHOE CITY PUD - MCKINNEY SEWER STATION       | 6393 CHAMBERS LODGE RD. TAHOMA CA 96142         |
| TAHOE CITY PUD - SUNNYSIDE SEWER              | 1780 SEQUOIA AVE TAHOE CITY CA 96145            |
| TAHOE CITY PUD - TAHOE CITY WELLS             | 700 BUNKER DR TAHOE CITY CA 96145               |
| TAHOE CITY PUD - TAHOE TAVERN BOOSTER         | 400 UPPER ROAD TAHOE CITY CA 96145              |
| TAHOE CITY PUD - UPPER HIGHLAND               | 3005 CEDARWOOD AVE TAHOE CITY CA 96145          |
| TAHOE CITY PUD - WATERS EDGE SEWER            | APN 098 210 014 TAHOMA CA 96142                 |
| TAHOE CITY STORE                              | 300 RIVER ROAD TAHOE CITY CA 96145              |
| TAHOE LAKE ELEMENTARY                         | 375 GROVE STREET TAHOE CITY CA 96145            |
| TAHOE TRUCKEE SIERRA DISPOSAL CO INC          | EASTERN REGIONAL LANDFILL TRUCKEE CA 96161      |
| TEICHERT EMIGRANT GAP YARD                    | 175 Nyack Place Emigrant Gap CA 95959           |
| THE VILLAGE AT SQUAW VALLEY                   | 1750 VILLAGE EAST RD OLYMPIC VALLEY CA 96146    |
| TIMBERLAND WATER CO, INC.                     | 850 SUGARPINE RD TAHOE CITY CA 96145            |
| TRUCKEE DONNER P.U.D. - RED MOUNTAIN          | RED MOUNTAIN HYDRO PUMP STATIO TRUCKEE CA 96160 |
| TRUCKEE SANITARY DISTRICT LAHONTAN 3          | 310 BOB HASLEM DRIVE TRUCKEE CA 96161           |
| TRUCKEE SANITARY DISTRICT- LAHONTAN 4         | 7631 LAHONTAN DRIVE TRUCKEE CA 956161           |
| U.S. COAST GUARD - LAKE TAHOE                 | 2500 LAKE FOREST RD TAHOE CITY CA 96145         |
| UNION PACIFIC RAILROAD - EMIGRANT GAP         | SOUTHERN PACIFIC TRACK, M EMIGRANT GAP CA 95715 |
| USA PETROLEUM #68140 - GRANITE BAY            | 6990 DOUGLAS BLVD GRANITE BAY CA 95746          |
| VERIZON CALIFORNIA, INC - WEIMAR              | 21415 CANYON WAY WEIMAR CA 95736                |
| VERIZON WIRELESS - ALPINE MEADOWS             | 2235 ALPINE CIR TAHOE CITY CA 95145             |
| VERIZON WIRELESS - BLUE CANYON                | BLUE CANYON WEATHER STATIO NEVADA CITY CA 95959 |
| VERIZON WIRELESS - CISCO BUTTES               | CISCO BUTTES BETWEEN I-8 EMIGRANT GAP CA 95715  |
| VERIZON WIRELESS - DRUM FOREBAY               | 600 SERENITY LN DUTCH FLAT CA 95714             |
| VERIZON WIRELESS - EMIGRANT GAP               | I-80 AND EMIGRANT GAP EMIGRANT GAP CA 95715     |
| VERIZON WIRELESS - GOLD RUN                   | 30300 MAGRA ROAD GOLD RUN CA 95717              |
| VERIZON WIRELESS - HEATHER GLEN               | 19290 CODY LN WEIMAR CA 95736                   |
| VERIZON WIRELESS - KINGS BEACH                | 1400 KINGS VISTA CT TAHOE VISTA CA 96148        |
| VERIZON WIRELESS - LOCUST ROAD                | 7975 LOCUST RD PLEASANT GROVE CA 95668          |
| VERIZON WIRELESS - NEWCASTLE                  | 100 TUNNEL ST NEWCASTLE CA 95658                |
| VERIZON WIRELESS - NORTHSTAR                  | 55 TRIMONT LN NORTHSTAR CA 96161                |
| VERIZON WIRELESS - ROSEVILLE WATER            | 9595 BARTON ROAD GRANITE BAY CA 95746           |
| VERIZON WIRELESS - WARD PEAK                  | TOP OF WARD PEAK @ ALPINE M TAHOE CITY CA 96154 |
| VERIZON WIRELESS - WHISKEY BAR                | 9383 BARBULA HILL RD NEWCASTLE CA 95658         |
| VILLAGE SWIM AND FITNESS CENTER               | 962 NORTHSTAR DRIVE TRUCKEE CA 96160            |
| VOGT FARMS                                    | 9494 SUNSET BLVD WEST PLEASANT GROVE CA 95668   |

Facility Jurisdiction Report as of 12/31/2012

FACILITY NAME

ADDRESS

|                                      |   |
|--------------------------------------|---|
| WAVE BROADBAND                       | 755 CLARK TUNNEL ROAD PENRYN CA 95663           |
| WAYNE ALLEN                          | 13391 BANNER LAVA CAP NEVADA CITY CA 95959      |
| WEIMAR COUNTRY STORE                 | 20170 WEST PAOLI LANE WEIMAR CA 95736           |
| WILLIAM M. LANE & LILY P. LANE TRUST | LAKE TAHOE SPECIALTY STOVE KINGS BEACH CA 96143 |
| WINCHESTER COUNTRY CLUB LLC          | 17015 WINCHESTER CLUB DR MEADOW VISTA CA 95722  |
| WORTON'S MARKET                      | 23140 FORESTHILL RD FORESTHILL CA 95631         |

Total Number of Facilities for UNINCORPORATED is 231



# ENFORCEMENT STATISTICS FOR 2012

## Compliance Performance

The District enforces state and federal air pollution laws and regulations, and locally adopted rules and regulations, as well as permits and orders. The burden of regulations to be enforced by District staff continues to increase.

All complaints received by the District are investigated. However, if enforcement action is called for based on the District's investigation, the complaint investigation may not be logged for tracking purposes until the investigation is reviewed and a Notice of Violation is issued.

Depending upon the nature and severity of a violation, they may be addressed by education, a warning, a corrective action notice, or a Notice of Violation. California law provides for civil or criminal complaints for violations of air pollution regulations, including the violation of District rules and permit conditions. Usually, enforcement cases are settled with the violator, a person or business, through a mutual negotiated agreement process. If settlement of a case cannot be reached the case may be referred to the Placer County District Attorney's Office for prosecution. The District may also seek prosecution of some cases by the State Attorney General's Office.

The District continues to augment permanent staff resources with extra-help employees to enhance field enforcement efforts. Augmenting permanent staff was first implemented in FY 2002-03. With a focus on investigating residential burning, dust from construction activities, and off-hours complaints, the extra-help enforcement staff has enabled more educational contacts, off-hour response capability, and a greater presence in the field.

Open burning complaints and violations (e.g., burning illegal material, burning without a permit, burning on a no burn day), construction dust complaints and violations, odor complaints, and the discovery of equipment not registered by the state or permitted by the District, comprise the majority of field investigations conducted by the District.

### **FY 2011-12 Overview:**

- In FY 2011-12, a total of \$58,434 in penalties was paid to the District. FY 2011-12 penalties reflect three factors that have continued the FY 2009-10 and FY 2010-11 trend of reduced penalties: 1) increased compliance and lack of major violations; 2) reduced frequency of violations due to the slowed economy and reduced business activity; and 3) lower penalty settlement amounts reflecting the District's acknowledgement of the higher burden of penalties in a poor economy.
- In FY 2011-12, two-hundred two (202) complaints were investigated and one-hundred eight (108) Notices of Violation were issued.
- In FY 2011-12, the only requests for response cost-recovery from fire agencies forwarding case information for air pollution violation was from CalFire, an agency that does not have a cost-recovery MOU with the District.

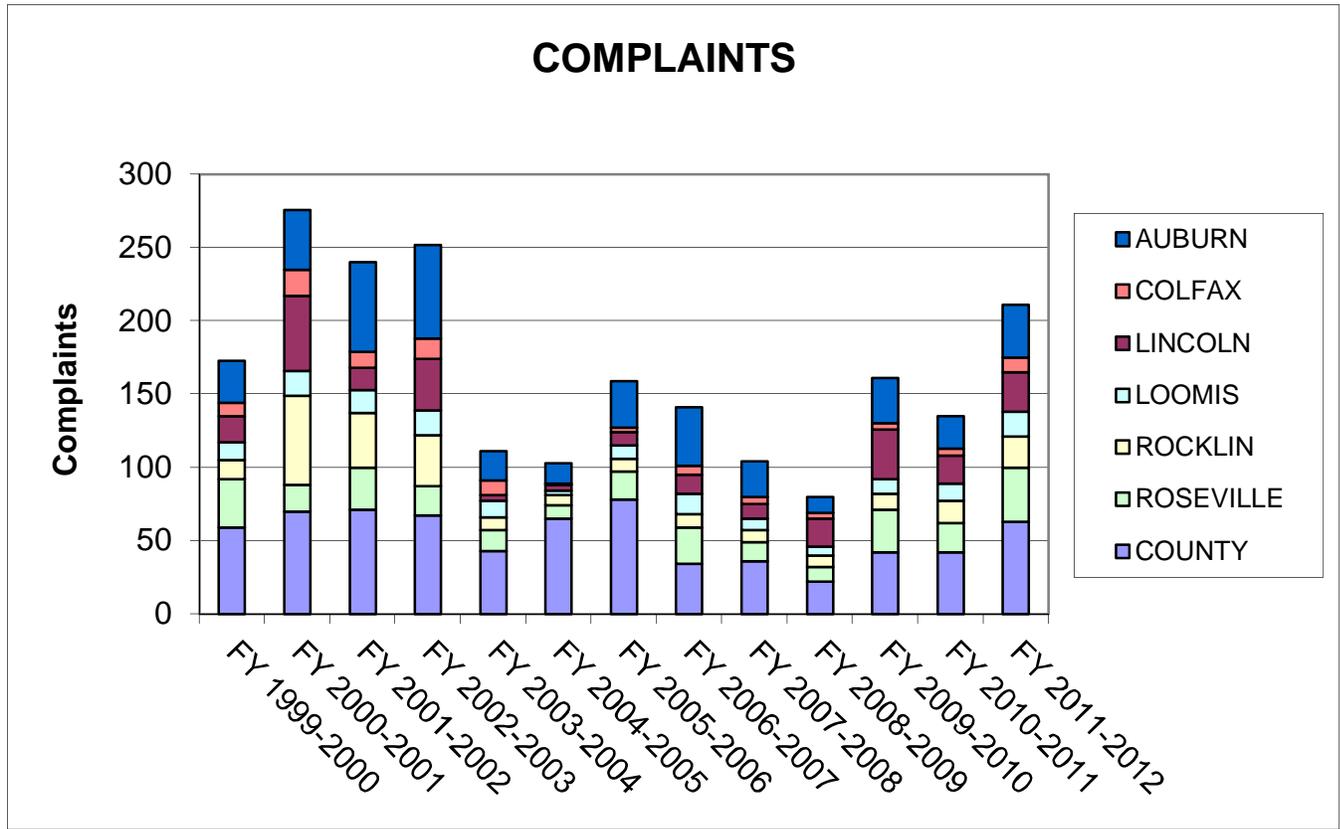
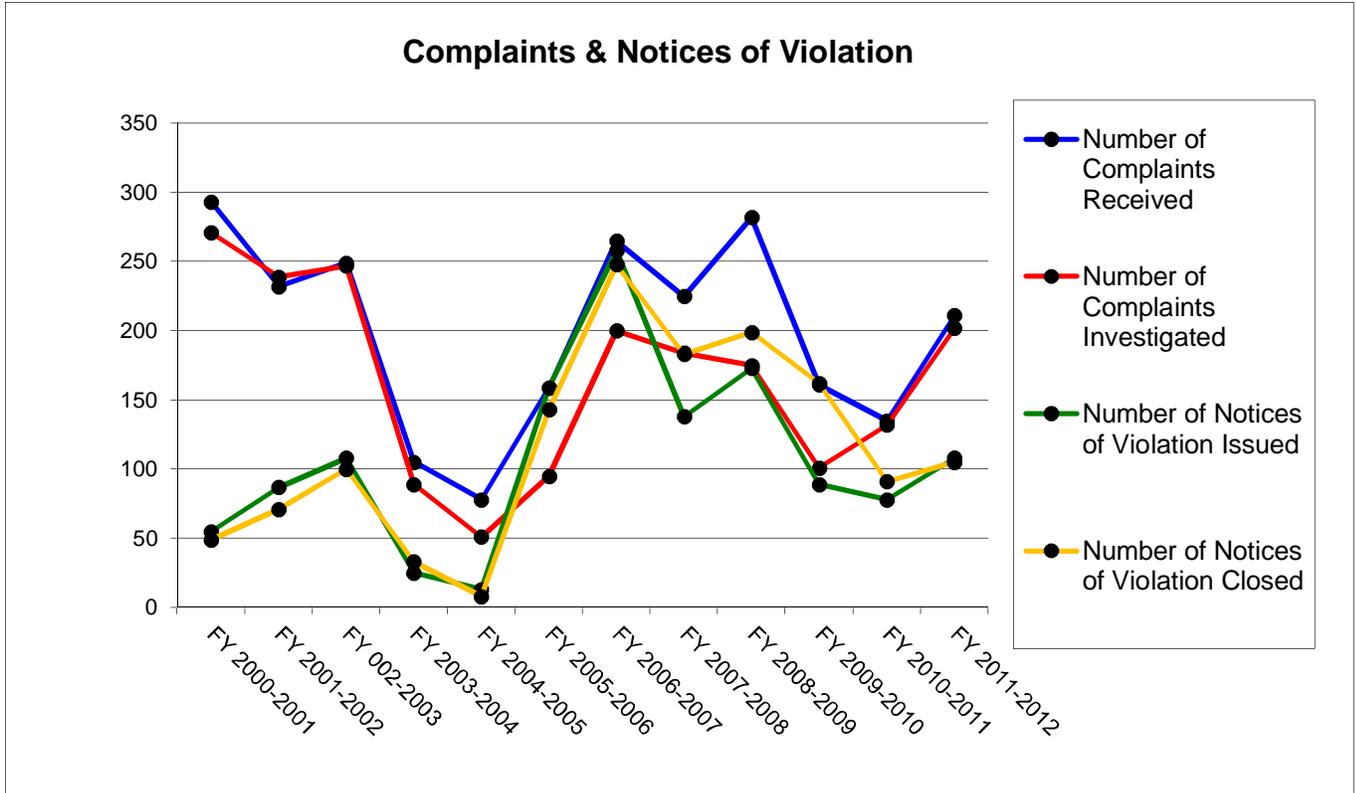
**Previous Years:**

The monetary penalties collected in prior years, shown below, reflect a ramp-up in compliance and enforcement efforts that is mirrored by the increase in Notices of Violation that were closed -- from 8 in FY 2004-05, to 143 in FY 2005-06, to 248 in FY 2006-07.

- FY 2010-11                      \$86,390. Includes \$49,555 resulting from the deferred final settlement for violations by SierraPine, Ltd. in 2008.
- FY 2009-10                      \$59,799
- FY 2008-09                      \$360,227. Includes \$242,084 which was the result of an enforcement action with Rio Bravo Rocklin and \$24,777 which was the first installment of a violation settlement by SierraPine ltd.
- FY 2007-08                      \$178,665. Does not include Sierra Pacific Industries violation cash settlement of \$2,742,500 and \$700,000 for District Staff time and attorney's fees.
- FY 2006-07                      \$318,860. The penalty total is composed of smaller penalties with the highest being \$16,000. An enhanced field enforcement effort resulted in the settlement of 248 Notices of Violations, the highest number recorded.
- FY 2005-06                      \$145,685
- FY 2004-05                      \$21,994
- FY 2003-04                      \$29,370

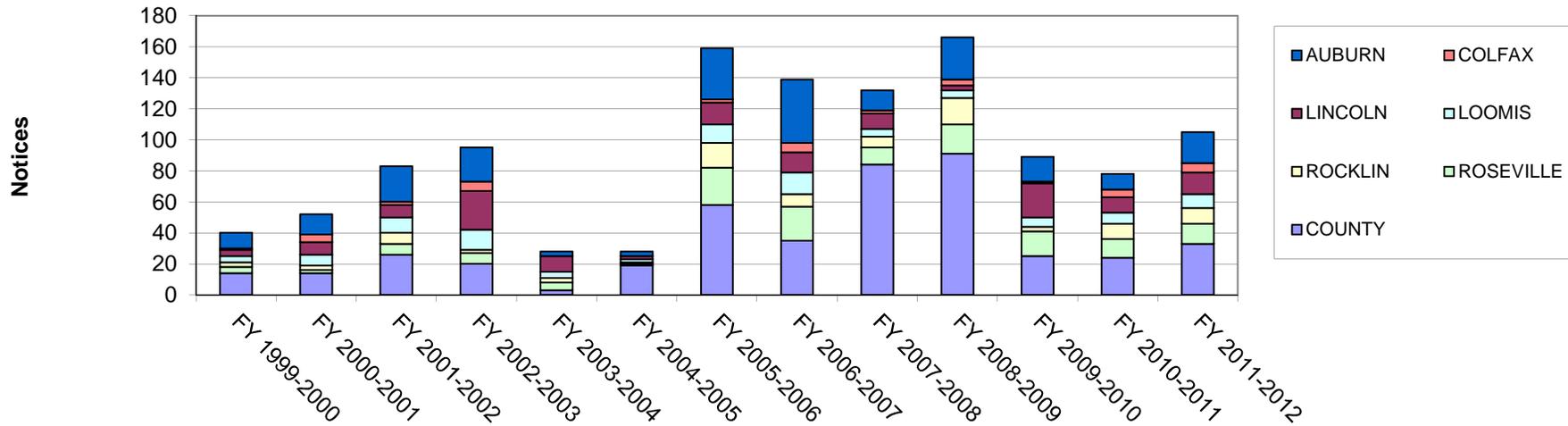
The following pages compare enforcement activities in FY 2011-12 to prior years.

# COMPLAINTS AND NOTICES OF VIOLATION



## NOTICES OF VIOLATION

### VIOLATION NOTICES ISSUED

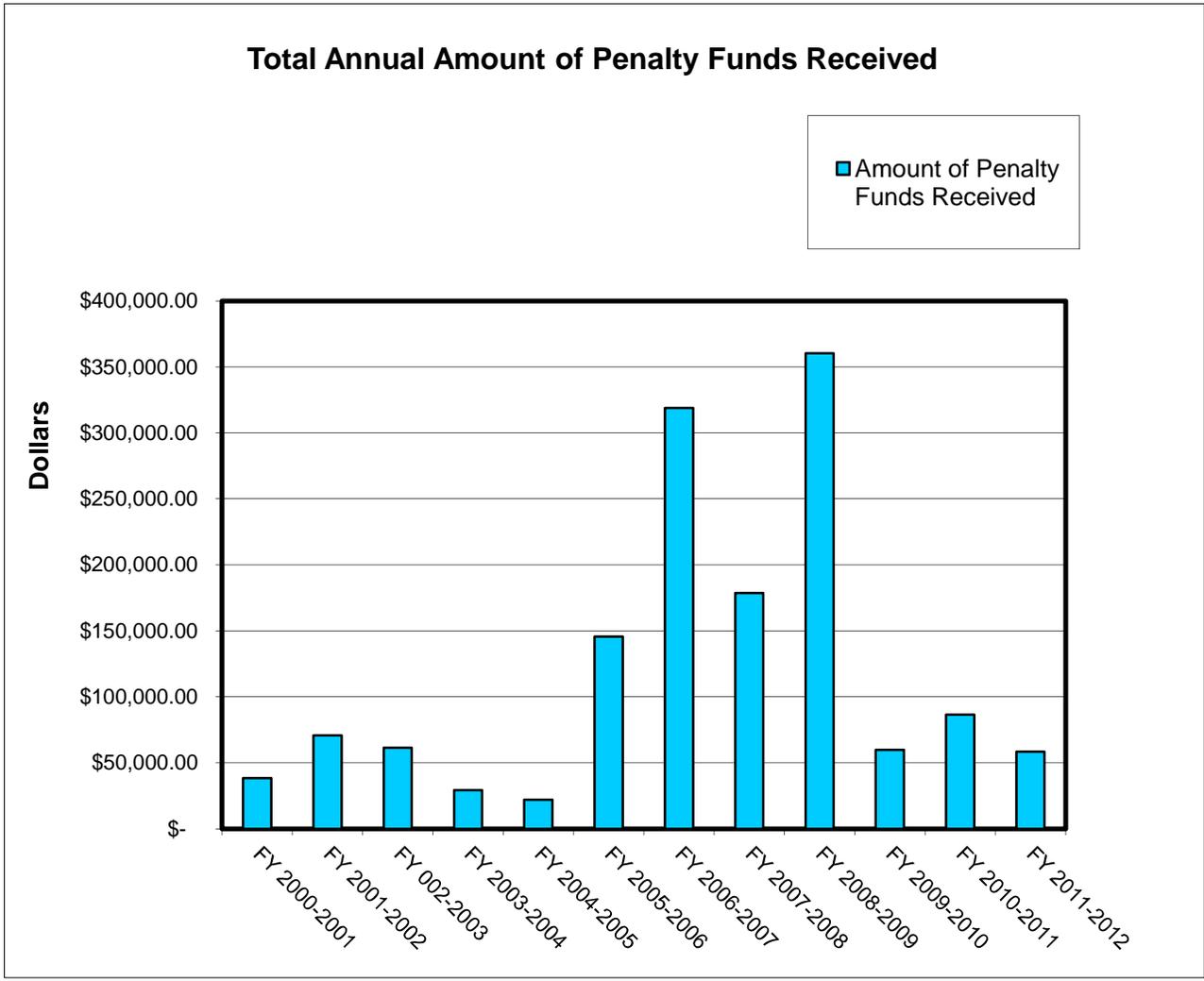


### VIOLATION NOTICES

|                  | FY 1999-2000 | FY 2000-2001 | FY 2001-2002 | FY 2002-2003 | FY 2003-2004 | FY 2004-2005 | FY 2005-2006 | FY 2006-2007 | FY 2007-2008 | FY 2008-2009 | FY 2009-2010 | FY 2010-2011 | FY 2011-2012 |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>COUNTY</b>    | 14           | 14           | 26           | 20           | 3            | 19           | 58           | 35           | 84           | 91           | 25           | 24           | 33           |
| <b>ROSEVILLE</b> | 4            | 2            | 7            | 7            | 5            | 1            | 24           | 22           | 11           | 19           | 16           | 12           | 13           |
| <b>ROCKLIN</b>   | 3            | 3            | 7            | 2            | 3            | 1            | 16           | 8            | 7            | 17           | 3            | 10           | 10           |
| <b>LOOMIS</b>    | 4            | 7            | 10           | 13           | 4            | 2            | 12           | 14           | 5            | 5            | 6            | 7            | 9            |
| <b>LINCOLN</b>   | 4            | 8            | 8            | 25           | 10           | 2            | 14           | 13           | 10           | 3            | 22           | 10           | 14           |
| <b>COLFAX</b>    | 1            | 5            | 2            | 6            | 0            | 0            | 2            | 6            | 2            | 4            | 1            | 5            | 6            |
| <b>AUBURN</b>    | 10           | 13           | 23           | 22           | 3            | 3            | 33           | 41           | 13           | 27           | 16           | 10           | 20           |
| <b>TOTAL</b>     | 40           | 52           | 83           | 95           | 28           | 28           | 159          | 139          | 132          | 166          | 89           | 78           | 105          |

Note: The statistics for municipalities are based on the mailing address and therefore do not necessarily reflect enforcement activity within the proper boundaries of each city.

# PENALTIES



\*Settlement funds from the SPI enforcement action (\$3.4 million) were received after the close of FY 2006-07 and placed in separate funds to be used at the Board's discretion.



## AIR QUALITY PLANNING & EMISSION INVENTORY

**Air Quality Management Plan Requirement:** Federal clean air laws require areas with unhealthy levels of criteria pollutants (ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead) to develop air quality management plans, known as the State Implementation Plan (SIP). The SIP is a comprehensive plan that describes how an area will attain national ambient air quality standards (NAAQS). The 1990 amendments to the federal Clean Air Act (FCAA) set deadlines for attainment based on the severity of an area's air pollution problem.

The SIP planning process includes: 1) development of the baseline emission inventory for pollutants themselves or pollutant precursors (e.g., volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) for ozone) to determine what extent various sources within the area are responsible for ozone precursor production, 2) conducting a computer modeling analysis to forecast the pollutant concentrations in the target year and to determine the additional emission reduction needed for the area to meet the federal standards in the target year, and 3) evaluating the combined reductions from federal, state and local control strategies and measures to achieve the emission reduction requirement. Usually emissions are produced by stationary sources, area-wide sources, and mobile sources. The baseline inventory represents actual emissions that are calculated using reported or estimated process rates and emission factors for stationary and area-wide sources. Mobile source emissions are calculated by motor vehicle emissions inventory models including consideration of the fleet mix, vehicle miles traveled, speeds, and vehicle emission factors.

Once the baseline emission inventory is established, the inventory is projected into the future based on expected growth rates of population, industrial/commercial activity, and energy use. In addition, the emission

projections take into account the anticipated emission reduction effects from previously adopted control measures. The projected emission inventories will be used in modeling analysis to forecast the pollutant concentration in future target years.

In order to study and relate air pollutant emissions to concentrations of pollutants in the ambient air, the Urban Air Shed Photochemical Grid Model is used to simulate the formation of pollutants. Depending on the emission sources identification, regional meteorological data, projected emission inventories, and the combinations of control strategies, the results from the modeling analysis will provide evidence to demonstrate when and how the planning area will attain the federal standard. If the pollutant is a secondary pollutant like ozone, the analysis will focus on the control of sources for its precursors (VOC and NO<sub>x</sub>). The previous analysis has indicated that NO<sub>x</sub> reductions were more effective at reducing downwind ozone when peak 8-hour ozone design values occurred in the Sacramento area. Therefore, the new ozone SIP will focus on the combination of emission control strategies that may reduce NO<sub>x</sub> by a greater percentage than VOC.

Table 1 depicts the state and federal air quality standards and Table 2 depicts the current area designations for the three air basins in Placer County. The area designations shown in the table are the latest status released by EPA and ARB.

**Federal Ozone Attainment Planning:** On March 12, 2008, the US Environmental Protection Agency (EPA) strengthened the national ambient air quality standards (NAAQS) for the ozone 8-hour average. EPA considered over 1700 new health studies and concluded that the previous ozone standards set in 1997 were not sufficient to protect public health or avoid environmental effects including

damage to vegetation and ecosystems. New health concerns identified by the studies include: increased asthma medication use, school absenteeism, cardiac effects, and mortality. The revised 2008 ozone 8-hour average standard is **0.075 ppm**, which is 11 % lower than the 1997 standard (0.084 ppm). EPA estimates that the health benefits of achieving the new standards are valued between \$2 billion and \$19 billion nationwide.

Although EPA announced that it would reconsider strengthening the ozone standards set in 2008, the President made a decision to reject this proposal because of the concern regarding the potential burdens on industry and local governments during a period of economic distress. Subsequently, on September 2, 2011, EPA announced their plan to move forward to implement the 2008 ozone 8-hour standard of 0.075 ppm. EPA is proceeding to implement the 2008 standards, starting with the states' recommendations submitted in 2009.

On May 21, 2012, EPA announced that the existing Sacramento federal ozone nonattainment area boundaries will remain as nonattainment for the 2008 revised ozone 8-hour standard with an attainment deadline of 2027. Attainment plans are typically due three years after EPA finalizes the designations. EPA is working to publish the final ozone implementation rule which will include the requirements for the attainment plan (SIP) development. District Staff will work with CARB and the other four local districts in the Sacramento Region to develop an attainment plan which will demonstrate the Sacramento area meeting the 2008 federal ozone standards in the target year.

**Federal PM Attainment Planning:** In December 2006, the U.S. EPA lowered the 24-hour  $PM_{2.5}$  standard from  $65 \text{ ug}/\text{m}^3$  to  $35 \text{ ug}/\text{m}^3$ . According to the analyses, EPA concluded that the mobile source emissions and the local wood smoke emissions from the adjacent counties lead to violations of the

federal  $PM_{2.5}$  standard in Sacramento County. Subsequently, on November 13, 2009, EPA published the *Final Determination* in the Federal Register to designate the area including the entire Sacramento County and portions of El Dorado, Placer, and Yolo County as the Sacramento Regional Nonattainment Area for the federal  $PM_{2.5}$  standards (Figure 2). Due to this nonattainment designation, a comprehensive  $PM_{2.5}$  attainment plan ( $PM_{2.5}$  SIP) needs to be developed to demonstrate how the Region will attain the federal  $PM_{2.5}$  standard in the target year.

Because of regional collaborative efforts, the Sacramento local air districts were able to submit the clean data finding report to EPA in May 2012, to demonstrate that the Sacramento Region  $PM_{2.5}$  nonattainment area is in attainment for the 2006  $PM_{2.5}$  24-hr standard. After reviewing the demonstration report, on October 16, 2012, EPA published the proposed attainment determination for the Sacramento Region  $PM_{2.5}$  nonattainment area and is working to finalize this attainment determination for the region after the public review period. Currently, District staff is working with the other Sacramento local air districts and CARB to develop an attainment demonstration/maintenance plan to ensure that the Sacramento Region will remain in attainment for the  $PM_{2.5}$  24-hr standard. The plan is anticipated to be completed in 2013.

**Emission Inventory:** The purpose of an emission inventory is to determine to what extent various sources within the region are responsible for air pollutant production. There are approximately 500 emission source categories in the emission inventory. ARB is responsible for 400 source categories and local air districts are responsible for the remaining categories. In general, the ARB develops estimates for categories in which information is readily available at the state level and for categories subject to statewide regulations. Statewide emissions developed by ARB are apportioned to individual counties and air

basins using various activity parameters such as population and employment data. Categories are designated as being the districts' responsibility when local data are more readily available. For ARB-responsibility categories, districts have the prerogative to use their own methods that better reflect local conditions.

Emission sources are divided into four categories; stationary source, area-wide sources, mobile sources, and non-anthropogenic sources. *Stationary sources* are large and fixed point sources of air pollution such as power plants, refineries, and factories. In addition to those large point sources, stationary sources also includes *aggregated point sources* which are many small point sources or facilities that have not been inventoried individually but estimated as a group and reported as a single source category. Examples of aggregated point sources include gas stations and dry cleaning operations. *Area-wide sources* include source categories associated with human activity and emissions that take place over a wide geographic area. Consumer products and unpaved road dust are examples of area-wide sources. *Non-anthropogenic sources* generally include source categories with naturally occurring emissions such as wildfires and biogenic sources.

Mobile sources are the emission category that can be attributed to both on-road and off-road mobile sources. On-road mobile sources include gas, diesel, and electrically powered passenger cars, light, medium and heavy duty trucks, motorcycles, school and transit buses, and motor homes. Off-road mobile sources include agricultural and construction vehicles and equipment, trains, aircrafts, lawn and garden equipment, and off-road recreation equipment. The ARB Planning and Technical Support Division (PTSD) has the primary responsibility for developing on-road and off-road mobile source emissions inventories in California and for maintaining those mathematical models, **EMFAC** and

**OFFROAD**, used to project changes in future inventories of mobile source emissions. The ARB has maintained these inventories, which are the product of population, activity, and emissions, for over 25 years.

The on-road emission inventory data has two parts: emissions-related and activity-related. The emissions-related data reflects new vehicle testing information and the latest vehicle registration data from the California Department of Motor Vehicles. The activity-related data are updated by the regional transportation agencies that estimate the daily vehicle miles of travel, the distribution of travel by speed, and the number of starts per vehicle, per day, by year.

The off-road emissions inventory is an estimate of the population, activity, and emissions estimate of the various types of off-road equipment. The major categories of engines and vehicles include agricultural, construction, lawn and garden, and off-road recreation, and includes equipment from hedge trimmers to cranes.

Tables 3 & 4 present the anthropogenic VOC and NO<sub>x</sub> emission inventories by source categories for the Sacramento nonattainment area. Emissions are given for various potential attainment demonstration analysis years of 2012, 2018, 2020, and 2023 which represent the forecast emissions for the target years in the existing 8-hour ozone SIP<sup>1</sup>. These emission inventories are used for the model analysis to determine how control combinations are needed to bring the Sacramento region into attainment by the established deadline.

In addition to the ozone attainment planning, emission inventories are constantly being

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<sup>1</sup> The Sacramento Regional 8-hour ozone SIP was approved by the Governing Boards of five air districts in Sacramento nonattainment area in February 2009. It was developed for the Sacramento region to meet the 1997 federal 8-hour ozone standards (0.08ppm).

updated for other air pollutants within the region. It is important to update the inventory annually so the emission trend can be established to determine the contribution of various sources to air pollution. The updated emission inventory can assist in the development and evaluation of appropriate control strategies that target those emission sources. Table 5 contains the emission inventory in Placer County including ROG, NOx, PM10 and PM2.5 emissions since 1980<sup>2</sup>. Table 6 presents the emission inventory of the different air basins in Placer County<sup>2</sup>. Figure 3 is the pie chart showing the percentage of ROG and NOx emissions emitted from District permitted facilities. The emission trends by pollutants are shown in Figure 4<sup>2</sup>.

The following figures (Figure 5 and 6) show the 8-hour ozone air quality trends in the Sacramento Nonattainment area. Figure 5 is a line graph showing the number of exceedence days based on 2008 federal 8-hour ozone standard (0.075 ppm) in the Sacramento nonattainment area since 1990. Figure 6 shows the 8-hour ozone federal design value which is the fourth highest concentration measurement from monitoring sites located within the Sacramento nonattainment area since 1990. These are the two indicators used to provide insight into the degree of air quality problems and whether air quality is improving or not. The overall trend shows a slight decline from 1990 through 2010 by both the number of exceedences and the design value.

**Greenhouse Emissions Impacts:** Passed in August 2006, the California Global Warming Solution Act (AB 32) recognizes that the potential adverse impacts of global warming will pose a serious threat to the environment of

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<sup>2</sup> The data was from CARB "Emission and Air Quality Almanac of 2009" which was published in 2009. The 2009 Almanac is the current edition which contains the most available emission inventory. Due to the updates of mobile source models, CARB did not publish the revision of almanac in 2010.

California. To reduce the impacts of global warming, AB 32 requires the Air Resources Board (ARB) to develop a scoping plan which includes comprehensive programs, feasible regulations, and market mechanisms to achieve real, quantifiable, cost-effective reduction of greenhouse gases (GHG) in California. The Scoping Plan was approved by the ARB Governing Board on December 11, 2008. Although a local air district (as of now) is not the entity required by law to reduce GHG emissions, air districts have the expertise and experience that will assist ARB to ensure that emissions reductions proposed by the Scoping Plan are real, permanent and quantifiable, and that data collection and reporting is enforceable. The District, as a member in the California Air Pollution Control Officers Association (CAPCOA), is working closely with ARB to use the existing programs and processes to implement the proposed statewide programs and regulations that will be promulgated in the future. CAPCOA and the District are working with ARB on the implementation of a small number of early action measures.

In addition to working with ARB for the proposed statewide programs and regulations, the District is working with other local air districts through CAPCOA to assist local governments in achieving California's goals to reduce GHGs. The goal of reducing GHGs has broadly influenced local governments over their activities that would contribute to significant direct and indirect GHG emissions such as land use planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. The role of the District is to provide the technical assistance including analysis guidance and resources to the local governments which will help them to develop programs and policies to effectively reduce GHG emissions.

One of the critical issues for local governments in reducing GHG emissions is land use

planning practices and whether GHG emissions are addressed. A land use development project's environmental documents are required to address potential climate impacts from GHG emissions pursuant to the California Environmental Quality Act (CEQA). An Amendment to the CEQA Guidelines for GHG emissions was adopted by the California Natural Resources Agency and became effective on March 18, 2010. The amendment provides guidance for the analysis and mitigation of the potential effects of GHG emissions in CEQA process. For the CEQA review process the most important part will inevitably be the determination of significance for the project's related climate change impacts and the identification of mitigation measures to reduce the project related GHG emissions. When the level of significance for the project's related greenhouse gas emissions is determined, the related mitigation measures can then be identified to offset the project's impacts.

Instead of the possible statewide GHG significant threshold, District staff is working with the other local air districts within the Sacramento Region to develop a Sacramento regional GHG significant threshold for land use development projects. In addition, District staff has worked with the other participating local air districts on the CAPCOA GHG Mitigation Evaluation Project. This project conducted technical analysis to assess and quantify the GHG emission reduction associated with a range of GHG mitigation strategies. The final report was released in August 2010. District staff uses this report as the reference to work with local governments to ensure there is an appropriate discussion of the anticipated GHG emissions and identification of feasible mitigation within a project's environmental documents.

| Pollutants       | Averaging Time          | State Standard | Federal Standard |
|------------------|-------------------------|----------------|------------------|
| Ozone            | 1 hr                    | 0.09 ppm       | —                |
|                  | 8 hr                    | 0.070 ppm      | 0.075 ppm        |
| PM 10            | 24 hr                   | 50 ug/m3       | 150 ug/m3        |
|                  | Annual                  | 20 ug/m3       | —                |
| PM 2.5           | 24 hr                   | —              | 35 ug/m3         |
|                  | Annual                  | 12 ug/m3       | 12 ug/m3         |
| Carbon Monoxide  | 1 hr                    | 20 ppm         | 35 ppm           |
|                  | 8 hr                    | 9 ppm          | 9 ppm            |
|                  | Tahoe 8 hr              | 6 ppm          | —                |
| Nitrogen Dioxide | 1 hr                    | 0.18 ppm       | 0.100 ppm        |
|                  | Annual                  | 0.030 ppm      | 0.053 ppm        |
| Sulfur Dioxide   | 1 hr                    | 0.25 ppm       | 0.075 ppm        |
|                  | 24 hr                   | 0.04 ppm       | —                |
| Lead             | 30 day average          | 1.5 ug/m3      | —                |
|                  | Calendar Quarter        | —              | 1.5 ug/m3        |
|                  | Rolling 3-month Average | —              | 0.15 ug/m3       |
| Green House Gas  | TBD                     | TBD            | TBD              |

|                  |             | State      |              |            | Federal        |                |                |
|------------------|-------------|------------|--------------|------------|----------------|----------------|----------------|
|                  |             | SacVal AB  | MCounty AB   | LTahoe AB  | SacVal AB      | MCounty AB     | LTahoe AB      |
| Ozone            | 1 hr        | Non-attain | Non-attain   | Attain     |                |                |                |
|                  | 8 hr        | Non-attain | Non-attain   | Non-attain | Non-attain     | Non-attain     | Unclass/Attain |
| PM 10            | 24 hr       | Non-attain | Non-attain   | Non-attain | Attain         | Attain         | Attain         |
|                  | Annual      | Non-attain | Non-attain   | Non-attain |                |                |                |
| PM 2.5           | 24 hr       | None       | None         | None       | Non-attain     | Unclassified   | Unclassified   |
|                  | Annual      | Attain     | Unclassified | Attain     | Attain         | Unclassified   | Unclassified   |
| Carbon Monoxide  | 1 hr        | Attain     | Unclassified | Attain     | Attain         | Attain         | Attain         |
|                  | 8 hr        | Attain     | Unclassified | Attain     | Attain         | Attain         | Attain         |
|                  | 8 hr(Tahoe) |            |              | Attain     |                |                |                |
| Nitrogen Dioxide | 1 hr        | Attain     | Attain       | Attain     | Unclassified   | Unclassified   | Unclassified   |
|                  | Annual      | Attain     | Attain       | Attain     | Attain         | Attain         | Attain         |
| Sulfur Dioxide   | 1 hr        | Attain     | Attain       | Attain     | Attain         | Attain         | Attain         |
|                  | 24 hr       | Attain     | Attain       | Attain     |                |                |                |
| Lead             | 30 days     | Attain     | Attain       | Attain     |                |                |                |
|                  | Quarterly   |            |              |            | Attain         | Attain         | Attain         |
|                  | 3-month Avg |            |              |            | Not Applicable | Not Applicable | Not Applicable |

| <b>Table 3</b>                                     |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|
| <b>Emissions of VOC<sup>a</sup> (tons per day)</b> |             |             |             |             |             |
| <b>Sacramento Nonattainment Area</b>               |             |             |             |             |             |
|  | <b>2002</b> | <b>2012</b> | <b>2018</b> | <b>2020</b> | <b>2023</b> |
| <b>TOTAL EMISSIONS</b>                             | 168         | 130         | 119         | 117         | 115         |
| STATIONARY   | 19          | 20          | 22          | 22          | 23          |
| AREA-WIDE  | 31          | 30          | 32          | 33          | 34          |
| ON-ROAD MOTOR VEHICLES                             | 69          | 42          | 30          | 27          | 24          |
| OTHER MOBILE SOURCES                               | 49          | 39          | 35          | 35          | 34          |
| <b>STATIONARY</b>                                  |             |             |             |             |             |
| Solvent/Coatings                                   | 7.8         | 7.9         | 8.7         | 8.9         | 9.2         |
| Petroleum Production/Marketing                     | 5.2         | 5.6         | 6.2         | 6.3         | 6.6         |
| Industrial Process                                 | 3.6         | 4.2         | 4.7         | 4.9         | 5.2         |
| Other  | 2.0         | 2.1         | 2.1         | 2.1         | 2.1         |
| <b>AREA-WIDE</b>                                   |             |             |             |             |             |
| Consumer Products                                  | 14.8        | 14.6        | 15.7        | 16.1        | 16.7        |
| Architectural Coatings                             | 8.0         | 7.4         | 8.1         | 8.3         | 8.9         |
| Pesticides   | 1.9         | 1.9         | 1.9         | 1.8         | 1.8         |
| Livestock Waste                                    | 2.8         | 2.8         | 2.8         | 2.8         | 2.8         |
| Ag Burn/Other Managed Burn                         | 1.3         | 1.3         | 1.2         | 1.2         | 1.2         |
| Other  | 2.1         | 2.3         | 2.4         | 2.4         | 2.5         |
| <b>ON-ROAD</b>                                     |             |             |             |             |             |
| Automobiles  | 31.9        | 15.1        | 9.5         | 8.4         | 7.0         |
| Lt/Med Duty Trucks                                 | 25.3        | 17.2        | 13.5        | 12.6        | 11.3        |
| Heavy Duty Gas Trucks                              | 6.7         | 4.8         | 3.5         | 3.1         | 2.7         |
| Heavy Duty Diesel Trucks                           | 2.1         | 1.6         | 1.1         | 1.0         | 1.0         |
| Motorcycles  | 2.7         | 2.5         | 2.0         | 1.9         | 1.7         |
| Buses/Motor Homes                                  | 0.5         | 0.3         | 0.2         | 0.2         | 0.2         |
| <b>OTHER MOBILE</b>                                |             |             |             |             |             |
| Recreational Boats                                 | 25.4        | 21.1        | 19.5        | 19.1        | 18.5        |
| Equipment (Const/Ind/Farm)                         | 7.7         | 4.2         | 2.6         | 2.3         | 2.0         |
| Lawn & Garden Equipment                            | 5.8         | 5.1         | 4.2         | 4.1         | 4.0         |
| Gas Can  | 4.7         | 1.6         | 1.7         | 1.7         | 1.7         |
| Trains   | 0.6         | 0.6         | 0.6         | 0.6         | 0.6         |
| Aircraft   | 0.5         | 0.6         | 0.6         | 0.6         | 0.6         |
| Other  | 4.0         | 5.4         | 6.1         | 6.4         | 6.4         |

<sup>a</sup> Source: CARB CEFS Version 1.04 (Rf#976), September 14, 2006, for average summer day.

| <b>Table 4</b>                                     |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|
| <b>Emissions of NOx<sup>a</sup> (tons per day)</b> |             |             |             |             |             |
| <b>Sacramento Nonattainment Area</b>               |             |             |             |             |             |
|  | <b>2002</b> | <b>2012</b> | <b>2018</b> | <b>2020</b> | <b>2023</b> |
| <b>TOTAL EMISSIONS</b>                             | 176         | 118         | 87          | 80          | 72          |
| <b>STATIONARY</b>                                  | 16          | 15          | 14          | 13          | 13          |
| AREA-WIDE  | 3           | 3           | 4           | 4           | 4           |
| ON-ROAD MOTOR                                      | 95          | 56          | 35          | 30          | 26          |
| OTHER MOBILE SOURCES                               | 61          | 44          | 35          | 33          | 30          |
| <b>STATIONARY</b>                                  |             |             |             |             |             |
| Fuel Combustion                                    | 7.6         | 8.1         | 8.5         | 8.5         | 8.6         |
| Ag Irrigation Pumps                                | 7.9         | 5.7         | 4.3         | 3.8         | 3.0         |
| Industrial Process                                 | 0.7         | 0.8         | 0.9         | 0.9         | 0.9         |
| <b>AREA-WIDE</b>                                   |             |             |             |             |             |
| Residential Fuel Combustion                        | 2.8         | 3.0         | 3.2         | 3.2         | 3.2         |
| Ag Burn/Other Managed Burn                         | 0.4         | 0.4         | 0.4         | 0.4         | 0.4         |
| <b>ON-ROAD</b>                                     |             |             |             |             |             |
| Heavy Duty Diesel Trucks                           | 39.8        | 28.3        | 17.0        | 14.8        | 12.6        |
| Lt/Med Duty Trucks                                 | 26.1        | 12.6        | 7.9         | 6.8         | 5.5         |
| Automobiles  | 20.4        | 7.9         | 4.4         | 3.7         | 2.9         |
| Heavy Duty Gas Trucks                              | 5.9         | 4.1         | 3.0         | 2.7         | 2.4         |
| Buses/Motor Homes                                  | 2.5         | 2.4         | 2.1         | 2.0         | 1.9         |
| Motorcycles  | 0.4         | 0.5         | 0.4         | 0.4         | 0.4         |
| <b>OTHER MOBILE</b>                                |             |             |             |             |             |
| Construction & Mining Equip                        | 15.9        | 9.6         | 4.8         | 3.6         | 2.6         |
| Trains   | 12.2        | 9.0         | 9.4         | 9.6         | 9.9         |
| Farm Equipment                                     | 12.9        | 8.4         | 5.3         | 4.5         | 3.5         |
| Boats  | 8.4         | 7.3         | 6.7         | 6.6         | 6.5         |
| Comm/Ind Equipment                                 | 5.2         | 3.5         | 2.2         | 1.8         | 1.5         |
| Trans Refrig Units                                 | 1.6         | 2.1         | 2.0         | 2.1         | 2.0         |
| Oil Drilling/Workover                              | 1.3         | 0.7         | 0.4         | 0.4         | 0.3         |
| Aircraft   | 1.6         | 2.3         | 2.8         | 2.9         | 3.0         |
| Other  | 1.8         | 1.4         | 1.2         | 1.2         | 1.1         |

<sup>a</sup> Source: CARB CEFS Version 1.04 (Rf#976), September 14, 2006, for average summer day.

**Table 5**  
**Placer County Emission Inventory**  
 by category (tons/day)

| <b>ROG</b> | <b>1980</b> | <b>1985</b> | <b>1990</b> | <b>1995</b> | <b>2000</b> | <b>2005</b> | <b>2010</b> |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Stationary | 8.95        | 7.71        | 8.66        | 8.52        | 5.25        | 5.85        | 4.75        |
| Area-wide  | 5.06        | 5.31        | 6.15        | 6.38        | 6.71        | 6.82        | 6.97        |
| On-road    | 26.43       | 24.27       | 17.11       | 13.43       | 10.66       | 8.05        | 5.19        |
| Off-road   | 4.05        | 4.96        | 6.61        | 7.38        | 7.56        | 5.86        | 7.94        |
| total      | 44.48       | 42.25       | 38.53       | 35.70       | 30.18       | 26.57       | 24.85       |

| <b>NOx</b> | <b>1980</b> | <b>1985</b> | <b>1990</b> | <b>1995</b> | <b>2000</b> | <b>2005</b> | <b>2010</b> |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Stationary | 2.00        | 1.41        | 2.52        | 2.95        | 3.16        | 3.18        | 3.56        |
| Area-wide  | 0.92        | 0.95        | 1.06        | 1.04        | 1.07        | 1.08        | 1.09        |
| On-road    | 16.72       | 17.96       | 18.18       | 16.69       | 15.79       | 12.20       | 15.81       |
| Off-road   | 13.95       | 14.30       | 16.41       | 15.74       | 16.06       | 13.68       | 8.27        |
| total      | 33.58       | 34.62       | 38.17       | 36.42       | 36.08       | 30.14       | 28.73       |

| <b>PM10</b> | <b>1980</b> | <b>1985</b> | <b>1990</b> | <b>1995</b> | <b>2000</b> | <b>2005</b> | <b>2010</b> |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Stationary  | 1.86        | 1.91        | 2.81        | 1.74        | 1.57        | 1.74        | 2.04        |
| Area-wide   | 13.98       | 15.30       | 17.70       | 18.40       | 20.68       | 22.18       | 23.69       |
| On-road     | 0.23        | 0.33        | 0.40        | 0.33        | 0.39        | 0.42        | 0.77        |
| Off-road    | 0.62        | 0.65        | 0.82        | 0.74        | 0.78        | 0.84        | 0.62        |
| total       | 16.69       | 18.19       | 21.73       | 21.21       | 23.42       | 25.18       | 27.12       |

| <b>PM2.5</b> | <b>1980</b> | <b>1985</b> | <b>1990</b> | <b>1995</b> | <b>2000</b> | <b>2005</b> | <b>2010</b> |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Stationary   | 1.34        | 1.27        | 1.88        | 1.08        | 0.87        | 1.02        | 1.24        |
| Area-wide    | 5.63        | 6.06        | 6.89        | 7.20        | 7.88        | 8.35        | 7.36        |
| On-road      | 0.18        | 0.26        | 0.31        | 0.23        | 0.27        | 0.28        | 0.56        |
| Off-road     | 0.56        | 0.58        | 0.73        | 0.65        | 0.68        | 0.72        | 0.52        |
| total        | 7.71        | 8.17        | 9.81        | 9.17        | 9.70        | 10.37       | 9.68        |

**Table 6**  
**Placer County Emission Inventory**  
 by each air basin (tons/day)

| <b>ROG</b> | <b>1980</b> | <b>1985</b> | <b>1990</b> | <b>1995</b> | <b>2000</b> | <b>2005</b> | <b>2010</b> |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| LTAB       | 2.78        | 2.99        | 3.00        | 2.97        | 2.63        | 2.43        | 2.15        |
| MCAB       | 9.23        | 5.35        | 5.07        | 4.43        | 4.32        | 3.89        | 5.2         |
| SVAB       | 32.47       | 33.91       | 30.46       | 28.31       | 23.24       | 20.25       | 17.5        |
| Total      | 44.48       | 42.25       | 38.53       | 35.70       | 30.18       | 26.57       | 24.85       |

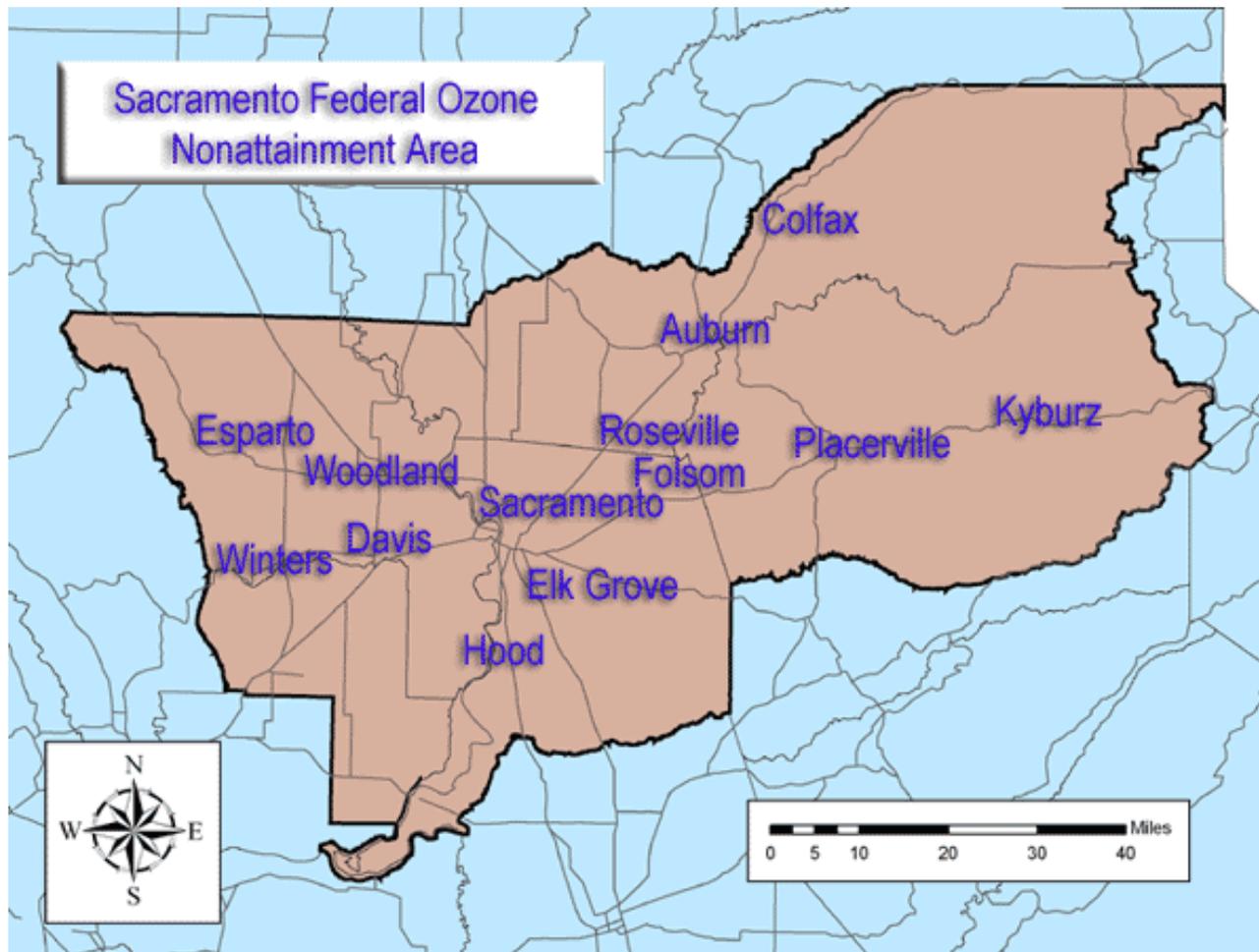
| <b>NOx</b> | <b>1980</b> | <b>1985</b> | <b>1990</b> | <b>1995</b> | <b>2000</b> | <b>2005</b> | <b>2010</b> |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| LTAB       | 1.46        | 1.96        | 2.35        | 2.39        | 2.26        | 2.10        | 1.64        |
| MCAB       | 5.59        | 4.75        | 4.90        | 4.90        | 5.44        | 4.46        | 9.04        |
| SVAB       | 26.54       | 27.90       | 30.91       | 29.13       | 28.38       | 23.59       | 18.05       |
| Total      | 33.58       | 34.62       | 38.17       | 36.42       | 36.08       | 30.14       | 28.73       |

| <b>PM10</b> | <b>1980</b> | <b>1985</b> | <b>1990</b> | <b>1995</b> | <b>2000</b> | <b>2005</b> | <b>2010</b> |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| LTAB        | 1.04        | 1.14        | 1.29        | 1.34        | 1.47        | 1.58        | 1.67        |
| MCAB        | 6.82        | 6.33        | 7.10        | 6.84        | 7.54        | 7.93        | 8.55        |
| SVAB        | 8.83        | 10.73       | 13.33       | 13.03       | 14.40       | 15.67       | 16.90       |
| Total       | 16.69       | 18.19       | 21.73       | 21.21       | 23.42       | 25.18       | 27.12       |

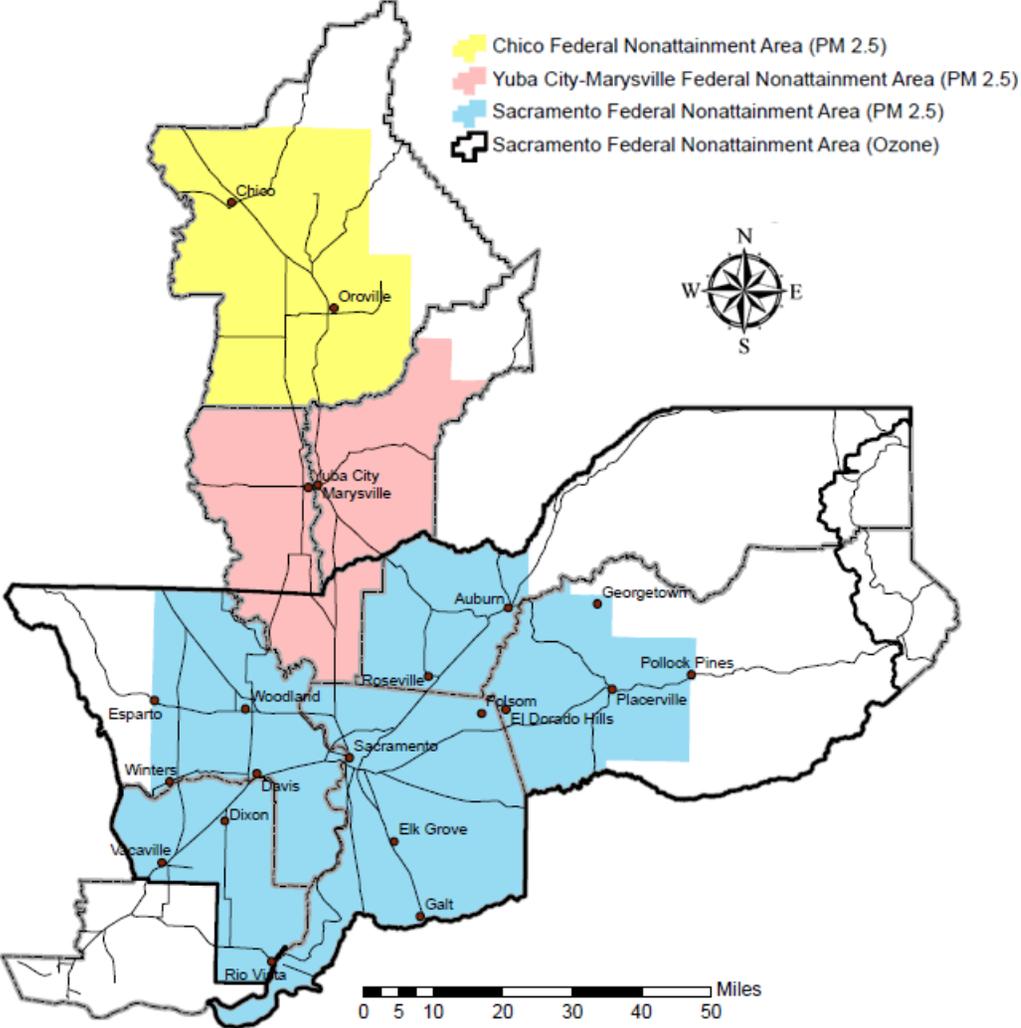
| <b>PM2.5</b> | <b>1980</b> | <b>1985</b> | <b>1990</b> | <b>1995</b> | <b>2000</b> | <b>2005</b> | <b>2010</b> |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| LTAB         | 0.50        | 0.56        | 0.63        | 0.66        | 0.71        | 0.76        | 0.69        |
| MCAB         | 2.85        | 2.29        | 2.51        | 2.25        | 2.44        | 2.55        | 2.17        |
| SVAB         | 4.36        | 5.33        | 6.67        | 6.26        | 6.54        | 7.06        | 6.82        |
| Total        | 7.71        | 8.17        | 9.81        | 9.17        | 9.70        | 10.37       | 9.68        |

LTAB = Lake Tahoe Air Basin  
 MCAB = Mountain County Air Basin  
 SVAB = Sacramento Valley Air Basin

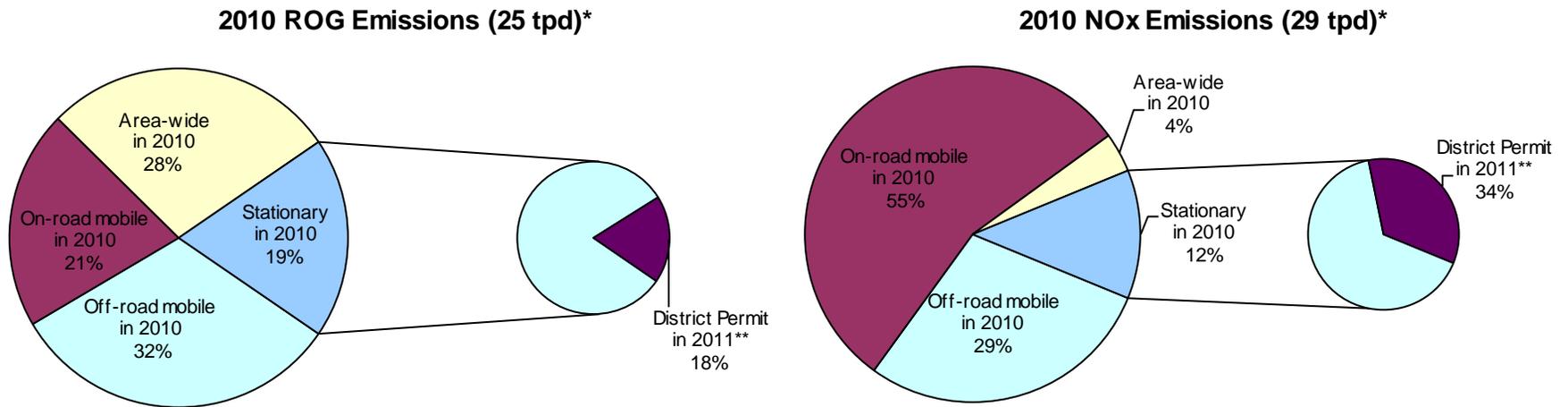
**Figure 1**  
Sacramento Federal Ozone Nonattainment Area (2008 ozone standards)



**Figure 2**  
Sacramento Federal PM2.5 Nonattainment Area



**Figure 3**  
2011 Placer County Emission Inventory



\* The California Air Resources Board projected emission inventory in 2010.

\*\* It is the latest update from the District based on the actual 2011 throughput data reported by permitted facilities in 2012.

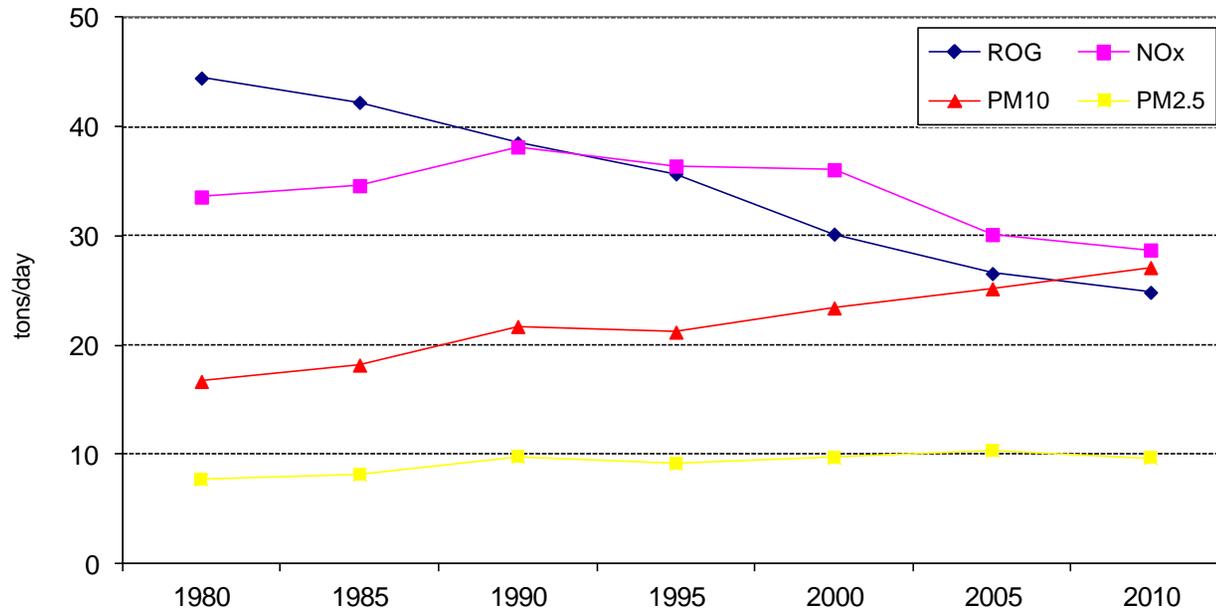
According to the pie chart,

ROG emissions from District's permitted facilities are 0.88 tons/day, 18% of total stationary ROG emissions or 3.5% of total County ROG emissions.

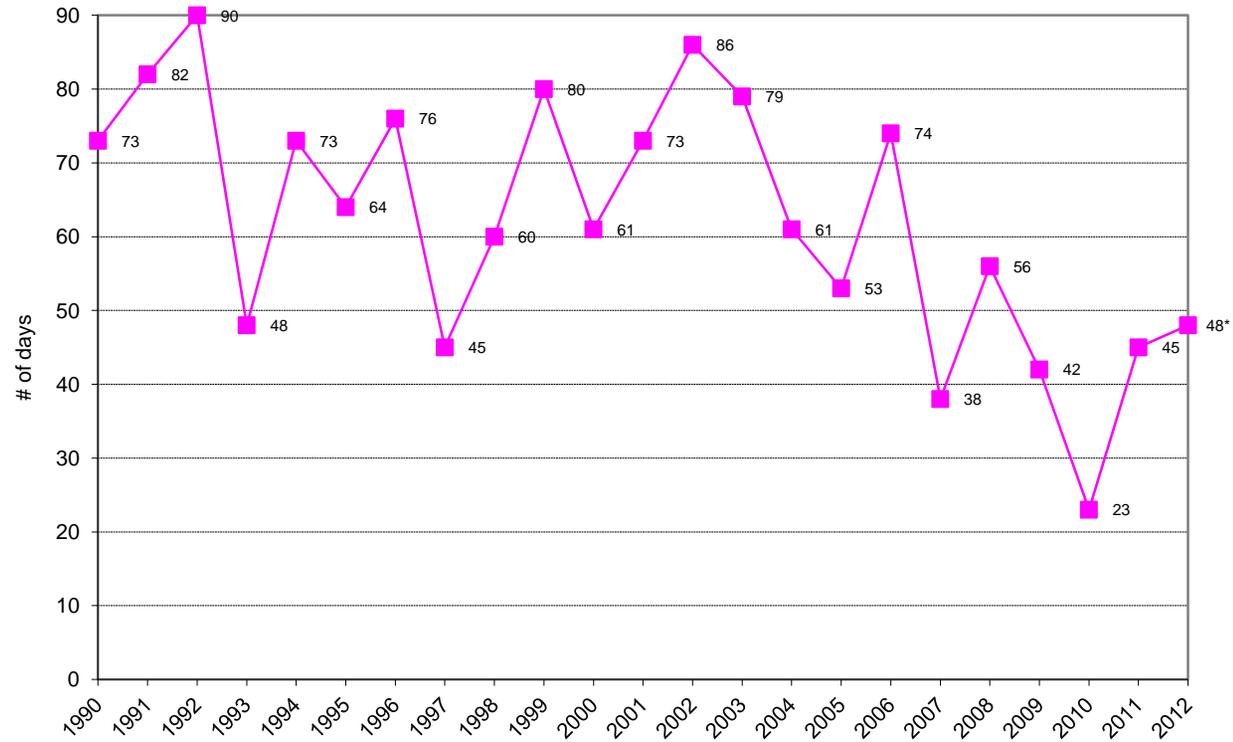
NOx emissions from District's permitted facilities are 1.23 tons/day, 34% of total stationary NOx emissions or 4.3% of total County NOx emissions.

**Based on above data, the District permits 3.9% of total County ROG and NOx emissions.**

**Figure 4**  
Emission Trends by Pollutants

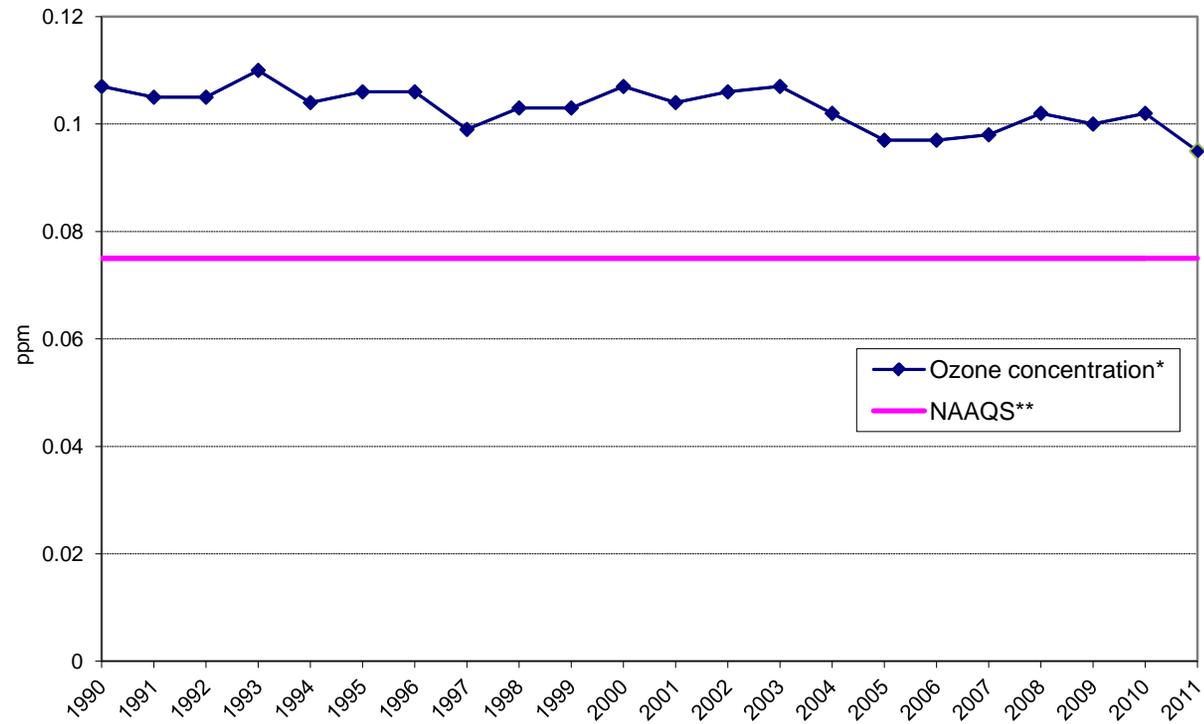


**Figure 5**  
Number of days exceeding for 2008 federal 8-hour ozone standard (0.075 ppm)  
Sacramento Nonattainment Area



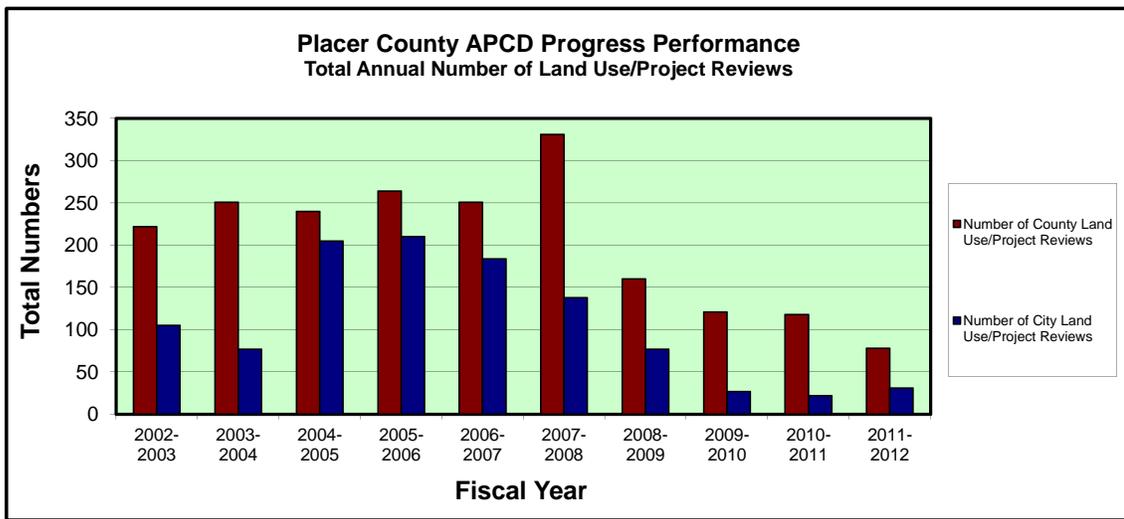
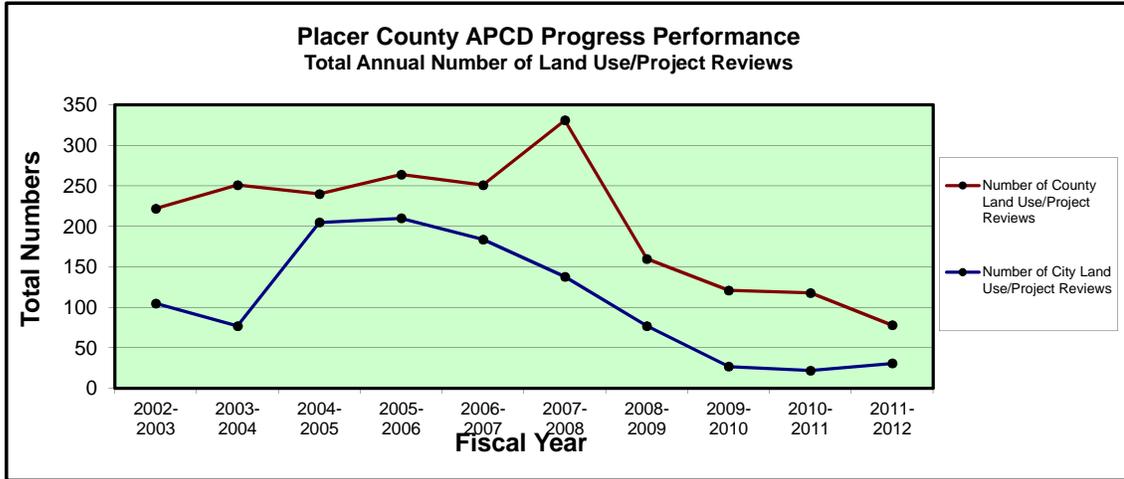
\* preliminary data only, it may be subject to revision

**Figure 6**  
8-hour ozone concentration  
Sacramento Nonattainment Area



\* 4th highest daily maximum ozone concentration at any site.

\*\* 2008 National Ambient Air Quality Standard for 8-hour ozone=0.075ppm



| Performance Indicators                    | Fiscal year |           |           |           |           |           |           |           |           |           |
|---|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|   | 2002-2003   | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010 | 2010-2011 | 2011-2012 |
| Number of County Land Use/Project Reviews | 222         | 251       | 240       | 264       | 251       | 331       | 160       | 121       | 118       | 78        |
| Number of City Land Use/Project Reviews   | 105         | 77        | 205       | 210       | 184       | 138       | 77        | 27        | 22        | 31        |



# Placer County Air Pollution Control District

## Significant Activities or Issues

January 2013

This is an updated list and short description of some of the District's ongoing significant activities, initiatives, or issues as of January 2013. They have been categorized into Permitting & Engineering, Compliance & Enforcement, Planning & Monitoring, and Administration based upon their characterization or applicability. These are in no particular order of priority. The list is designed to capture and synthesize the item for Board members. Staff will provide more in depth and follow-up information should a Director request it or as a result of normal District business conducted throughout the year.

### **Permitting & Engineering Section**

- Global Warming Solutions Act of 2006, AB 32, (Nuñez, Pavley): This bill, signed into law by Governor Schwarzenegger in September 2006, requires California to reduce its greenhouse gas emissions to 1990 levels by 2020.

In order to meet the requirements of the bill, the scoping plan developed by the California Air Resources Board (ARB) incorporates a balanced mix of strategies to achieve the approximately 30 percent reductions of emissions and grow the economy in a clean and sustainable direction. An important component of the plan is a cap-and-trade program covering 85 percent of the state's emissions. Additional key recommendations of the plan include: strategies to enhance and expand proven cost-saving energy efficiency programs; implementation of California's clean cars standards; increases in the amount of clean and renewable energy used to power the state; and implementation of a low-carbon fuel standard that will make the fuels used in the state cleaner. The plan proposes

full deployment of the California Solar Initiative, high-speed rail, water-related energy efficiency measures and a range of regulations to reduce emissions from trucking and from ships docked in California ports. There are also measures designed to safely reduce or recover a range of very potent greenhouse gases (GHG), refrigerants and other industrial gases that contribute to global warming at a level many times greater than carbon dioxide. The plan recommends targeted fees to fund the state's long-term commitment to AB 32 administration.

Some elements of the plan, such as the Semiconductor Perfluorocarbon Emissions Reduction Strategy and Methane Emissions from Municipal Solid Waste Landfills will be implemented by the District. The District will expend resources on both the evaluation and implementation of these stationary source measures in coming years. Semiconductor and municipal solid waste landfills have stationary source permits with the District and much of the cost can be recovered through existing permit fees.

In addition to state climate change initiatives, at the federal level the U.S. EPA continues to press forward on measures to control the emission of GHG. The identification by U.S. EPA of CO<sub>2</sub> as a federally regulated pollutant and the U.S. EPA's adoption of regulations for major stationary sources has required additional new rules to be adopted by the District. One such rule, Rule 517, Permitting Requirements for Stationary Sources Emitting Greenhouse Gases, was adopted on February 10, 2011. CO<sub>2</sub> will now need to be considered in Title V permits.

- CAPCOA Subcommittee for GHG Offset Protocol Reviews: CAPCOA is developing a GHG Offset Exchange and has formed a subcommittee of engineering managers from California Districts to review protocols for those offsets. District Staff have developed a biomass offset protocol which was the first of these protocols to be reviewed. Staff is currently involved in reviewing other proposed protocols. This is a separate, voluntary exchange from the Cap and Trade state program. It is anticipated that these offset and offset protocols will be utilized for CEQA mitigation.
- Emission Reduction Credits: Emission Reduction Credits (ERCs) are required to offset new or modified facilities if emissions exceed offset trigger levels. There are very few ERCs available for use. This can make it difficult for sources to expand operations. The District issues ERCs when a person or company reduces emissions and files an application. The quantifying, adjusting, and certification of ERCs must meet the requirements identified in District rules. In an effort to increase the availability of ERCs the District has worked to develop non-traditional ERC rules. In 2008, Rule 518, Stationary Rail Yard Control Emission Reductions Credits, was adopted to allow ERCs if reductions occurred at the rail yard

in Roseville. In 2009, Rule 516, Rice Straw Emission Reductions Credits, was adopted to allow rice growers to certify ERCs from reductions in burning rice fields. However, only a small number of growers chose to apply for and receive ERCs. In 2012, most of these credits went toward meeting offset requirements for a landfill gas engine project. Rail yard reductions have not resulted in ERCs. The lack of ERCs could limit industrial and business growth because when they produce increased emissions they will not be able to obtain a permit without ERCs.

Changes to Rule 502, New Source Review, that were made by the District in 2011, provided some relief by reducing the offset needed to the amount of quarterly emissions that exceeded the trigger levels listed in the rule. Previously a company had to offset the total amount of quarterly emissions. Requirements for the Lake Tahoe air basin were eliminated to reflect the ozone attainment status of that area.

- PSD Delegation: Rule 518, Prevention of Significant Deterioration, (PSD) accepts EPA's delegation of permitting authority for all PSD sources which would be an additional and new responsibility. The District will take over this authority as soon as final approval is published in the federal register by EPA. The final approval is expected in early 2013.
- EPA Maximum Achievable Control Technology (MACT): EPA adopts MACT standards to set limits on toxic emissions from stationary sources. Emissions Standards for Boilers and Process Heaters and Commercial/Industrial Solid Waste Incinerators were reconsidered and finalized on December 20, 2012. District staff will review and work with sources to assure they are aware of and implement these standards.

- CEQA for Permits: District staff intends to better define the program for compliance with CEQA in the permitting of stationary sources through development of a permitting process where most permit evaluations and approval determinations are ministerial through the use of a permitting manual that guides the evaluation and approval decision making. Other non-ministerial projects will be addressed through CEQA evaluations that will start with a new questionnaire that will be included with permit applications. Finally, the District's application forms will be revised to clarify the responsibility of the applicant in complying with CEQA, and with regard to liability for construction in advance of CEQA approvals.
- Diesel Exhaust as a Toxic Air Contaminant: Diesel particulate is an identified air toxic contaminant (carcinogen) and the state is required to develop measures to address its health effects. Because of the prevalence of diesel use, addressing this issue has been the paramount toxics related issue in this millennium. The District has implemented the ARB's "Airborne Toxic Control Measure for Stationary Compression Ignition Engines". The ARB is adopting and implementing regulations for the control of emissions from diesel engines for both in-use on-road vehicles and in-use off-road vehicles. The regulations require existing vehicles to be upgraded or replaced to comply with specified PM and NOx emission standards through retrofits or fleet modernization. The District has sought to cushion the effect of fleet modernization requirements and obtain emission reductions by encouraging early replacement through the Clean Air Grants program. When reductions and controls become mandated the vehicles become ineligible for grants.

In recent years stationary diesel engines were targeted by an amendment to the AB 2588, Hot Spots regulation. The District is now

required to perform a health risk screening of all permitted diesel engines for inclusion in the Hot Spots Program. If the increased cancer risk caused by the combined engines at a facility is equal to, or greater than, one in one million the facility will be subject to the program.

- Title V Permitting Program: Four (4) Major Stationary Sources (Major Sources) of emissions within Placer County are permitted by the District under the Title V program as mandated by the Clean Air Act. These facilities are: Rio Bravo – Rocklin (biomass power plant), PABCO – Gladding McBean Co. (clay building products manufacturer), Sierra Pacific Industries – Lincoln (lumber mill and co-gen power plant), and Roseville Electric (gas turbine power plant). One additional existing facility – the Western Regional Sanitary Landfill – is permitted as a Title V facility through the requirements of the Federal New Source Performance Standard (NSPS). There are also nine (9) sources that could become Major Sources of emissions and subject to Title V but for permit limitations that keep them from becoming a Major Source (i.e. Synthetic Minor Sources). The District inspects the Title V sources at least two times a year, and inspects Synthetic Minor Sources at least once per year. The District has additional enforcement responsibilities for Title V sources, including review of deviation and compliance certification reporting.

SierraPine Ltd. (medium density fiberboard manufacturer) located in Rocklin shut down most of its operations and ceased to be a Title V source at the end of 2011. The District is finalizing the Title V permit renewal for the PABCO dba Gladding McBean Co. and the renewal will be issued in 2013. Title V permits must be renewed every five (5) years.

- Stationary Source Air Toxics Assessments: District staff continues to evaluate new and existing sources for affects of air toxic emissions upon public health. The potential impacts of toxics upon health have become a consideration in land-use planning decision making and in addressing environmental justice concerns. The emissions of toxics are evaluated through Health Risk Assessments (HRAs) of individual emission sources of categories of industry, the New Source Review process. Statutes require noticing for sources near schools, the implementation of state adopted Airborne Toxic Control Measures (ATCMs) for specific toxic compounds and specific industries, or through the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) which was enacted in 1987, and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

On-going tasks include: (1) evaluation of new sources, (2) re-evaluation of high priority existing sources every four years, and (3) industry-wide assessments. CARB fees are collected, a portion of which are passed through to the State's program. The District may need to update its fees to address changes to the State's fees as well as to provide adequate funding for the District's program.

- Gasoline Enhanced Vapor Recovery (EVR): Since the adoption of vapor recovery requirements by the California Air Resources Board (CARB) in 1974, many changes have been made in the equipment and the maintenance requirements of this equipment which is used to control vapors at

gasoline dispensing facilities (GDFs). These requirements are enacted through executive orders issued by CARB and are designed to certify that vapor recovery from the transfer of fuel is maintained at a 95% efficiency (recovery) rate. This equipment is only for gasoline. There are no requirements for diesel fuel dispensers at this time.

Over the past several years, technological advances in equipment and vapor recovery systems have resulted in more sophisticated systems that recover more of the vapors. These systems are referred to as Enhanced Vapor Recovery (EVR) systems and are designed to analyze a facility's pressure controls and equipment integrity. CARB supports retention of EVR systems for toxic emission control even though the federal mandate to have EVR has gone away due to the widespread use of on-board refueling vapor recovery systems which negate much of the need for EVR.

Aboveground GDF facilities are in the beginning stages of complying with CARB EVR requirements. The first is a standing vapor loss requirement which is due by April 1, 2013. Aboveground tank manufacturers must either recertify their tanks with CARB or if they do not, the tank must be painted with a specific coating as outlined in the CARB's executive orders. Aboveground GDF Phase I EVR is required by July 1, 2014, and aboveground GDF Phase II EVR will be required by July 1, 2015, or once the equipment is certified, whichever is later.

The District is currently working on amendments of Rule 213, Gasoline Transfer Into Stationary Storage Tanks, and Rule 214, Transfer of Gasoline Into Vehicle Storage Tanks. The District will include a tank coating exemption in Rule 213 to allow the tanks at Dawson Oil on Blocker Drive in Auburn to continue to be painted with

“endurance murals” instead of the ARB specified coating.

### **Compliance & Enforcement Section**

- Unregulated Stationary Source Compliance Plan (Harvest Initiative): Efforts continue to identify and permit emissions sources that are required to be regulated under District rules. The District’s permitting program has historically been a “top down” approach where the larger emission sources, for which the cost of achieving emission reductions often are the most cost-effective, have been permitted first and the smaller emission source categories are permitted next. In previous years the District has surveyed commercial buildings (including hotels and health care facilities) that use boilers for space heating and internal combustion engines for emergency generators, health clubs that employ boilers for swimming pool heating and locker room hot water, small non-retail above ground gasoline storage tanks, and portable engines and equipments. For 2013, staff will expand this effort to identify sources that require District permits utilizing County contractor and business license databases, industry trade associations, and field patrols.
- Naturally-Occurring Asbestos: The District is implementing the State’s Airborne Toxic Control Measure for naturally-occurring asbestos (NOA). NOA is prevalent in the foothill areas of the County. The program minimizes impacts from dust associated with construction and grading activities in NOA areas. In previous years, the District contracted with the California Geological Survey, State Department of Conservation, for mapping services to identify higher probability areas for NOA in the County. This map became available in early 2006. More recently, the District has finalized a guidance document for use by projects with NOA areas including direction for the

preparation of dust control mitigation plans and additional maps displaying parcels most likely to have NOA. Extensive information on NOA, including the maps, has been made available on the District’s website. For 2013, the District will continue to ensure projects in NOA areas comply with State and District regulations.

- Enforcement Augmentation: Since 2003, the District has continued to utilize part-time extra-help staff as field inspectors to increase compliance education and enforcement presence throughout the County. This resource has provided increased services to the public while allowing for flexibility in District budgeting from year-to-year. The resource augmentation provides an afterhours and weekend response capability, dispatched through the County Sheriff’s Office and Cal Fire Emergency Command Center, for field complaint investigations and fire agency support. Extra-help personnel have also provided support for short-term projects. In 2012, the District hired two extra-help field inspectors stationed in the Tahoe Region to improve complaint response effectiveness and reduce labor costs. In 2013, extra-help support is being used for field complaint investigations, fireplace inspections, stationary source and portable equipment and engine inspections, finding unpermitted sources, and air toxics. Extra-help support will likely be reduced in 2014 in response to a generally tightened budget.
- Fugitive Dust Measures: The District adopted a fugitive dust rule in 2003, and continues to work with jurisdictions to reduce the generation of dust from construction and other activities. Enforcement is particularly difficult because of the large tracts of land that are graded. In previous summers the District has emphasized construction dust controls and field enforcement efforts utilizing extra-help

staff. There has been a marked decrease in fugitive dust violations from development operations since field enforcement was enhanced and more recently because of the economic downturn and a reduced number of development projects.

- Odor Nuisance: The District has begun to receive complaints concerning foul odors from sources including municipal waste landfills, composting, biomass fuel storage, waste water treatment, and marijuana growing and harvesting operations. District staff is working with local jurisdictions and the appropriate law and health authorities to ensure that odors are managed in a manner that does not adversely impact the health and comfort of neighboring communities.
- Biomass Initiatives: The County contains over 550,000 acres of forested land, stretching from Auburn to Lake Tahoe. The forests have dense, hazardous fuel loads resulting from decades of fire suppression and are at risk for catastrophic wildfires. The County has experienced five major wildfires since 2001, burning more than 50,000 acres including vital upland watersheds. The District has teamed with other public and private stakeholders to implement economically self-sustaining forest management activities to restore the forested land to a fire-resistant condition.

Program accomplishments have included:

- Sponsorship of projects utilizing woody biomass wastes for energy, as an alternative to disposal by open pile burning or mastication. For this work, the District was honored with a U.S. EPA Clean Air Excellence Award in 2011. Also in 2011, the District received publication of a peer-reviewed scientific technical air pollution journal article documenting the air quality benefits of biomass energy as an alternative to open pile burning.

- Development of a peer-reviewed emission offset accounting protocol for biomass to energy projects.
- Development of a methodology to assess emissions reduction benefits, and other eco-system services that are provided by forest hazardous fuel reduction treatments designed to reduce wildfire size and intensity, and stimulate forest growth rate.
- Assessment of air pollutant emissions and economics of energy conversion technology suitable for small-scale distributed systems in Placer County, utilizing woody biomass wastes from forest fuel treatments, timber harvest residues, and defensible space clearings.
- Implementation of centralized biomass collection programs for county residents, businesses, and public land managers, to reduce open burning and increase biomass to energy.
- Review of smoke management plans and prescribed burns on landscapes that have been pre-treated by removing excess fuels.

In 2013, the District will be implementing further woody biomass for energy projects which are innovatively supported through monetary valuation of the air emissions reductions. In the summer of 2013, the District will be investing in a biomass waste for energy project at the Blodgett Forest Research Station in cooperation with the University of California Berkeley, Department of Natural Resources, Center for Forestry. The District is also continuing to develop a unique public-private partnership with Santa Maria Pacific, LLC, which involves investment in county biomass waste to energy projects to comply with CEQA greenhouse gas reduction requirements.

The District is also continuing to provide comment and assessment on the air quality impacts of a forest biomass waste powered

distributed electricity generation facility in the Lake Tahoe Region. The facility is being developed through a joint county and private partner relationship. The facility is being sized to economically utilize biomass wastes produced from nearby forest management activities. The District is providing support to evaluate the greenhouse gas lifecycle impact of the use of biomass wastes from forest fuel thinning hazardous fuel reduction treatments for energy.

The District is also continuing our advocacy for an appropriate regulatory structure that recognizes the full environmental benefits of the use of forest biomass wastes for energy. In 2012, the District participated in the creation of the new Feed in Tariff program at the California Public Utilities Commission (CPUC), and assisted with the development of SB 1122 which will require that the Investor Owned Utilities in California to purchase a total of 50 MW of distributed forest biomass generation at facilities that produce less than 3 MW in communities with areas with forests at risk for catastrophic wildfire over the next three years. In 2013, the District will continue to be involved in working with the CPUC with the implementation of SB 1122, in coordination with Cal Fire, Cal EPA, renewable energy industry groups, and the United States Forest Service, as well as assist the CPUC in developing a fair power purchase agreement template for use within the program, and assist with interconnection issues to support the District's goal of seeing more distributed energy generation in Placer County from forest biomass.

- Residential Allowable Burning, Vegetation Management, Smoke, and Agricultural Burning: The District, in coordination with the local Fire Agencies, oversees outdoor burning used to dispose of dry vegetation. The California Health and Safety Code provides for the types of burning allowed

under state law. The District rules further define these types of burning (including residential, land development, fire hazard reduction, vegetation management, prescribed fire, and agricultural) and the conditions under which each may be conducted. Except for residential allowable burning, the District issues burn permits for the other types of burning allowed under the District rules.

The District continues to receive conflicting requests from stakeholders to both restrict and expand the practice of open burning. The District believes that open burning is a necessary vegetation management option. It is managed in a manner that assures that healthful conditions are maintained, regulations are met, and that problem burning is corrected so that a few do not create a prohibition of burning for everyone. The District continues to address specific burning issues with local fire agencies and local resident groups (typically an area's Municipal Advisory Council), as was done in the Granite Bay area for residential allowable burning. Residential allowable burning is burning at a single or two family properties. Burning is very limited in the city limits of Roseville, Rocklin, and Lincoln.

Considering the public health impacts of smoke from open burning and the extreme wild land fire threat existing in the county, the District approves smoke management plans for prescribed burns. Working with land management entities, including the United States Forest Service, Bureau of Land Management, and State Parks, the District participates in working groups with neighboring air districts to coordinate these burns and manage the smoke generated. Smoke management planning minimizes the health impacts from smoke and allows the use of open burning in vegetation management to help prevent catastrophic fires. Open burning is frequently the best

option based on vegetation type and proximity to sensitive receptors.

Regardless of the type of burning, the District fosters alternatives to open burning through resource development (including green waste pickup, chipping, and biomass utilization) and restricts open burning when and where appropriate.

Agricultural burning takes place primarily in the fall and spring. There are approximately 17,338 acres of planted field crops including 14,125 acres of rice, 3,213 of other field crops and 1,653 acres of fruit and nuts (data obtained from the 2011 County Agriculture Commissioner's Crop Report). While most of the field crop residue is no longer burned, residues from the fruit and nut crop category continue to be burned. Alternatively, rice straw burning is significantly limited. The burning of rice straw in the Sacramento Valley Air Basin was restricted by the 1992 Rice Straw Reduction Act, as amended in 1998, in order to reduce smoke impacts. This law mandated the reduction of rice straw burning over a period of ten years. By 2001, only 25% (or no more than 125,000 acres total for the basin) of the rice straw can be burned if it is certified (by the County Agricultural Commissioner) to have a certain percentage of disease. The District works cooperatively with the State Air Resources Board and the Sacramento Valley Air Basin Agricultural Burn Coordinator to allocate the acres that can be burned daily, based on meteorological conditions and air quality conditions, the locations of populated areas and the potential impacts to the public.

In the last year, the District improved outreach regarding the daily burn day information and residential allowable burning. In the spring of 2012, District staff was able to begin providing burn day information on-line, accessible through the internet. Staff updates the daily burn day

information on line at the same time the voice mail system is updated. Website statistics show that the webpage is getting a couple thousand visits each month during the burn season. Staff revamped the residential allowable burning brochure and sent copies to Cal Fire and local fire agencies for use. Staff continues to pursue outreach opportunities that provide education with regard to open burning. The District has included the residential burning information brochure in the waste collection billing for a large portion of the Western Placer County. In 2013 these brochures will be provided to the remaining areas.

### **Planning & Monitoring Section**

- Clean Air Grants: The District has established the Clean Air Grant (CAG) program to fund projects that reduce emissions from sources that are not required by existing law to reduce their emissions by public agencies, private business, and individuals. The funds are derived from the Department of Motor Vehicles (DMV) surcharge of \$6.00 per registered vehicle and the offsite air quality mitigation funds paid for new land development projects. The \$6 DMV surcharge fee is authorized by AB2766 (Sher) and AB923 (Firebaugh). The \$2 portion of the fee from the AB923 authorization will sunset on January 1, 2015, if no further legislation is enacted.

The District will be making approximately \$850,000 in grant funding available in 2013. The District continues to consider eligible heavy duty on-road and off-road mobile vehicles/equipment, alternative fuel infrastructure, new or expanding transit service program, agricultural (AG) pump engines, public education, and other emission reduction/energy conserving projects. District staff outreach efforts will include newspaper ads, e-mails and public

workshops at the District office in January 2013. Grant applications will be accepted from 12/27/12 to 2/28/13. Approval for recommended projects will be sought from the Board at the April 21, 2012, Board of Director's meeting. The District has provided approximately \$13 million in Clean Air Grants for emission reducing projects over the past thirteen fiscal cycles.

- Federal PM2.5 Standards and Regional Demonstration Plan (SIP): On September 21, 2006, the U.S. EPA lowered the National Ambient Air Quality Standards (NAAQS) for the 24-hr fine particulate matter (PM2.5) standards from 65µg/m<sup>3</sup> to 35µg/m<sup>3</sup> to better protect the public health and welfare. On November 13, 2009, EPA designated all of Sacramento County along with portions of El Dorado, Placer, and Yolo Counties as the regional non-attainment area for the federal PM2.5 24-hr standard.

Because of the regional collaborative efforts, the Sacramento Area air districts were able to submit the clean data finding report to EPA in May 2012, to demonstrate that the Sacramento Region PM2.5 nonattainment area is in attainment for the 2006 PM2.5 24-hr standard. Based upon the demonstration report EPA published the proposed attainment determination for the Sacramento Region PM2.5 nonattainment area on October 16, 2012, and is working to finalize this attainment determination for the region after the public review period. Currently, District staff is working with the other Sacramento local air districts and California Air Resources Board (CARB) to develop an attainment demonstration/maintenance plan to ensure the Sacramento Region will remain in attainment for the PM2.5 24-hr standard. The plan is anticipated to be submitted to the Board of Directors for review and approval in April 2013.

- 2008 Federal 8-Hour Ozone Standard Revision and Area Designation: On March 12, 2008, the EPA strengthened the 8-hour standard for ozone to 0.075 part per million (ppm) which is lower than the 1997 standard (0.08 ppm). Areas classified as nonattainment were given up to 20 years to meet the new standards depending on the severity of their classification. Although EPA has announced that they would reconsider strengthening the ozone standards set in 2008, EPA decided to move forward to implement the 2008 ozone 8-hour standard of 0.075 ppm on September 2, 2011. According to the final area designation published by EPA on May 21, 2012, the existing Sacramento ozone nonattainment area boundaries will remain as nonattainment for the 2008 revised ozone 8-hour standard with an attainment deadline of 2027. EPA is in the process of preparing the final implementation rule for the 2008 revised ozone standard to address the requirements for reasonable further progress (RFP), modeling and attainment demonstrations, and analyses of reasonably available control measures (RACM) and reasonably available control technology (RACT). District staff will work with CARB and the other four local districts in the Sacramento Region to ensure that the new SIP meets the 2008 revised ozone standards in the target year.
- Triennial Progress Report Update (2008-2011): District staff is working to prepare a triennial progress report which is an update to the Placer County Air Quality Attainment Plan (Plan) developed for the state's ozone standards in 1991. The Plan mainly addressed Placer County's nonattainment status for the state's ozone standards and contained preliminary implementation schedules for control programs on stationary sources, transportation and indirect sources, and a vehicle/fuels program to describe how control programs on stationary sources, area

sources, and mobile sources should be implemented toward attaining the state ozone standard. The California Clean Air Act (CAAA) required that by the end of 1994 and once every three years thereafter, air districts should prepare an update to assess their progress toward attaining the state air quality standards. The District has prepared its subsequent triennial progress report updates for 1997, 2000, 2003, and 2009.

This triennial progress report for the years 2008 through 2011, will describe the historical trends in ambient air quality levels, provide updates to the emission inventories, and evaluate the implementation of stationary and mobile source control measures. The preparation of this triennial report which was to be done in 2012, for the three previous years has been postponed due to a delay in the state's progress on updating the emission inventory. Currently, CARB is updating the statewide emission inventories based on the revised mobile source emission data model. Once the update of mobile source emission inventories is finished, staff will be able to complete the triennial progress report for the years 2008 through 2011 to fulfill the CAAA requirements.

- Climate Change Impacts: Since the adoption of AB32, Climate Change/greenhouse gas (GHG) emissions impacts have become one of the significant environmental issues facing land use development projects today. As directed by SB97, the California Natural Resources Agency adopted Amendments to the CEQA Guidelines for GHG emissions that became effective on March 18, 2010. According to the amended CEQA Guideline, the lead agencies should analyze the project's related GHG emissions to determine the level of significance and identify mitigation measures if the impacts are potentially significant or use its approved

Climate Action Plan to tier and streamline the GHG emission analysis for the project.

To respond to these amendments, District staff has worked with the other participating air districts under the California Air Pollution Control Officer's Association (CAPCOA) guidance to accomplish the *Quantifying GHG Mitigation Measure Report* and the *California Emission Estimator Model* (CalEEMod) for determining the land use related emissions for GHG and criteria pollutants. District staff applies the report and the model as the reference to work with local jurisdictions to determine the potential GHG emissions and identify feasible mitigations to prepare defensible environmental documents for projects. District staff continues to work with the staff of the other local air districts within the Sacramento Region to develop the Sacramento regional GHG significant threshold for the land use development projects which would drive more consistent analyses to address GHG emission impacts from projects located within the Sacramento area.

- Emission Inventory Development: In preparation for future Ozone SIP updates, the District continues work to update and reconcile a comprehensive list of stationary and other area sources of emissions within Placer County. The work includes updating emissions from the sources which could be influenced by the recent rule adoptions or amendments approved by the District board. It is a continuous effort to review and update the inventories annually and to validate the numbers contained in the various databases within ARB and EPA so that accurate control measures can be developed to target those emission sources. Staff continues to work with ARB to update the District emission inventory and provide information as references for regional planning and regulation development.

- Rule Development: The California Health and Safety Code authorizes the District to adopt and enforce rules and regulations to achieve and maintain ambient air quality standards within the District and to adopt rules and regulations and do such acts as may be necessary or proper to execute the powers and duties granted. Accordingly, the District maintains a set of rules and regulations that have been adopted by the District Board of Directors. These rules and regulations are administered and enforced by District staff in addition to state and federal air pollution control laws and regulations that has been delegated to the District.

The District must adopt new rules to make changes in program administration and adapt to mandates such as adopting new control measures that have been committed to as part of the State Implementation Plan (SIP). Such adopted rules may become revisions to the SIP and become enforceable by the U.S. EPA. Rule development is particularly burdensome because this work is in addition to the day-to-day assignments for staff. However, new state or federal requirements, air quality planning commitments, and administrative needs make ongoing rule adoption and rule updating essential as they establish the requirements that industry must meet.

In 2013, the District will consider the amendment of a number of rules. District staff annually prepares a “Regulatory Measures List” of rules that may be considered for adoption in the coming year. A full list of rules considered in 2013 is provided in the District’s “Regulatory Measures List for 2013”.

- District Air Monitoring Network Improvement: The District is currently operating six (6) monitoring stations through the county: (from west to east): Lincoln, Auburn, Meadow Vista, Colfax, Tahoe City,

and Kings Beach. These stations comprise an air monitoring network that provides information useful in determining the air quality in Placer County. To enhance the performance of air monitoring program the District, along with the other air districts who operate their own monitoring programs, participated in the State’s Technical System Audits (TSA) in 2011. The audit included a questionnaire and interviews that covered various aspects of the air monitoring program including network design, field operations, laboratory operations, data handling procedures, and quality assurance. The audit report for the District was completed in 2012 and identified that the District’s monitoring program is both well organized and maintained and generally met or exceeded the U.S. EPA monitoring requirements. The audit report also provided recommendations to enhance the overall quality of the District’s monitoring program.

To enhance the performance air monitoring programs statewide, CAPCOA has established a committee that includes the air districts that have participated in a TSA, CARB, and EPA to evaluate the TSA audit recommendations. The committee will be developing several statewide protocols addressing federal and state air monitoring requirements. District staff has joined this committee and the District will use the guidance produced by the committee to continue improving the District’s air monitoring program.

- District Sustainable Initiatives Webpage: “Sustainability” in this context means the long-term maintenance of well-being which has environmental, economic and social dimensions, and encompasses the concept of stewardship and the responsible management of resource uses. For the District, sustainability is about environmental protection, sustained economic growth, and social equity. It is a concept of how to

balance the economic and socio-economic consequences of population growth coupled with the need for an improvement in the air quality in the County. The District is working to design a webpage regarding what the District has done in the past and how it can continue working for the future. The webpage will integrate the information from existing District programs and the other agencies/organizations that develop the tools and programs to promote the energy efficiency, renewable fuel usage, transportation improvement, land use and green building initiatives.

### **Administrative Services Section**

- **Strategic IT Master Plan:** In the latter part of 2012, the District began work with IT consultant Clark Moots, DBA MootsPoint, the former Director of Placer County Administrative Services, on the creation of a Strategic IT Master Plan. As approved in the FY 2012-2013 District budget, this is an effort to identify technologies that the District can use to improve its operations with the goal of improving staff productivity, the completeness of documentation, and cost. The Plan will provide a road map for the District to accomplish improvements previously identified as significant issues. In 2013, the District will receive and approve the Plan and seek Board of Director's approval for phased implantation of the Plan over two or three years. District staff has already begun working on a project to improve the accuracy and completeness of the District's contacts for permitted sources and other work that will enable better document handling, including electronic document processing. Below are areas that the Plan will cover:
  - **Database Electronic Document Handling:** The District has implemented a database program consisting of the following modules: Invoicing;

Permitting; Complaints/Notice to Comply/Notice of Violation; and Inspections. The District will be fully implementing an advanced document-handling program into our current database program that will make it possible for staff to have almost immediate access to all incoming documents. Scanning the incoming documents into our database program ensures that incoming mail is handled efficiently and expeditiously. It will enable more than one person to have access to the document at one time and will reduce the need for multiple copies of the same document. Each process eliminated will reduce administrative costs and increase efficiency. Electronic handling of documents will also cut down on the distribution process. It is the goal of the District to be able to retrieve data in a cost effective and efficient manner that will allow the District to track the success of its programs and disseminate information to the public. The full implementation of the advanced document-handling program has been postponed to 2013 due to work priorities. The District's goal is enter data once and handle paperwork once or not at all through electronic media use.

- **Database Enhancements:** Additional modules need to be developed for the District database and some existing modules that are not fully functional need to be enhanced. These operational improvements and the costs associated with their development will be included in the Strategic IT Master Plan and programmed into future annual budgets. The development and implementation of the database thus far has increased internal business process efficiencies and enhanced overall operations.

- Technological Aids for Field Inspections: The combination of wireless computer technology, and the District's database of permit and compliance information, could provide efficiencies that would improve the quality and quantity of inspections and investigations that are conducted by District staff in the field. The availability of permit and compliance data to field staff through the internet and wireless communications technology, via tablet PCs or iPads; fill-in inspection forms; the possibility of uploading inspection outcomes to populate the database and the creation of electronic inspection reports would provide efficiencies to reduce inspection time, increase productivity and improve the quality of the inspection and its documentation. Increases in inspection productivity would enable fewer District staff to conduct required inspections reducing costs for inspections and freeing resources for other programs. The Strategic IT Master Plan will explore opportunities for implementing technological aids for inspections and investigations.
- Building Department and Business License Outreach: District staff have developed guidance instruments that can be used by building departments to determine if an air district review or permit is required prior to issuing a building permit. A draft "Air Quality Supplemental Questionnaire" addresses District compliance questions and will direct applicants to information regarding the need for District permits, Naturally-Occurring Asbestos Dust Mitigation Plans or Dust Control Plans, wood-fired appliance requirements, review of hazardous air pollutant sources proposed within 1,000 feet of schools, and in conjunction with Placer County Environmental Health Division, hazardous materials management requirements for all

jurisdictions except for the City of Roseville. Several of these reviews are mandated by state law, but currently are not well addressed by jurisdictions. The District hopes that the questionnaire will provide a streamlined means for jurisdictions and the District to address air quality compliance issues that arise during construction/grading, and from tenant improvements. Some of the outreach information would be informative to those obtaining business licenses.

Outreach on the Questionnaire is awaiting the availability of resources. When resources are available the District plans to enter into a dialog with the building, grading, and business licensing departments of local jurisdictions to encourage the use of the proposed supplemental questionnaire and other outreach tools that can be incorporated into the application process.

In addition to the questionnaire, the District has opened a dialog with the Placer County Building Department regarding the possibility of sharing the cost of wood-burning appliance inspections for newly constructed residences in the unincorporated areas of the County. The District currently sends its inspectors to verify the compliance of wood-burning appliances with EPA standards. These visits are redundant to the Building Department staff's inspections, and the Building Department has commitments to assure wood-fired appliance compliance with EPA standards. Accordingly, there may be an opportunity eliminate a duplication of effort while reducing costs for both entities.

- Update of the County - District MOU: In October of 2006, the District Board approved an agreement between the District and the County of Placer which clarified the relationship between the two entities. An agreement was deemed to be necessary because, while the members of the staff of the District are county employees, the

District is not governed in the same way as county departments, due to the District being governed by both County Supervisors and elected councilpersons or mayors of the six incorporated municipalities in Placer County. In addition, District business practices may differ from that of the county, yet the District must interface appropriately with county departments that provide services and the District needs to have adequate internal controls. Since the MOU was first approved, many of the specifics of the agreement have changed, due mainly to the County having updated many of its County Codes and Administrative Rules into a more up to date and cohesive document called the "Placer Administrative Manual" (PAM). Finally, the MOU outlines how the District is to be charged for A-87 services and the District wants to provide for paying for County services through direct charges where that is the most cost-effective. In 2012, District staff began a review of County policies and procedures and in 2013 staff will seek to update the MOU in cooperation with county staff and for Board of Supervisors and District Board approval.

- District Building Costs: In December 2010, the District purchased the building at 110 Maple Street, Auburn, to house the District

offices. District staff and District operations were moved into the building in June 2011. District staff had estimated a cost savings over the previous lease costs for offices in the County's Community Development Resources Center at approximately \$150,000. Recent projections put the anticipated on-going annual savings at \$132,700 in the 2011-12 fiscal year due to the existing telecom charges not having been fully accounted for in the original savings estimate. This figure does not include revenue from leasing a portion of the District's building, which will be approximately \$15,000.

In the summer of 2012, the District completed one full-year of building occupancy. Based upon the electrical energy usage through this first year it was determined that installing a photovoltaic solar system would reduce the District's energy costs with a payback period of approximately 11-years. In January 2013 the District started the installation of a PV Solar system providing ~30kW.

The District's tenant terminated their lease and ended occupancy on November 30, 2012. The availability of the leased space has been listed with a commercial broker.

# PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

## REGULATORY MEASURES LIST

### - List of Rules to Be Considered for Adoption in 2013 -

#### January 2013

The listed rules or regulatory measures are being considered for adoption, amendment or rescission in the 2013 calendar year. If the rule or regulatory measure is not addressed in 2013, it may be considered for adoption, amendment, or rescission in the 2014 calendar year or later.

In accordance with Health and Safety Code Section 40923, a regulatory measure may not be considered for adoption during any year that it is not listed in the most recent published list of proposed regulatory measures unless earlier consideration is required to satisfy federal requirements, to abate a substantial endangerment to public health or welfare, or comply with Section 39666 (i.e. required to implement State Air Toxic Control Measures) or 40915 (i.e. contingency measures contained in air quality plans). This listing requirement does not apply to administrative rules that are not control measures, or the modification of any existing rule the District finds is necessary to preserve the original intent of the rule or to increase opportunities for alternative compliance methodology. Although not required by Section 40923, the list provided includes administrative rules to be considered for adoption, amendment or rescission in 2013 as such rules are identified by District staff.

Within 60 days from the date of a district's publication, pursuant to Section 40923, of the list of regulatory measures proposed for adoption in the following year, any person may inform the district of any existing federal or state air pollution control requirement or guideline or proposed or existing district air pollution control requirement or guideline that applies to the same type of source or equipment in that district as any proposed new or amended district rule or regulation on that district's list of regulatory measures. If any person informs the district of any requirement or guideline that does not apply to the same type of source or equipment, the district shall notify the person to that effect and shall not be required to review that requirement or guideline.

#### **Regulations Being Considered for Adoption in 2013:**

##### **Most likely to be adopted, amended, or rescinded in 2013:**

- Amend Rule 502, New Source Review, to address SIP disapproval comment of U.S. EPA (added for 2013).
- Amendment of Rule 206, Incinerator Burning, and if necessary, Rule 222, Reduction of Animal Matter, and/or a new Rule to resolve conflicting requirements for human/animal cremation (added 2010).
- Amend Rule 214, Transfer of Gasoline into Vehicle Fuel Tanks, to address US EPA comments and correct deficiencies required for SIP approval (added 2012).
- Amend Rule 213, Gasoline Transfer into Stationary Storage Containers, to address new standing loss requirements and deficiencies, and to provide an exemption for existing above ground tanks meeting specific requirements from new tank painting requirements so as to preserve public art murals (added 2013).

## PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

### REGULATORY MEASURES LIST

#### - List of Rules to Be Considered for Adoption in 2013 -

- Amend Rule 217, Cutback and Emulsified Asphalt Paving Materials, to preserve the original intent of the rules to meet Federal CAA requirements for the adoption of RACT and California CAA requirements for the adoption of Best Available Retrofit Control Technology (BARCT) and “every feasible measure” (added 2009).
- Adoption of a new rule (possibly number 247) or amendment of an existing rule to set low NOx emission standards for newly installed Large Water Heaters and Boilers between 75,000 BTU and 1,000,000 BTU. This range of heating values is currently not addressed by a District rule. Adoption of a new or revised rule is a SIP commitment for 2015 (added 2010).
- Adopt Rule 249, Plastic Parts Coating, to satisfy Federal Reasonably Available Control Technology (RACT) requirements (added 2012).

#### **To be considered, but less likely to be adopted or amended in 2013:**

- Amendment of Rule 207, Particulate Matter, to address US EPA disapproval comments (added 2012).
- Amendment of the following rules if required to meet planning commitments and California CAA requirements for the adoption of Best Available Retrofit Control Technology (BARCT) and “every feasible measure”:
  - Rule 216, Organic Solvent Cleaning and Degreasing Operations (added 2009)
  - Rule 240, Surface Preparation and Cleanup (added 2012)
- Amendment of Rule 601, Permit Fees, to make fee schedule changes that will better reflect actual levels of effort and distributed program costs, while being relatively revenue neutral with respect to the total of permit fee revenue derived from stationary sources. Fee rules are administrative and are not regulatory measures; however, the consideration of the fee rules is mentioned to be as complete as possible in the disclosure of planned rules and rule changes (added 2009).
- Amendment of Rule 604, Source Test Observation and Report Evaluation, to allow fees to be assessed based on actual staff hours, if actual costs exceed the specified fee of \$220 for a source test observation and report evaluation, and to add an annual CPI adjustment to the \$220 fee. Fee rules are administrative and are not regulatory measures; however, the consideration of fee rules is mentioned to be as complete as possible in the disclosure of planned rules and rule changes (added 2010).
- Amendment of Rule 610, Air Toxics “Hot Spots” Fees, which authorizes fees to provide funding for the District “Hot Spots” program administration and technical evaluations, as well as fees for the California Air Resources Board that are collected by the District and then passed-through. The amendment is required to reflect current charges of ARB and current costs to the District. The Rule was last amended in 1998. Fee rules are administrative and are not regulatory measures that are required to be listed; however, the consideration of the fee rules is mentioned to be as complete as possible in the disclosure of planned rules and rule changes (added 2009).
- Adoption of new fees for toxic new source reviews, area-wide and indirect source reviews, naturally-occurring asbestos dust control plan reviews and fees to recover District costs for other reviews that are separate from fees included in Rule 601, Permit Fees, may be considered. Fee rules are administrative and are not regulatory measures; however, the consideration of the fee rules is mentioned to be as complete as possible in the disclosure of planned rules and rule changes (added 2005).

# PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

## REGULATORY MEASURES LIST

### - List of Rules to Be Considered for Adoption in 2013 -

- Adoption of a new rule or amendment of an existing rule defining the authority of the District to inspect permitted facilities; and to collect, record, and preserve evidence or information upon inspection (including documentation of compliance and non-compliance by the taking of photographs and video images) (added 2005).



**For information and comparative purposes the regulatory measures that were actually adopted by the District in calendar years 2008 through 2012 are listed below:**

#### **Regulatory Measures That Were Adopted/Amended/Rescinded in 2012:**

- Amend Rule 233, Biomass Boilers, to address US EPA comments and Federal Reasonably Available Control Technology (RACT) requirements required for SIP approval. Amended June 14, 2012.
- Amend Regulation 3, Open Burning, Rules 301 to 306, and Rule 102, Definitions, to address US EPA comments and deficiencies identified by District staff in order to avoid a limited approval/disapproval of the SIP revision. Amended February 8, 2012.
- Amend Rule 235, Adhesives, to meet Federal CAA requirements for the adoption of RACT. Amended October 11, 2012.
- Amend Rule 239, Graphic Arts Operations, to meet Federal CAA requirements for the adoption of RACT. Amended October 11, 2012.
  - Rule 240, Surface Preparation and Cleanup (added 2012)
- Rescind the following rules since the RACT requirement is no longer needed for major sources that are no longer operating:
  - Rule 229, Fiberboard Manufacturing (SierraPine Ltd.). Rescinded April 12, 2012.
  - Rule 230, Plastic Products and Materials - Paper Treating Operations (Formica Corporation). Rescinded April 12, 2012.
  - Rule 232, Biomass Suspension Boilers (SierraPine Ltd.). Rescinded April 12, 2012.
  - Rule 241, Boilers at Plastic Laminate Manufacturing Facilities (Formica Corporation). Rescinded April 12, 2012.
  - Rule 227, Petroleum Dry Cleaning Operations (will defer to Federal Standards). Rescinded April 12, 2012.
  - Rule 237, Municipal Landfills (no applicable sources remaining). Rescinded April 12, 2012.
  - Rule 506, Biomass Emission Reduction Credits (was replaced by Rule 516, Rice Straw Emission Reduction Credits). Rescinded April 12, 2012.
  - Rule 805, Notice to Comply (mandating statute sunset January 1, 2001). Rescinded April 12, 2012.
- Rescind the following rules in favor of implementing the state regulation (added 2010).
  - Rule 902, Airborne Chromium Control Measure - Emissions of Hexavalent Chromium From Chrome Plating and Anodizing Operations. Rescinded April 12, 2012.
  - Rule 903, Ethylene Oxide Airborne Toxic Control Measure for Sterilizers and Aerators. Rescinded April 12, 2012.
  - Rule 904, Airborne Toxic Control Measure - Hexavalent Chromium Emissions From Cooling

# PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

## REGULATORY MEASURES LIST

### - List of Rules to Be Considered for Adoption in 2013 -

- Towers. Rescinded April 12, 2012.
- Rule 905, Airborne Toxic Control Measure - Asbestos Containing Serpentine Rock in Surfacing Applications. Rescinded April 12, 2012.
- Rule 906, Airborne Toxic Control Measure - Medical Waste Incinerators. Rescinded April 12, 2012.

#### **Regulatory Measures That Were Adopted/Amended in 2011:**

- Rule 102, Definitions, to reflect new terms used in recently amended rules, particularly in the amendment of Regulation 3 (added 2011). Amended February 10, 2011.
- Rescinded Regulation 3, Open Burning, Rules 301 through 325 and adopted new Rules 301 – 306 to update the rules to match current state law and to address the US EPA's comments, and to reorganize and update the formatting of all of the Rules to make the requirements more easily understood (added 2010). Adopted February 10, 2011.
- Rule 412, Registration Requirements for Agricultural Engines, amended to provide for a low use exemption (added 2011). Amended August 11, 2011.
- Rule 502, New Source Review, amended to address deficiencies identified in a limited approval/disapproval by US EPA of the version of the rule that was adopted on February 11, 2010 (added 2011). Amended October 13, 2011.
- Rule 517, Requirements for Stationary Sources Emitting Greenhouse Gases, adopted to meet mandatory implementation requirements of the federal Greenhouse Gas Tailoring Regulation (added 2011). Adopted February 10, 2011.
- Rule 518, Prevention of Significant Deterioration Permit Program, adopted to provide for the District's acceptance of delegation from the US EPA of PSD permitting authority for Major Sources (added 2011). Adopted February 10, 2011.
- Rule 607, Burning Permit Fees, to reconcile changes in references to Regulation 3 rules and to definitions. No fees were revised. Amended February 10, 2011.
- Rule 608, Control Council Fee, to reconcile changes in references to Regulation 3 rules and to definitions. No fees were revised. Amended February 10, 2011.

#### **Regulatory Measures That Were Adopted/Amended in 2010:**

- Rule 102, Definitions, amended to reflect new terms used in rules (added 2010). Amended August 10, 2010.
- Rule 218, Architectural Coatings, amended to level the field for shop coaters and field coaters and to update the Rule for a 2007 CARB Suggested Control Measure. The amendment of Rule 218 is also a SIP commitment for 2012 (added 2007). Amended October 14, 2010.
- Rule 234, Automotive Refinishing Operations, amended to revise applicator requirements and may include an update of requirements to meet a 2005 CARB Suggested Control Measure (SCM). In addition, the District wishes to clarify the recordkeeping and reporting required of coating distributors. Amendment of this rule is a SIP commitment for 2015 (added 2009). Amended October 14, 2010.
- Rule 236, Wood Products Coating Operations and Rule 238, Factory Coating of Flat Wood Paneling, amended to update these rules to match existing state and federal control measure standards (added 2007). Amended October 14, 2010.

# PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

## REGULATORY MEASURES LIST

### - List of Rules to Be Considered for Adoption in 2013 -

- Rule 501, General Permit Requirements, amended for submission as a revision of the SIP (added 2009). Amended August 10, 2010.
- Rule 502, New Source Review, amended for submission as a revision of the SIP (added 2009). Amended February 11, 2010.
- Rule 503, Emission Statement, amended to clarify and update the terminology with regard to the information to be reported (added 2010). Amended August 10, 2010.
- Rule 504, Emission Reduction Credits, amended to reflect new ERC rules and for submission as a revision of the State Implementation Plan (added 2009). Amended August 10, 2010.
- Rule 601, Permit Fees, amended to create a new semiconductor fee schedule, and a new fee for Prevention of Significant Deterioration (PSD) permitting for when such authority is delegated to the District. Amended December 9, 2010.

#### **Regulatory Measures That Were Adopted/Amended in 2009:**

- Rule 214, Transfer of Gasoline into Vehicle Fuel Tanks. Amended April 9, 2009
- Rule 233, Biomass Boilers. Amended December 10, 2009
- Rule 245, Surface Coating of Metal Parts and Products. Amended August 20, 2009
- Rule 516, Rice Straw Emission Reduction Credits. Adopted February 19, 2009

#### **Regulatory Measures That Were Adopted/Amended in 2008:**

- Negative Declaration, adopted December 11, 2008, with regard to no sources in Placer County exceeding the threshold of Control of Volatile Organic Emissions from Flexible Package Printing (EPA-453/R, 06-003, 09/2006) to satisfy federal requirements.
- Rule 206, Incinerator Burning. Amended October 9, 2008
- Rule 245, Surface Coating of Metal Parts and Products. Adopted December 11, 2008
- Rule 411, Indemnification of District. Adopted February 14, 2008
- Rule 412, Agricultural Engine Registration. Amended August 14, 2008
- Rule 515, Stationary Rail Yard Control Emission Reduction Credits. Adopted October 9, 2008



# Air Pollution Glossary Overview

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The warm weather and geographic features that make California such an attractive place to visit and live also contribute to the state's air quality problems -- seven of the nation's 10 regions whose air quality most frequently violates national health standards are in California. **Air pollution** is a general term used to describe undesirable amounts of particulate or gaseous matter in the atmosphere. Air pollution is a major concern because it reduces visibility and lowers the overall quality of life in the state. Air pollution damages crops, reduces property values, and is harmful to humans -- especially children and the elderly. Furthermore, a majority of the state's population resides in low-lying basins where air pollutants tend to persist. In California, the state Air Resources Board (ARB), the Bureau of Automotive Repair (BAR), and the Department of Pesticide Regulation (DPR) work together with 35 local air districts and the U.S. Environmental Protection Agency (U.S. EPA) to improve and protect air quality in the state.

California's air pollution control program is one of the most effective in the world. Coordinated state, regional, and local efforts have steadily improved our air quality. Strict motor vehicle tailpipe standards, cleaner fuels, controls on factories and other stationary sources, and cleaner products have led to a steady decline in levels of ozone, carbon monoxide, air toxics (such as benzene) and in some cases, particulate matter in the air. In fact, air quality in much of California continues to improve as emissions of pollutants are significantly reduced.

## The Regulatory System

Federal, state and local governments have agencies, laws and regulations that control air pollution. At the federal level, the U.S. EPA is responsible for safeguarding the nation's air quality. In turn, each state must meet the standards set by the U.S. EPA. Some states, including California, have passed standards that are at least as strict as those set by the U.S. EPA. In such cases, pollution emissions must also comply with the state's air quality standards. The U.S. EPA works with state and local agencies to make sure that air quality in the state, at the very least, meets federal standards. The state and local agencies have the responsibility for monitoring air pollutants and enforcing both state and federal air quality standards.

In California, the ARB is the lead agency responsible for air quality management. Local air districts, overseen by the ARB, develop and implement local air quality management plans. The air districts specifically regulate emissions made by local stationary sources (i.e., those emissions that do not come from mobile sources, such as cars and trains). In addition to overseeing local regulatory efforts, ARB has direct authority over mobile sources as well.

Air quality management and regulations are dependent on information gathered from a number of technical disciplines. These include the study of the health and environmental effects of pollutants, air quality sampling and pollutant measurement, data management and analysis, and control technology development.

Together, federal, state, and local agencies, in coordination with the regulated community and the general public, act in concert to meet health- and welfare-based air quality standards as expeditiously as possible.

# Glossary of Air Pollution Terms

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## INTRODUCTION

This glossary provides definitions of terms pertaining to the laws, regulations, programs, and government agencies involved in assuring healthful air quality for California's citizens. Moreover, this glossary explains some of the scientific terms used to describe air pollutants, the processes that form them, and their effects on the environment and the population. The primary focus of this publication is to help interested citizens understand the most commonly used air pollution terms.

## A

**AB 1807 (Tanner):** A California state law (Health and Safety Code section 39650 et seq.) which became effective in January of 1984 and established the framework for California's [toxic air contaminant](#) identification and control program. For more information, please see our [toxics summary](#).

**AB 2588 (Connelly) Air Toxics "Hot Spots" Information and Assessment Program:** A California program (Health and Safety Code Section 44300 et seq.) which requires certain [stationary sources](#) to report the type and quantity of specific toxic substances they routinely release into the air. The program identifies high priority facilities and requires facilities posing significant risks to notify all exposed individuals. For more information, please go to our [AB2588](#) website.

**AB 2766 (Sher) Motor Vehicle Fee Program:** A program that permits [air district](#) and local governments to allocate vehicle registration surcharge fees to projects that reduce motor vehicle emissions such as [zero-emission vehicles](#), bike lanes, and trip reduction programs.

**Abatement:** The reduction or elimination of pollution.

**Acceptable Daily Intake (ADI):** The highest daily amount of a substance that may be consumed over a lifetime without adverse effects.

**Acid Deposition:** A comprehensive term for the various ways acidic compounds precipitate from the atmosphere and deposit onto surfaces. It can include: 1) wet deposition by means of acid rain, fog, and snow; and 2) dry deposition of acidic particles (aerosols).

**Acid Rain:** Rain which is especially acidic (pH <5.2). Principal components of acid rain typically include nitric and sulfuric acid. These may be formed by the combination of nitrogen and sulfur oxides with water vapor in the [atmosphere](#).

**Acute Exposure:** One or a series of short-term exposures generally lasting less than 24 hours.

**Acute Health Effect:** A health effect that occurs over a relatively short period of time (e.g., minutes or hours). The term is used to describe brief exposures and effects which appear promptly after [exposure](#).

**Add-On Control Device:** An air pollution control device such as carbon absorber or incinerator that reduces the pollution in exhaust gas. The control device usually does not affect the process being controlled and thus is "add-on" technology, as opposed to a scheme to control pollution through altering the basic process itself. See also [pollution prevention](#).

**Adsorber:** An emissions control device that removes [VOCs](#) from a gas stream as a result of the gas attaching (adsorbing) onto a solid matrix such as activated carbon.

**Adverse Health Effect:** A health effect from exposure to air contaminants that may range from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches to permanent and serious conditions, such as birth defects, cancer or damage to lungs, nerves, liver, heart, or other organs.

**Aerosol:** Particles of solid or liquid matter that can remain suspended in air from a few minutes to many months depending on the particle size and weight.

**Afterburner:** An air pollution abatement device that removes undesirable organic gases through incineration.

**Agricultural Burning:** The intentional use of fire for vegetation management in areas such as agricultural fields, orchards, rangelands, and forests. The regulation of agricultural burning is described in the Agricultural Burning Guidelines, Title 17, California Code of Regulations. For more information, please go to our [smoke management](#) program website.

**Air:** So called "pure" air is a mixture of gases containing about 78 percent nitrogen; 21 percent oxygen; less than 1 percent of [carbon dioxide](#), argon, and other gases; and varying amounts of water vapor. See also [ambient air](#).

**Air Basin:** A land area with generally similar meteorological and geographic conditions throughout. To the extent possible, air basin boundaries are defined along political boundary lines and include both the [source](#) and receptor areas. California is currently divided into 15 air basins.

**Airborne Toxic Control Measure (ATCM):** A control measure adopted by the ARB (Health and Safety Code Section 39666 et seq.), which reduces emissions of [toxic air contaminants](#). For more information please see our [ATCM](#) top page.

**Air District:** A political body responsible for managing air quality on a regional or county basis. California is currently divided into 35 air districts. (See also [air pollution control district](#) and [air quality management district](#)). For more information, see our [local air district directory](#).

**Air Monitoring:** Sampling for and measuring of pollutants present in the [atmosphere](#).

**Air Pollutants:** Amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation, and/or materials. (See also [air pollution](#).)

**Air Pollution:** Degradation of air quality resulting from unwanted chemicals or other materials occurring in the air. (See also [air pollutants](#).)

**Air Pollution Control District (APCD):** A county agency with authority to regulate stationary, indirect, and [area sources](#) of air pollution (e.g., power plants, highway construction, and housing developments) within a given county, and governed by a district air pollution control board composed of the elected county supervisors. (See also air quality management district).

**Air Quality Index (AQI):** A numerical index used for reporting severity of air pollution levels to the public. It replaces the formerly used Pollutant Standards Index (PSI). Like the PSI, the AQI incorporates five criteria pollutants -- ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide -- into a single index. The new index also incorporates the 8-hour ozone standard and the 24-hour PM<sub>2.5</sub> standard into the index calculation. AQI levels range from 0 (Good air quality) to 500 (Hazardous air quality). The higher the index, the higher the level of pollutants and the greater the likelihood of health effects. The AQI incorporates an additional index category -- unhealthy for sensitive groups -- that ranges from 101 to 150. In addition, the AQI comes with more detailed cautions. For more information, see our [air quality index](#) top page.

**Air Quality Management District (AQMD):** A group of counties or portions of counties, or an individual county specified in law with authority to regulate stationary, indirect, and area sources of air pollution within the region and governed by a regional air pollution control board comprised mostly of elected officials from within the region. (See also air pollution control district). For more information, please see our [local air district directory](#).

**Air Quality Management Plan (AQMP):** A plan prepared by an APCD / AQMD, for a county or region designated as a [nonattainment area](#), for the purpose of bringing the area into compliance with the requirements of the national and / or California [ambient air quality standards](#). AQMPs are incorporated into the [State Implementation Plan](#) (SIP).

**Air Quality Manager:** An individual employed by the local, state, or federal government to manage air quality.

**Air Quality Simulation Model:** A mathematical relationship between emissions and air quality which simulates on a computer the transport, dispersion, and transformation of compounds emitted into the air. For more information, please see our [software](#) webpage.

**Air Quality Standard (AQS):** The prescribed level of a pollutant in the outside air that should not be exceeded during a specific time period to protect public health. Established by both federal and state governments. (See also [ambient air quality standards](#).) For more information please see our [ambient air quality standards](#) webpage.

**Air Quality Working Groups (AQWG):** Advisory groups that provide forums for communication, cooperation, and coordination in the development and implementation of air quality control measures. They may be comprised of representatives from the ARB, citizen groups, environmental groups, industry, local air districts, and the U.S. EPA.

**Air Resources Board:** (See [California Air Resources Board](#).)

**Airshed:** A subset of [air basin](#), the term denotes a geographical area that shares the same air because of topography, meteorology, and climate.

**Air Toxics:** A generic term referring to a harmful chemical or group of chemicals in the air.

Substances that are especially harmful to health, such as those considered under U.S. EPA's [hazardous air pollutant](#) program or California's [AB 1807](#) and / or [AB 2588](#) air toxics programs, are considered to be air toxics. Technically, any compound that is in the air and has the potential to produce adverse health effects is an air toxic. For more information, please visit our [toxics](#) website.

**Alternative Fuels:** Fuels such as methanol, ethanol, natural gas, and liquid petroleum gas that are cleaner burning and help to meet ARB's mobile and stationary [emission standards](#). These fuels may be used in place of less clean fuels for powering motor vehicles. For more information, please visit our [alternative fuels](#) website.

**Ambient Air:** The air occurring at a particular time and place outside of structures. Often used interchangeably with "outdoor air." (See also [air](#).)

**Ambient Air Quality Standards (AAQS):** Health- and welfare-based standards for outdoor air which identify the maximum acceptable average concentrations of air pollutants during a specified period of time. (See also [CAAQS](#) and [NAAQS](#) and [Criteria Air Pollutant](#).) For more information, please view our [ambient air quality standards](#) website.

**American Society for Testing and Materials (ASTM):** A nonprofit organization that provides a forum for producers, consumers, and representatives of government and industry, to write laboratory test standards for materials, products, systems, and services. ASTM publishes standard test methods, specifications, practices, guides, classifications, and terminology. For more information, please visit the [ASTM](#) website.

**Ammonia (NH<sub>3</sub>):** A pungent colorless gaseous compound of nitrogen and hydrogen that is very soluble in water and can easily be condensed into a liquid by cold and pressure. Ammonia reacts with NO<sub>x</sub> to form ammonium nitrate -- a major PM<sub>2.5</sub> component in the Western United States.

**Area Sources:** Those sources for which a methodology is used to estimate emissions. This can include area-wide, mobile and natural sources, and also groups of stationary sources (such as dry cleaners and gas stations). The [California Clean Air Act](#) requires [air districts](#) to include area sources in the development and implementation of the [AQMP](#). In the California emission inventory all sources which are not reported as individual point sources are included as area sources. The federal air toxics program defines a source that emits less than 10 tons per year of a single [hazardous air pollutant](#) (HAP) or 25 tons per year of all HAPs as an area source. For more information, please visit our [area-wide source methodologies](#) website.

**Area-Wide Sources:** Sources of pollution where the emissions are spread over a wide area, such as consumer products, fireplaces, road dust and farming operations. Area-wide sources do not include [mobile sources](#) or [stationary sources](#).

**Aromatic:** A type of [hydrocarbon](#), such as benzene or toluene. Some aromatics are toxic.

**Asbestos:** A mineral fiber that can pollute air or water and cause [cancer](#) or asbestosis when inhaled. The U.S. EPA has banned or severely restricted its use in manufacturing and construction and the ARB has imposed limits on the amount of asbestos in serpentine rock that is used for surfacing applications. For more information, please visit our website.

**Asthma:** A chronic inflammatory disorder of the lungs characterized by wheezing,

breathlessness, chest tightness, and cough.

**Atmosphere:** The gaseous mass or envelope of [air](#) surrounding the Earth. From ground-level up, the atmosphere is further subdivided into the [troposphere](#), stratosphere, mesosphere, and the thermosphere.

**Attainment Area:** A geographical area identified to have air quality as good as, or better than, the national and / or California [ambient air quality standards \(NAAQS / CAAQS\)](#). An area may be an attainment area for one pollutant and a nonattainment area for others. For more information, please visit our [area designations](#) website.

**Authority to Construct (A/C):** A pre-construction permit issued by an [air district](#).

## B

**Baghouse:** An air pollution control device that traps [particulates](#) by forcing gas streams through large permeable bags usually made of glass fibers. For more information, please go to our [baghouse training](#) website.

**Banking:** A provision in [air district](#) permit regulations that allows a facility to accumulate credits for reducing emissions beyond regulatory limits (emission reduction credits) and then use or sell those credits at a later date. For more information, please go to our [New Source Review](#) website.

**Best Available Control Measure (BACM):** A term used to describe the "best" measures (according to U.S. EPA guidance) for controlling small or dispersed sources of [particulate matter](#) and other emissions from sources such as roadway dust, woodstoves, and open burning.

**Best Available Control Technology (BACT):** The most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for given regulated air pollutants and processes. BACT is a requirement of NSR ([New Source Review](#)) and PSD ([Prevention of Significant Deterioration](#)). For more information, please go to our [BACT](#) website.

**Best Available Retrofit Control Technology (BARCT):** An air emission limitation that applies to existing sources and is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of [source](#). (See also [Best Available Control Technology](#).) For more information, please go to our [BARCT](#) website.

**Biogenic Source:** Biological sources such as plants and animals that emit air pollutants such as [volatile organic compounds](#). Examples of biogenic sources include animal management operations, and oak and pine tree forests. (See also [natural sources](#).) For more information, please go to our [Ecosystems Impact](#) website.

**Bureau of Automotive Repair (BAR):** An agency of the California Department of Consumer Affairs that manages the implementation of the motor vehicle [Inspection and Maintenance Program](#). For more information, please go to [the smogcheck](#) website.

**Burn Day:** A day that is not officially determined by meteorologists and [air quality managers](#) to be a no-burn day. Burn days vary by air basin on any given day. For more information, please view our [smoke management program](#) website.

## C

**California Air Pollution Control Officers Association (CAPCOA):** A nonprofit association of the air pollution control officers from all 35 air quality agencies throughout California. CAPCOA was formed in 1975 to promote clean air and to provide a forum for sharing of knowledge, experience, and information among the air quality regulatory agencies around the state. CAPCOA is an organization of air quality professionals -- leaders in their field -- who promote unity and efficiency, and strive to encourage consistency in methods and practices of air pollution control. For more information, please go to [CAPCOA's](#) website.

**California Air Resources Board (ARB):** The State's lead air quality agency consisting of an eleven-member board appointed by the Governor and several hundred employees. CARB is responsible for attainment and maintenance of the state and federal [air quality standards](#), and is fully responsible for motor vehicle pollution control. It oversees county and regional air pollution management programs.

**California Ambient Air Quality Standard (CAAQS):** A legal limit that specifies the maximum level and time of exposure in the outdoor air for a given air pollutant and which is protective of human health and public welfare (Health and Safety Code section 39606b). CAAQSs are recommended by the California [Office of Environmental Health Hazard Assessment](#) and adopted into regulation by the CARB. CAAQSs are the standards which must be met per the requirements of the California Clean Air Act (CCAA). For more information, please view our [AAQS](#) website.

**California Clean Air Act (CCAA):** A California law passed in 1988 which provides the basis for air quality planning and regulation independent of federal regulations. A major element of the Act is the requirement that local [air districts](#) in violation of the [CAAQS](#) must prepare attainment plans which identify air quality problems, causes, trends, and actions to be taken to attain and maintain California's air quality standards by the earliest practicable date.

**California Environmental Protection Agency (Cal/EPA):** A state government agency established in 1991 for unifying environmental activities related to public health protection in the State of California. There are six boards, departments, and offices under the organization of Cal/EPA including the [California Air Resources Board](#) (ARB), California Integrated Waste Management Board (IWMB), State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCB), Department of Pesticide Regulation (DPR), Department of Toxic Substances Control (DTSC), and [Office of Environmental Health Hazard Assessment](#) (OEHHA). To see links to these Cal/EPA organizations, go to the bottom of this webpage or any webpage on this website. The Cal/EPA boards, departments, and offices are directly responsible for implementing California environmental laws, or play a cooperative role with other regulatory agencies at regional, local, state, and federal levels. Please visit [Cal/EPA's home page](#).

**California Environmental Quality Act (CEQA):** A California law that sets forth a process for public agencies to make informed decisions on discretionary project approvals. The process aids decision makers to determine whether any environmental impacts are associated with a proposed project. It requires environmental impacts associated with a proposed project to be eliminated or reduced, and that air quality mitigation measures are implemented.

**Cancer:** A group of diseases characterized by uncontrolled invasive growth of body cells leading to the formation of malignant tumors that tend to grow rapidly and spread (*i.e., metastasize*).

**Carbon Dioxide (CO<sub>2</sub>):** A colorless, odorless gas that occurs naturally in the Earth's [atmosphere](#). Significant quantities are also emitted into the air by fossil fuel [combustion](#). (See also [ClimateChange.ca.gov Glossary](#).)

**Carbon Monoxide (CO):** A colorless, odorless gas resulting from the incomplete combustion of hydrocarbon fuels. CO interferes with the blood's ability to carry oxygen to the body's tissues and results in numerous [adverse health effects](#). Over 80 percent of the CO emitted in urban areas is contributed by motor vehicles. CO is a [criteria air pollutant](#).

**Carcinogen:** A cancer-causing substance. (See also [cancer](#).)

**Carl Moyer Fund:** A multi-million dollar incentive grant program designed to encourage reduction of emissions from heavy-duty engines. The grants cover the additional cost of cleaner technologies for on-road, off-road, marine, locomotive and agricultural pump engines, as well as forklifts and airport ground support equipment. Please visit our [Carl Moyer Program](#) website.

**CAS Registry Number:** The Chemical Abstracts Service Registry Number (CAS) is a numeric designation assigned by the American Chemical Society's Chemical Abstract Service and uniquely identifies a specific compound. This entry allows one to conclusively identify a material regardless of the name or naming system used.

**Catalyst:** A substance that can increase or decrease the rate of a chemical reaction between the other chemical species without being consumed in the process.

**Catalytic Converter:** A motor vehicle pollution control device designed to reduce emissions such as [oxides of nitrogen](#), [hydrocarbons](#), and [carbon monoxide](#). Catalytic converters have been required equipment on all new motor vehicles sold in California since 1979.

**Chlorofluorocarbons (CFCs):** Any of a number of substances consisting of chlorine, fluorine, and carbon. CFCs are used for refrigeration, foam packaging, solvents, and propellants. Visit the [Cal/EPA website](#) for more information.

**Chronic Exposure:** Long-term exposure, usually lasting one year to a lifetime.

**Chronic Health Effect:** A health effect that occurs over a relatively long period of time (e.g., months or years). (See also [acute health effect](#).)

**Cleaner-Burning Gasoline:** Gasoline fuel that results in reduced emissions of [carbon monoxide](#), [nitrogen oxides](#), reactive organic gases, and particulate matter, in addition to toxic substances

such as benzene and 1,3-butadiene. Visit our [cleaner-burning gasoline](#) website or an overview of [ARB's fuels program](#).

**Climate Change:** see [ClimateChange.ca.gov Glossary](#).)

**Coating:** A layer of any substance such as paint, lacquer, or varnish applied over a surface for protection. For more information, please see our [coatings](#) website.

**Coefficient of Haze (COH):** A measurement of the quantity of dust and smoke in the [atmosphere](#) in a theoretical 1,000 linear feet of air. A COH of less than three is considered clean air and more than five is of some concern. COH readings of 20 or more can occur in urban areas.

**Combustion:** The act or instance of burning some type of fuel such as gasoline to produce energy. Combustion is typically the process that powers automobile engines and power plant generators.

**Compressed Natural Gas (CNG):** (See [alternative fuels](#).)

**Conformity:** A demonstration of whether a federally-supported activity is consistent with the [State Implementation Plan](#) (SIP) -- per Section 176 (c) of the [Clean Air Act](#). Transportation conformity refers to plans, programs, and projects approved or funded by the Federal Highway Administration or the Federal Transit Administration. General conformity refers to projects approved or funded by other federal agencies.

**Congestion Management Program:** A state-mandated program (California Government Code Section 65089a) that requires each county to prepare a plan to relieve congestion and reduce air pollution.

**Consumer Products:** Products such as hairspray, detergents, cleaning compounds, polishes, lawn and garden products, personal care products, and automotive specialty products which are part of our everyday lives and, through consumer use, may produce volatile organic air emissions which contribute to air pollution. Please view our [consumer products](#) website.

**Continuous Emission Monitor (CEM):** A type of air emission monitoring system installed to operate continuously inside of a smokestack or other emission source.

**Continuous Sampling Device:** An air analyzer that measures air quality components continuously. (See also [Integrated Sampling Device](#).)

**Control Techniques Guidelines (CTG):** Guidance documents issued by [U.S. EPA](#) that define reasonably available control technology (RACT) to be applied to existing facilities that emit excessive quantities of air pollutants; they contain information both on the economic and technological feasibility of available techniques.

**Cost-Effectiveness:** The cost of an emission control measure assessed in terms of dollars-per-pound, or dollars-per-ton, of air emissions reduced.

**Criteria Air Pollutant:** An air pollutant for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples include:

[ozone](#), [carbon monoxide](#), [nitrogen dioxide](#), [sulfur dioxide](#), and [PM10](#) and PM2.5. The term "criteria air pollutants" derives from the requirement that the [U.S. EPA](#) must describe the characteristics and potential health and welfare effects of these pollutants. The U.S. EPA and CARB periodically review new scientific data and may propose revisions to the standards as a result. View our [health and air pollution](#) website.

**Cyclone:** An air pollution control device that removes larger particles -- generally greater than one micron -- from an air stream through centrifugal force.

## D

**Deciview:** A measurement of visibility. One deciview represents the minimal perceptible change in visibility to the human eye.

**Degreaser:** Equipment that removes grease, dirt, or unwanted materials from any part or product. Degreasers typically use aqueous or nonaqueous solvents, as liquid baths or condensing vapors, to remove such material.

**Deposit Control Additives:** Substances added to motor vehicle fuel to reduce and prevent deposits in the fuel delivery system and engine intake valves.

**Design Value:** The pollutant concentration used by [air quality managers](#) as the basis for determining [attainment](#) of an [air quality standard](#), generally by using an [air quality model](#). The design value may or may not be the same as the designation value.

**Designation Value:** The pollutant concentration used by [air quality managers](#) for designating [attainment](#) status of an [air district](#) with respect to the state and federal [ambient air quality standards](#). Generally, the designation value is the highest concentration that remains after excluding certain qualifying values. For a specific pollutant, the designation value for the state and federal standards may not be the same.

**Diesel Engine:** A type of internal combustion engine that uses low-volatility petroleum fuel and fuel injectors and initiates [combustion](#) using compression ignition (as opposed to spark ignition that is used with gasoline engines).

**Dispersion Model:** See [air quality simulation model](#) above.

**Dose:** The amount of a pollutant that is absorbed. A level of exposure which is a function of a pollutant's concentration, the length of time a subject is exposed, and the amount of the pollutant that is absorbed. The concentration of the pollutant and the length of time that the subject is exposed to that pollutant determine dose.

**Dose-Response:** The relationship between the dose of a pollutant and the response (or effect) it produces on a biological system.

**Dust:** Solid [particulate matter](#) that can become airborne.

## E

**Electric Vehicle:** A motor vehicle that uses an electric motor as the basis of its operation. Such vehicles emit virtually no air pollutants. (See also [hybrid electric vehicle](#).) For more information, please see our [zero emission vehicles](#) website.

**Electrostatic Precipitator (ESP):** An air pollution control device that removes [particulate matter](#) from an air stream by imparting an electrical charge to the particles for mechanical collection at an electrode. For more information, please see our associated [training class](#) on this subject.

**Emission Factor:** For [stationary sources](#), the relationship between the amount of pollution produced and the amount of raw material processed or burned. For [mobile sources](#), the relationship between the amount of pollution produced and the number of vehicle miles traveled. By using the emission factor of a pollutant and specific data regarding quantities of materials used by a given source, it is possible to compute emissions for the source. This approach is used in preparing an emissions inventory. Please also look at [U.S. EPA emission factors](#), or ARB's [emission factors and toxic air contaminants](#),

**Emission Inventory:** An estimate of the amount of pollutants emitted into the [atmosphere](#) from major mobile, stationary, area-wide, and natural source categories over a specific period of time such as a day or a year. For more information, please view our [emissions inventory](#) website.

**Emission Offsets (also known as Emissions Trading):** A rule-making concept whereby approval of a new or modified stationary source of air pollution is conditional on the reduction of emissions from other existing stationary sources of air pollution. These reductions are required in addition to reductions required by [best available control technology](#). For information please go to our New Source Review [Emission Reduction Credit Offsets](#) website.

**Emission Rate:** The weight of a pollutant emitted per unit of time (e.g., tons / year).

**Emission Standard:** The maximum amount of a pollutant that is allowed to be discharged from a polluting source such as an automobile or smoke stack.

**Energy Content:** The amount of energy available for doing work. For example, the amount of energy in fuel available for powering a motor vehicle.

**Environmental Justice:** The fair treatment of people of all races and incomes with respect to development, implementation, and enforcement of environmental laws, regulations, and policies.

**Environmental Tobacco Smoke:** Primarily a combination of sidestream smoke from the burning end of a cigarette, pipe or cigar, and exhaled mainstream smoke from the smoker. Other components include smoke emitted at the mouthpiece during puff drawing. For more information, please see our [environmental tobacco smoke](#) website.

**Epidemiology:** The study of the occurrence and distribution of disease within a population.

**Ethanol:** Ethyl-alcohol, a [volatile](#) alcohol containing two carbon groups (CH<sub>3</sub>CH<sub>2</sub>OH). For fuel use, ethanol is produced by fermentation of corn or other plant products.

**Evaporative Emissions:** Emissions from evaporating gasoline, which can occur during vehicle refueling, vehicle operation, and even when the vehicle is parked. Evaporative emissions can account for two-thirds of the [hydrocarbon](#) emissions from gasoline-fueled vehicles on hot summer days.

**Exhaust Gas Recirculation (EGR):** An emission control method that involves recirculating exhaust gases from an engine back into the intake and combustion chambers. This lowers [combustion](#) temperatures and reduces NO<sub>x</sub>. (See also [nitrogen oxides](#).)

**Expected Peak Day Concentration (EPDC):** A calculated value that represents the concentration expected to occur at a particular site once per year, on average. The calculation procedure uses measured data collected at the site during a three-year period. Measured concentrations that are higher than the EPDC are excluded from the state area designation process.

**Exceedence:** A measured level of an air pollutant higher than the national or state [ambient air quality standards](#). (See also [NAAQS](#) and [CAAQS](#).)

**Exposure:** The concentration of the pollutant in the air multiplied by the population exposed to that concentration over a specified time period.

**Exposure Assessment:** Measurement or estimation of the magnitude, frequency, duration and route of exposure to a substance for the populations of interest.

## F

**Federal Clean Air Act (FCAA):** A federal law passed in 1970 and amended in 1974, 1977 and 1990 which forms the basis for the national air pollution control effort. Basic elements of the act include national [ambient air quality standards](#) for major air pollutants, mobile and stationary control measures, air toxics standards, acid rain control measures, and enforcement provisions. For more information, please go to the [Federal Clean Air Act](#).

**Federal Implementation Plan (FIP):** In the absence of an approved [State Implementation Plan](#) (SIP), a plan prepared by the [U.S. EPA](#) which provides measures that nonattainment areas must take to meet the requirements of the Federal Clean Air Act.

**Flexible Fuel Vehicle (FFV):** Vehicles that can use a combination of fuels such as alcohol fuel and unleaded gasoline.

**Fly Ash:** Air-borne solid particles that result from the burning of coal and other solid fuel.

**Fossil Fuels:** Fuels such as coal, oil, and natural gas; so-called because they are the remains of ancient plant and animal life.

**Fuel Cell:** An electrochemical cell which captures the electrical energy of a chemical reaction between fuels such as liquid hydrogen and liquid oxygen and converts it directly and continuously into the energy of a direct electrical current. For more information, please go to ARB's [fuel cell portal](#) page.

**Fugitive Dust:** Dust particles that are introduced into the air through certain activities such as soil cultivation, or vehicles operating on open fields or dirt roadways. A subset of fugitive emissions.

**Fugitive Emissions:** Emissions not caught by a capture system which are often due to equipment leaks, evaporative processes and windblown disturbances.

**Fume:** Solid particles under 1 micron in diameter formed as vapors condense, or as chemical reactions take place.

**Furnace:** A [combustion](#) chamber; an enclosed structure in which fuel is burned to heat air or material.

## G

**Gas Turbine:** An engine that uses a compressor to draw air into the engine and compress it. Fuel is added to the air and combusted in a combustor. Hot combustion gases exiting the engine turn a turbine which also turns the compressor. The engine's power output can be delivered from the compressor or turbine side of the engine.

**Gasoline Volatility:** The evaporative properties of gasoline. Gasoline vapor is a [volatile organic compound](#). (See also [Reid Vapor Pressure](#).)

**Global Warming:** An increase in the temperature of the Earth's troposphere. Global warming has occurred in the past as a result of natural influences, but the term is most often used to refer to the warming predicted by computer models to occur as a result of increased emissions of greenhouse gases. For more information, please go to ARB's [climate change website](#) or Climate Change: see [ClimateChange.ca.gov Glossary](#).)

**Greenhouse Effect:** The warming effect of the Earth's atmosphere. Light energy from the sun which passes through the Earth's [atmosphere](#) is absorbed by the Earth's surface and re-radiated into the atmosphere as heat energy. The heat energy is then trapped by the atmosphere, creating a situation similar to that which occurs in a car with its windows rolled up. A number of scientists believe that the emission of [CO<sub>2</sub>](#) and other gases into the atmosphere may increase the greenhouse effect and contribute to global warming. Climate Change: see [ClimateChange.ca.gov Glossary](#).)

**Greenhouse Gases:** Atmospheric gases such as carbon dioxide, methane, chlorofluorocarbons, nitrous oxide, ozone, and water vapor that slow the passage of re-radiated heat through the Earth's atmosphere. ( See also [ClimateChange.ca.gov Glossary](#).)

**Growth Management Plan:** A plan for a given geographical region containing demographic projections (i.e., housing units, employment, and population) through some specified point in time, and which provides recommendations for local governments to better manage growth and reduce projected environmental impacts.

## H

**Hazardous Air Pollutant (HAP):** An air pollutant listed under section 112 (b) of the federal Clean Air Act as particularly hazardous to health. Emission sources of hazardous air pollutants are identified by [U.S. EPA](#), and [emission standards](#) are set accordingly. For more information, please go our [Title III website](#) area.

**Haze (Hazy):** A phenomenon that results in reduced [visibility](#) due to the scattering of light caused by [aerosols](#). Haze is caused in large part by man-made air pollutants.

**Health-Based Standard (Primary Standard):** A dosage of air pollution scientifically determined to protect against human health effects such as asthma, emphysema, and cancer.

**Health Risk Assessment (HRA):** A document that identifies the risks and quantities of possible [adverse health effects](#) that may result from [exposure](#) to emissions of [toxic air contaminants](#). A health risk assessment cannot predict specific health effects; it only describes the increased possibility of adverse health effects based on the best scientific information available.

**"Hot Spot":** (See [toxic hot spot](#).)

**Hybrid Electric Vehicle (HEV):** Hybrid electric motor vehicles may operate using both electric and gasoline-powered motors. Emissions from hybrid electric motor vehicles are also substantially lower than conventionally powered motor vehicles. (See also [Electric Motor Vehicle](#).)

**Hydrocarbons:** Compounds containing various combinations of hydrogen and carbon atoms. They may be emitted into the air by natural sources (e.g., trees) and as a result of fossil and vegetative fuel combustion, fuel volatilization, and solvent use. Hydrocarbons are a major contributor to [smog](#). (See also [Reactive Organic Gases](#)).

**Hydrogen Sulfide (H<sub>2</sub>S):** A colorless, flammable, poisonous compound having a characteristic rotten-egg odor. It is used in industrial processes and may be emitted into the air.

## I

**Incremental Reactivity (IR):** The additional [ozone](#) formed in the [atmosphere](#) with the incremental addition of a certain amount of a [volatile organic compound](#).

**Incineration:** The act of burning a material to ashes.

**Indirect Source:** Any facility, building, structure, or installation, or combination thereof, which generates or attracts mobile source activity that results in emissions of any pollutant (or precursor) for which there is a state ambient air quality standard. Examples of indirect sources include employment sites, shopping centers, sports facilities, housing developments, airports, commercial and industrial development, and parking lots and garages.

**Indirect Source Control Program:** Rules, regulations, local ordinances and land use controls, and other regulatory strategies of air pollution control districts or local governments used to

control or reduce emissions associated with new and existing indirect sources. Indirect source control programs include regulatory strategies such as transportation control measures (e.g., South Coast's Regulation XV for employer-based trip reduction); parking charges; land use controls that reduce the need for vehicle travel and increase transit, bicycle, and pedestrian access; and source-specific regulations such as truck idling and travel schedule requirements.

**Indirect Source Review:** A major component of an indirect source control program which applies to new and modified indirect sources. Strategies for indirect source review include permit programs, review and comment on new and modified indirect source projects through the [California Environmental Quality Act](#) (CEQA) process, and coordination of air quality, transportation and land use policies through local government general plans. Indirect source review reduces emissions from new and modified sources through best available mitigation measures and additional offsite mitigation such as offsets and mitigation fees.

**Individual Cancer Risk:** The probability, expressed as chances in a million, that a person experiencing 70 years of continuous area-wide outdoor exposure to a toxic air contaminant will develop cancer.

**Indoor Air Pollution:** Air pollutants that occur within buildings or other enclosed spaces, as opposed to those occurring in outdoor, or ambient air. Some examples of indoor air pollutants are nitrogen oxides, smoke, asbestos, formaldehyde, and carbon monoxide. For more information, please go to our [indoor air quality website](#).

**Industrial Source:** Any of a large number of sources -- such as manufacturing operations, oil and gas refineries, food processing plants, and energy generating facilities -- that emit substances into the [atmosphere](#).

**Inert Gas:** A gas that does not react with the substances coming in contact with it.

**Inspection and Maintenance Program:** A motor vehicle inspection program implemented by the California [Bureau of Automotive Repair](#). The purpose of the I&M is to reduce emissions by assuring that cars are running properly. It is designed to identify vehicles in need of maintenance and to assure the effectiveness of their emission control systems on a biennial basis. Enacted in 1979 and strengthened in 1990. (Also known as the "Smog Check" program.) For more information, please go to the [States main smogcheck website](#).

**Integrated Sampling Device:** An air sampling device that allows estimation of air quality components over a period of time through laboratory analysis of the sampler's medium. (See also [Continuous Sampling Device](#).)

**Internal Combustion Engine:** An engine in which both the heat energy and the ensuing mechanical energy are produced inside the engine. Includes gas turbines, spark ignition gas, and compression ignition diesel engines.

**International Agency for Cancer (IARC):** An expert international agency of the World Health Organization which publishes evaluations of evidence on the carcinogenicity of a wide range of chemicals. For more information, please go to the [IARC website](#).

**Inversion:** A layer of warm air in the atmosphere that prevents the rise of cooling air and traps pollutants beneath it.

## L

**Lead:** A gray-white metal that is soft, malleable, ductile, and resistant to corrosion. Sources of lead resulting in concentrations in the air include industrial sources and crustal weathering of soils followed by fugitive dust emissions. Health effects from exposure to lead include brain and kidney damage and learning disabilities. Lead is the only substance which is currently listed as both a [criteria air pollutant](#) and a [toxic air contaminant](#).

**Light-Duty Vehicle (LDV):** Any motor vehicle with a gross vehicle weight of 6000 pounds or less.

**Limit of Detection (LOD):** The lowest concentration of a substance that can reliably measured.

**Liquefied Natural Gas (LNG):** (See [Alternative Fuels](#).)

**Liquefied Petroleum Gas (LPG):** (See [Alternative Fuels](#).)

**Low Emission Vehicle (LEV):** A vehicle that meets the ARB's low emission vehicle standards. For more information, please go to our [low emission vehicle website](#).

**Low Emission Vehicle II (LEV II):** California exhaust emission standards for 2004 and subsequent model passenger cars, light-duty trucks and medium-duty vehicles.

**Lowest Achievable Emission Rate (LAER):** Under the [Clean Air Act](#), the rate of emissions that reflects (1) the most stringent emission limitation in the [State Implementation Plan](#) of any state for a given source unless the owner or operator demonstrates such limitations are not achievable; or (2) the most stringent emissions limitation achieved in practice, whichever is more stringent.

**Low NOx Burners:** One of several [combustion](#) technologies used to reduce emissions of [nitrogen oxides](#).

**Lubricity:** A measure of the ability of an oil or other compound to lubricate (reduce friction) between two surfaces in contact.

## M

**Major Source:** A stationary facility that emits a regulated pollutant in an amount exceeding the threshold level depending on the location of the facility and attainment with regard to air quality status. (See [Source](#).)

**Maximum Achievable Control Technology (MACT):** Federal emissions limitations based on the best demonstrated control technology or practices in similar sources to be applied to major sources emitting one or more federal [hazardous air pollutants](#). For more information, please see our [Title III website](#).

**Maximum Incremental Reactivity (MIR):** A measure of the increase in [ozone](#) formation per unit weight of a [hydrocarbon](#) when added to the [atmosphere](#).

**Mean:** Average.

**Median:** The middle value in a population distribution, above and below which lie an equal number of individual values; midpoint.

**Melting Point:** The temperature at which a solid becomes a liquid. At this temperature, the solid and the liquid have the same vapor pressure.

**Mesosphere:** The layer of the Earth's [atmosphere](#) above the [stratosphere](#) and below the [thermosphere](#). It is between 35 and 60 miles from the Earth.

**Methyl Tertiary Butyl Ether (MTBE):** An ether compound added to gasoline to provide oxygen and enhance complete [combustion](#). MTBE is being phased out of California's gasoline. For more information, please see our website that discusses [oxygenates](#).

**Miscible:** Capable of being mixed with other substances.

**Mobile Sources:** Sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes. (See also [stationary sources](#)). For more information, please go to our [mobile sources portal](#) page.

**Monitoring:** The periodic or continuous sampling and analysis of air pollutants in ambient air or from individual pollution sources.

**Motor Vehicle Fee Program:** See [AB 2766](#).

**Morbidity:** Rate of disease incidence.

**Mortality:** Death rate.

**Multimedia Exposure:** Exposure to a toxic substance from multiple pathways such as air, water, soil, food, and breast milk.

**Mutagenic:** The ability of a chemical or physical agent to produce heritable changes in the DNA of living cells.

## N

**National Ambient Air Quality Standards (NAAQS):** Standards established by the United States EPA that apply for outdoor air throughout the country. There are two types of NAAQS. Primary standards set limits to protect public health and secondary standards set limits to protect public welfare. For more information, please go to our [AAQS](#) website.

**National Emission Standards for Hazardous Air Pollutants (NESHAPS):** Emissions standards set by the U.S. EPA for a hazardous air pollutant, such as benzene, which may cause an increase in deaths or in serious, irreversible, or incapacitating illness. For more information, please go to our [Title III](#) website.

**Natural Sources:** Non-manmade emission sources, including biological and geological sources,

wildfires, and windblown dust.

**New Source Performance Standards (NSPS):** Uniform national EPA air emission standards that limit the amount of pollution allowed from new sources or from modified existing sources. For more information, please go to our [Title V](#) website.

**New Source Review (NSR):** A Clean Air Act requirement that State Implementation Plans must include a permit review, which applies to the construction and operation of new and modified stationary sources in [nonattainment areas](#), to ensure [attainment of national ambient air quality standards](#). The two major requirements of NSR are [Best Available Control Technology](#) and [Emission Offsets](#). For more information, please go to our [New Source Review](#) website.

**Nitric Oxide (NO):** Precursor of [ozone](#), NO<sub>2</sub>, and nitrate; nitric oxide is usually emitted from [combustion](#) processes. Nitric oxide is converted to nitrogen dioxide (NO<sub>2</sub>) in the [atmosphere](#), and then becomes involved in the photochemical processes and / or particulate formation. (See [Nitrogen Oxides](#).)

**Nitrogen Oxides (Oxides of Nitrogen, NOx):** A general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO<sub>2</sub>) and other oxides of nitrogen. Nitrogen oxides are typically created during [combustion](#) processes, and are major contributors to [smog](#) formation and [acid deposition](#). NO<sub>2</sub> is a [criteria air pollutant](#), and may result in numerous [adverse health effects](#).

**Nonattainment Area:** A geographic area identified by the [U.S. EPA](#) and / or [CARB](#) as not meeting either [NAAQS](#) or [CAAQS](#) standards for a given pollutant. For more information, please view our [designated areas](#) website.

**Nonattainment Transitional:** A subcategory of the nonattainment designation category for state standards that signals progress and implies the area is nearing attainment. Districts with nonattainment-transitional status may revise their attainment plans to delay adoption of control measures anticipating attainment without the measures.

**Noncarcinogenic Effects:** Non-cancer health effects which may include birth defects, organ damage, morbidity, and death.

**Non-Industrial Source:** Any of a large number of sources -- such as mobile, area-wide, indirect, and natural sources -- which emit substances into the [atmosphere](#).

**Non-Methane Hydrocarbon (NMHC):** The sum of all [hydrocarbon](#) air pollutants except methane. NMHCs are significant precursors to [ozone](#) formation.

**Non-Methane Organic Gas (NMOG):** The sum of non-methane hydrocarbons and other organic gases such as aldehydes, ketones and ethers.

**Non-Point Sources:** Diffuse pollution sources that are not recognized to have a single point of origin.

**Non-Road Emissions:** Pollutants emitted by a variety of non-road sources such as farm and construction equipment, gasoline-powered lawn and garden equipment, and power boats and outboard motors. For more information, please see our [offroad](#) website.

**No-Observed-Adverse-Effect-Level (NOAEL):** A term used in risk assessment. An exposure level at which there are no statistically or biologically significant increases in the frequency or severity of adverse effects between an exposed population and a comparable non-exposed population.

**No-Observed-Effect-Level (NOEL):** A term used in risk assessment. An exposure level at which there are no statistically or biologically significant difference or severity of an effect between an exposed population and a comparable non-exposed population.

## O

**Octane Number:** A numerical measure of the antiknock properties of gasoline used as a motor fuel. The higher the octane number, the greater the antiknock properties.

**Office of Environmental Health Hazard Assessment (OEHHA):** A department within the California Environmental Protection Agency that is responsible for evaluating chemicals for adverse health impacts and establishing safe exposure levels. OEHHA also assists in performing health risk assessments and developing risk assessment procedures for air quality management purposes. Please visit [OEHHA's home page](#).

**Olefin:** A class of unsaturated [hydrocarbons](#) having the general formula  $C_nH_{2n}$ .

**Onboard Diagnostics:** Devices that are incorporated into the computer systems of new motor vehicles to monitor components and systems that affect emissions when malfunctioning. If a problem is detected, the OBD system illuminates a warning lamp on the vehicle instrument panel to alert the driver. This warning lamp typically contains the phrase Check Engine or Service Engine Soon. The system will also store important information about the detected malfunction so that a repair technician can accurately find and fix the problem. For more information, please go to our [on-board diagnostics](#) website.

**Onboard Vapor Recovery:** Devices placed on vehicles to capture gasoline vapor during refueling and then route the vapors to the engine when the vehicle is started so that they can be efficiently burned.

**Opacity:** The amount of light obscured by particle pollution in the [atmosphere](#). Opacity is used as an indicator of changes in performance of particulate control systems.

**Organic Compounds:** A large group of chemical compounds containing mainly carbon, hydrogen, nitrogen, and oxygen. All living organisms are made up of organic compounds.

**Oxidant:** A substance that brings about oxidation in other substances. Oxidizing agents (oxidants) contain atoms that have suffered electron loss. In oxidizing other substances, these atoms gain electrons. [Ozone](#), which is a primary component of [smog](#), is an example of an oxidant.

**Oxidation:** The chemical reaction of a substance with oxygen or a reaction in which the atoms in an element lose electrons and its valence is correspondingly increased.

**Oxygenate:** An organic molecule that contains oxygen. Oxygenates are typically ethers and alcohols.

**Ozone:** A strong smelling, pale blue, reactive toxic chemical gas consisting of three oxygen atoms. It is a product of the photochemical process involving the sun's energy and [ozone precursors](#), such as [hydrocarbons](#) and [oxides of nitrogen](#). Ozone exists in the upper [atmosphere ozone layer](#) (stratospheric ozone) as well as at the Earth's surface in the troposphere (ozone). Ozone in the troposphere causes numerous [adverse health effects](#) and is a [criteria air pollutant](#). It is a major component of [smog](#).

**Ozone Depletion:** The reduction in the stratospheric ozone layer. Stratospheric ozone shields the Earth from ultraviolet radiation. The breakdown of certain chlorine and / or bromine-containing compounds that catalytically destroy ozone molecules in the stratosphere can cause a reduction in the ozone layer. For more information, please go to [U.S. EPA's website](#) on this subject.

**Ozone-Forming Potential:** (See [Reactivity](#).)

**Ozone Layer:** A layer of [ozone](#) in the lower portion of the [stratosphere](#) -- 12 to 15 miles above the Earth's surface -- which helps to filter out harmful ultraviolet rays from the sun. It may be contrasted with the ozone component of photochemical [smog](#) near the Earth's surface which is harmful.

**Ozone Precursors:** Chemicals such as non-methane [hydrocarbons](#) and [oxides of nitrogen](#), occurring either naturally or as a result of human activities, which contribute to the formation of [ozone](#), a major component of [smog](#).

## P

**Particulate Matter (PM):** Any material, except pure water, that exists in the solid or liquid state in the [atmosphere](#). The size of particulate matter can vary from coarse, wind-blown dust particles to fine particle [combustion](#) products. For more information, please take a look at our [PM brochure](#).

**Peak Levels:** A level of airborne pollutants that is much higher than average. They can occur over a short period of minutes or hours in response to sudden releases, or they can occur due to a longer term build-up over several days.

**Permit:** Written authorization from a government agency (e.g., an [air quality management district](#)) that allows for the construction and / or operation of an emissions generating facility or its equipment within certain specified limits. For more information, please go to our [permitting activities](#) portal page.

**Permit to Operate (P/O):** An operational permit issued yearly by an [air district](#) to [sources](#) that meet specified regulations.

**Peroxyacetyl Nitrate:** A group of compounds formed from the photochemical reactions of nitrogen and organic compounds. PANs are components of smog and known to cause eye irritation.

**Persistence:** Refers to the length of time a compound stays in the [atmosphere](#), once introduced. A compound may persist for less than a second or indefinitely.

**Personal Watercraft (PWC):** Watercraft that do not have outboard, inboard, or stern drive engines. This encompasses the watercraft typically referred to as Jet Skis, Waverunners, etc. For more information, please check out our [recreational marine](#) website.

**Photochemical Reaction:** A term referring to chemical reactions brought about by the light energy of the sun. The reaction of [nitrogen oxides](#) with [hydrocarbons](#) in the presence of sunlight to form [ozone](#) is an example of a photochemical reaction.

**Photolysis:** Chemical decomposition induced by light or other energy.

**Plume:** A visible or measurable discharge of a contaminant from a given point of origin that can be measured according to the Ringelmann scale. (See [Ringelmann Chart](#).)

**PM<sub>2.5</sub>:** Includes tiny particles with an aerodynamic diameter less than or equal to a nominal 2.5 microns. This fraction of particulate matter penetrates most deeply into the lungs. For more information, please go to our [particulate matter](#) website.

**PM<sub>10</sub> (Particulate Matter):** A criteria air pollutant consisting of small particles with an aerodynamic diameter less than or equal to a nominal 10 microns (about 1/7 the diameter of a single human hair). Their small size allows them to make their way to the air sacs deep within the lungs where they may be deposited and result in [adverse health effects](#). PM<sub>10</sub> also causes [visibility](#) reduction. For more information, please view our [particulate matter brochure](#).

**Point Sources:** Specific points of origin where pollutants are emitted into the [atmosphere](#) such as factory smokestacks. (See also [Area-Wide Sources](#) and [Fugitive Emissions](#).)

**Pollutant Standards Index (PSI):** A numerical index formerly used for reporting severity of air pollution levels to the general public. The PSI incorporated the five criteria pollutants -- [ozone](#), [PM<sub>10</sub>](#), [carbon monoxide](#), [sulfur dioxide](#), and [nitrogen dioxide](#) -- into one single index. The PSI was based on the 1-hour ozone standard. PSI levels ranged from 0 (Good air quality) to 500 (Hazardous air quality). The higher the index, the higher the level of pollutants and the greater likelihood of health effects. For more information, see our website regarding the [Air Quality Index](#).

**Pollution Prevention:** The use of materials, processes, or practices to reduce, minimize, or eliminate the creation of pollutants or wastes. It includes practices that reduce the use of toxic or hazardous materials, energy, water, and/or other resources. For more information, please go to our [pollution prevention program](#) website.

**Polycyclic Aromatic Hydrocarbons (PAHs):** Organic compounds which include only carbon and hydrogen with a fused ring structure containing at least two benzene (six-sided) rings. PAHs may also contain additional fused rings that are not six-sided. The combustion of organic substances is a common source of atmospheric PAHs.

**Polymer:** Natural or synthetic chemical compounds composed of up to millions of repeated linked units, each of a relatively light and simple molecule

**Positive Crankcase Ventilation (PCV):** An emission control system for a reciprocating internal combustion engine that involves re-circulating gases that blow by the piston rings during combustion from the crankcase back into the intake manifold so they can be more completely burned.

**Precipitator:** Pollution control device that collects particles from an air stream. (See [Electrostatic Precipitator](#).)

**Prescribed Burning:** The planned application of fire to vegetation to achieve any specific objective on lands selected in advance of that application. In California, prescribed burning is governed under the Agricultural Burning Guidelines.

**Prevention of Significant Deterioration (PSD):** A permitting program for new and modified stationary sources of air pollution located in an area that attains or is unclassified for national ambient air quality standards ([NAAQS](#)). The PSD program is designed to ensure that air quality does not degrade beyond those air quality standards or beyond specified incremental amounts. The PSD permitting process requires new and modified facilities above a specified size threshold to be carefully reviewed prior to construction for air quality impacts. PSD also requires those facilities to apply [BACT](#) to minimize emissions of air pollutants. A public notification process is conducted prior to issuance of final PSD permits.

**Primary Particles:** Particles that are directly emitted from [combustion](#) and fugitive dust sources. (Compare with [Secondary Particle](#).)

**Propellant:** A gas with a high vapor pressure used to force formulations out of aerosol spray cans. Among the gases used are butanes, propanes and nitrogen.

**Proposition 65:** Safe Drinking and Toxic Enforcement Act of 1986, also known as Proposition 65. This Act is codified in California Health and Safety Code section 25249.5, et seq. No person in the course of doing business shall knowingly discharge or release a chemical known to the state to cause cancer or reproductive toxicity into water or into land where such chemical passes or probably will pass into any source of drinking water, without first giving clear and reasonable warning to such individual. For more information, please go to [OEHHA's Prop 65](#) website.

**Public Workshop:** A workshop held by a public agency for the purpose of informing the public and obtaining its input on the development of a regulatory action or control measure by that agency.

## R

**Radon:** A colorless, naturally occurring, radioactive, inert gaseous element formed by radioactive decay of radium atoms in soil or rocks.

**Reactive Organic Gas (ROG):** A photo chemically reactive chemical gas, composed of [non-methane hydrocarbons](#), that may contribute to the formation of [smog](#). Also sometimes referred to as [Non-Methane Organic Gases \(NMOGs\)](#). (See also [Volatile Organic Compounds](#) and [Hydrocarbons](#).)

**Reactivity (or Hydrocarbon Photochemical Reactivity):** A term used in the context of air

quality management to describe a hydrocarbon's ability to react (participate in photochemical reactions) to form [ozone](#) in the [atmosphere](#). Different [hydrocarbons](#) react at different rates. The more reactive a hydrocarbon, the greater potential it has to form ozone.

**Reasonably Available Control Measures (RACM):** A broadly defined term referring to technologies and other measures that can be used to control pollution. They include Reasonably Available Control Technology and other measures. In the case of [PM10](#), RACM refers to approaches for controlling small or dispersed source categories such as road dust, woodstoves, and open burning.

**Reasonably Available Control Technology (RACT):** Control techniques defined in [U.S. EPA](#) guidelines for limiting emissions from existing sources in [nonattainment areas](#). RACTs are adopted and implemented by states. For more information, please go to our [RACT](#) website.

**Reasonably Available Retrofit Control Technology (RARCT):** (See also [Best Available Control Technology](#).)

**Reciprocating Internal Combustion Engine:** An engine in which air and fuel are introduced into cylinders, compressed by pistons and ignited by a spark plug or by compression. Combustion in the cylinders pushes the pistons sequentially, transferring energy to the crankshaft, causing it to rotate.

**Reference Dose (RfD):** An estimate delivered by the [U.S. EPA](#) (with uncertainty spanning perhaps an order of magnitude) of the daily [exposure](#) to the human population, (including sensitive subpopulations) that is likely to be without deleterious effects during a lifetime. The RfD is reported in units of mg of substance/kg body weight / day for oral exposures.

**Reference Exposure Concentration (RfC):** An estimate, derived by the [U.S. EPA](#) with an uncertainty spanning perhaps an order of magnitude) of a daily [exposure](#) to the human population, (including sensitive subgroups) that is likely to be without appreciable risk of deleterious effects during a lifetime of exposure. The RfC is derived from a no or lowest observed adverse effect level from human or animal exposures, to which uncertainty or "safety" factors are applied.

**Reference Exposure Level (REL):** A term used in risk assessment. It is the concentration at or below which no adverse health effects are anticipated for a specified exposure period.

**Reformulated Gasoline (RFG):** Also called [Cleaner Burning Gasoline](#) (CBG). Gasoline with a different composition from conventional gasoline (e.g., lower [aromatics](#) content) that results in the production of lower levels of air pollutants. For more information, please go to our [cleaner burning gasoline](#) website.

**Reformulated Gasoline Predictive Model:** A set of mathematical equations that predict the emissions likely to occur from the [combustion](#) of a given formulation of gasoline. For more information, please go to our [predictive model](#) website area.

**Regional Haze:** The haze produced by a multitude of sources and activities which emit fine particles and their precursors across a broad geographic area. National regulations require states to develop plans to reduce the regional haze that impairs visibility in national parks and wilderness areas.

**Reid Vapor Pressure:** Refers to the vapor pressure of the fuel expressed in the nearest hundredth of a pound per square inch (psi) with a higher number reflecting more gasoline evaporation. (See also [Gasoline Volatility](#).)

**Residual Risk:** The quantity of health risk remaining after application of emission control.

**Ringelmann Chart:** A series of charts, numbered 0 to 5, that simulate various [smoke](#) densities by presenting different percentages of black. A Ringelmann No. 1 is equivalent to 20 percent black; a Ringelmann No. 5 is 100 percent black. They are used for measuring the [opacity](#) or equivalent obscuration of [smoke](#) arising from stacks and other [sources](#) by matching the actual effluent with the various numbers, or densities, indicated by the charts.

**Risk Assessment:** An evaluation of risk which estimates the relationship between exposure to a harmful substance and the likelihood that harm will result from that exposure.

**Risk Management:** An evaluation of the need for and feasibility of reducing risk. It includes consideration of magnitude of risk, available control technologies, and economic feasibility.

## S

**Sanctions:** Actions taken against a state or local government by the federal government for failure to plan or to implement a [State Implementation Plan](#) (SIP). Examples include withholding of highway funds and a ban on construction of new [sources](#) of potential pollution.

**Scientific Review Panel (SRP):** Mandated by [AB 1807](#), this nine-member panel advises the [ARB](#), [OEHHA](#), and the California Department of Pesticide Regulation on the scientific adequacy of the risk assessment portion of reports issued by those three agencies in the process of identifying substances as [toxic air contaminants](#). For more information, please go to our [SRP](#) website.

**Scrubber:** An air pollution control device that uses a high energy liquid spray to remove [aerosol](#) and gaseous pollutants from an air stream. The gases are removed either by absorption or chemical reaction.

**Secondary Particle:** Particles that are formed in the atmosphere. Secondary particles are products of the chemical reactions between gases, such as nitrates, [sulfur oxides](#), ammonia, and organic products.

**Sensitive Groups:** Identifiable subsets of the general population that are at greater risk than the general population to the toxic effects of a specific air pollutant (e.g., infants, asthmatics, elderly).

**Smog:** A combination of smoke and other particulates, [ozone](#), [hydrocarbons](#), [nitrogen oxides](#), and other chemically reactive compounds which, under certain conditions of weather and sunlight, may result in a murky brown haze that causes [adverse health effects](#). The primary source of smog in California is motor vehicles.

**Smog Check Program:** (See [Inspection and Maintenance Program](#)).

**Smoke:** A form of air pollution consisting primarily of [particulate matter](#) (*i.e., particles released by combustion*). Other components of smoke include gaseous air pollutants such as [hydrocarbons](#), [oxides of nitrogen](#), and [carbon monoxide](#). Sources of smoke may include fossil fuel combustion, agricultural burning, and other combustion processes.

**Solvent Base:** [Hydrocarbon](#)-containing compounds such as paint thinner used for the purpose of thinning various types of [coatings](#) such as paint.

**Soot:** Very fine carbon particles that have a black appearance when emitted into the air.

**Source:** Any place or object from which air pollutants are released. Sources that are fixed in space are [stationary sources](#) and sources that move are [mobile sources](#).

**Stakeholders:** Citizens, environmentalists, businesses, and government representatives that have a stake or concern about how air quality is managed.

**State Implementation Plan (SIP):** A plan prepared by states and submitted to U.S. EPA describing how each area will attain and maintain national [ambient air quality standards](#). SIPs include the technical foundation for understanding the air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. (See also [AQMP](#)). For more information, please go to our [SIP](#) website.

**Stationary Sources:** Non-mobile sources such as power plants, refineries, and manufacturing facilities which emit air pollutants. (See also [mobile sources](#)).

**Storage Tank:** Any stationary container, reservoir, or tank, used for storage of liquids.

**Stratosphere:** The layer of the Earth's [atmosphere](#) above the [troposphere](#) and below the [mesosphere](#). It extends between 10 and 30 miles above the Earth's surface and contains the [ozone layer](#) in its lower portion. The stratospheric layer mixes relatively slowly; pollutants that enter it may remain for long periods of time.

**Suggested Control Measure (SCM):** A model rule developed by air quality managers for local [air districts](#) to use to control the emissions from certain [stationary sources](#) of air pollution.

**Sulfates:** (See [Sulfur Oxides](#).)

**Sulfur Dioxide (SO<sub>2</sub>):** A strong smelling, colorless gas that is formed by the combustion of fossil fuels. Power plants, which may use coal or oil high in sulfur content, can be major sources of SO<sub>2</sub>. SO<sub>2</sub> and other sulfur oxides contribute to the problem of acid deposition. SO<sub>2</sub> is a [criteria air pollutant](#).

**Sulfur Oxides:** Pungent, colorless gases (sulfates are solids) formed primarily by the [combustion](#) of sulfur-containing [fossil fuels](#), especially coal and oil. Considered major air pollutants, sulfur oxides may impact human health and damage vegetation.

## T

**Thermosphere:** The outermost layer of the Earth's [atmosphere](#) extending from about 60 miles to several hundred miles. The temperature of this layer varies from many hundreds to thousands of degrees Celsius.

**Title III:** A section of the 1990 amendments to the federal [Clean Air Act](#) that addresses the control of toxic air emissions. For more information, please go to our [Title III](#) website.

**Title V:** A section of the 1990 amendments to the federal [Clean Air Act](#) that requires a federally enforceable operating permit for [major sources](#) of air pollution. For more information, please see our [Title V](#) website.

**Topography:** The configuration of a surface, especially the Earth's surface, including its relief and the position of its natural and man-made features.

**Total Organic Gases (TOG):** Gaseous organic compounds, including [reactive organic gases](#) and the relatively un-reactive organic gases such as methane.

**Total Suspended Particulate (TSP):** Particles of solid or liquid matter -- such as soot, dust, aerosols, fumes, and mist -- up to approximately 30 microns in size.

**Toxic Air Contaminant (TAC):** An air pollutant, identified in regulation by the ARB, which may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code section 39650 et seq.) than pollutants subject to [CAAQS](#)s. Health effects to TACs may occur at extremely low levels, and it is typically difficult to identify levels of exposure which do not produce adverse health effects. For more information, please view our [toxics](#) website.

**Toxic Best Available Control Technology (T-BACT):** The most effective emission limitation or control technique which (1) has been achieved in practice for such permit unit category or class of source; or (2) is any other emissions limitation or control technique, including process and equipment changes of basic and control equipment, found by the Executive Officer of the [California Air Resources Board](#) or Air Pollution Control Officer of the local districts to be technologically feasible for such class or category of sources, or for a specific source.

**Toxic Hot Spot:** A location where emissions from specific sources may expose individuals and population groups to elevated risks of [adverse health effects](#) -- including but not limited to cancer -- and contribute to the cumulative health risks of emissions from other sources in the area. For more information, please go to our [toxics hot spots](#) website.

**Transfer Efficiency:** For [coatings](#), a measure of the percent of the total amount of coating used which is transferred to a unit surface by a spray gun or other device.

**Transportation Control Measure (TCM):** Any control measure to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. TCMs can include encouraging the use of carpools and mass transit.

**Troposphere:** The layer of the Earth's [atmosphere](#) nearest to the surface of the Earth. The troposphere extends outward about five miles at the poles and about 10 miles at the equator.

## U

**Ultra-Low Emission Vehicle (ULEV):** Vehicles that meet the ARB ultra-low emission standards. These emission limits are between those for LEVs and ZEVs. For more information, please view our [DriveClean](#) website.

**Underground Storage Tank (UST):** Refers to tanks used to store gasoline underground. For more information, please go to the [underground storage tank](#) website.

**United States Environmental Protection Agency (U.S. EPA):** The federal agency charged with setting policy and guidelines, and carrying out legal mandates for the protection of national interests in environmental resources. For more information, please go to the [U.S. EPA](#) website.

**Unit Risk Number:** The number of potential excess cancer cases from a lifetime [exposure](#) to one microgram per cubic meter ( $\mu/m^3$ ) of a given substance. For example, a unit risk value of  $5.5 \times 10^{-6}$  would indicate an estimated 5.5 cancer cases per million people exposed to an average concentration of  $1 \mu/m^3$  of a specific carcinogen for 70 years.

**Urban Airshed Model:** A three-dimensional photochemical grid model designed to calculate the concentrations of both inert and chemically reactive pollutants in the [atmosphere](#). It simulates the physical and chemical processes that affect pollution concentrations.

## V

**Vapor:** The gaseous phase of liquids or solids at atmospheric temperature and pressure.

**Vapor Density:** The vapor density is expressed in grams per liter (g / L) and is compared to the density of air (air=1).

**Vapor Pressure:** The pressure, often expressed in millimeters of mercury (mm Hg) or pounds per square inch (PSI), which is characteristic at any given temperatures of a vapor in equilibrium with its liquid or solid form.

**Vapor Recovery Systems:** Mechanical systems that collect and recover chemical vapors resulting from transfer of gasoline from operations such as tank-to-truck systems at refineries, tanker-to-pipeline systems at offshore oil operations, and pump-to-vehicle systems at gasoline stations. For more information, please go to our [vapor recovery](#) website.

**Variance:** Permission granted for a limited time (under stated conditions) for a person or company to operate outside the limits prescribed in a regulation.

**Vehicle Miles Traveled (VMT):** The miles traveled by motor vehicles over a specified length of time (e.g., daily, monthly or yearly) or over a specified road or transportation corridor.

**Viscosity:** The degree to which a fluid resists flow under an applied force.

**Visibility:** A measurement of the ability to see and identify objects at different distances. Visibility reduction from air pollution is often due to the presence of sulfur and [nitrogen oxides](#), as well as [particulate matter](#).

**Visibility Reducing Particles (VRP):** Any particles in the [atmosphere](#) that obstruct the range of [visibility](#).

**Volatile:** Any substance that evaporates readily.

**Volatile Organic Compounds (VOCs):** Carbon-containing compounds that evaporate into the air (with a few exceptions). VOCs contribute to the formation of [smog](#) and / or may themselves be toxic. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints.

## W

**Water Base:** Water used as the solvent for coatings such a paint.

**Water Solubility:** The solubility of a substance in water provides information on the fate and transport in the environment. The higher the water solubility, the greater the tendency to remain dissolved and the less likely to volatilize from the water. Low water soluble substances will volatilize more readily in water and will partition to soil or bioconcentrate in aquatic organisms.

**Weight of Evidence:** The extent to which the available information supports the hypothesis that a substance causes an effect in humans. For example, factors which determine the weight-of-evidence that a chemical poses a hazard to humans include the number of tissue sites affected by the agent; the number of animal species, strains, sexes, relationship, statistical significance in the occurrence of the adverse effect in treated subjects compared to untreated controls; and the timing of the occurrence of adverse effect.

**Welfare-Based Standard (Secondary Standard):** An air quality standard that prevents, reduces, or minimizes injury to agricultural crops and livestock, damage to and the deterioration of property, and hazards to air and ground transportation.

**Woodburning Pollution:** Air pollution caused by woodburning stoves and fireplaces that emit [particulate matter](#), [carbon monoxide](#) and odorous and toxic substances. For more information, please see our [disposal of non-industrial wood waste](#) website.

## Z

**Zero Emission Vehicle (ZEV):** Vehicles which produce no emissions from the on-board source of power (e.g., an electric vehicle). For more information, please go to our [zero emission vehicles](#) program website.

## ACKNOWLEDGEMENTS

This glossary represents the efforts of numerous groups and individuals. Various ARB staff members reviewed this material and provided valuable comments, and without their help this

glossary would not have been possible. A special thanks goes to Jeff Lindberg, Aaron Philippi, and Erin Weaver who made substantial contributions to the development and final review of this document. Also, a special thanks goes to Gary Agid, Julie Billington, Edie Chang, Richard Corey, Bart E. Croes, Joe De Vita, Bob Fletcher, Rachel Kirlis, Bill Loscutoff, Cynthia Marvin, Linda Murchison, Marci Nystrom, Bill Oslund, Bruce Oulrey, Jon Pederson, Michael Poore, Mark Tavianini, Jon Taylor, Doug Thompson and Todd Wong, all of whom contributed to the development of the Air Quality Glossary.

This glossary has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the ARB. Although the ARB has taken many steps to ensure that the information in this glossary is correct and up-to-date, readers should note that the codes are frequently amended, and the courts from time to time interpret their provisions. When necessary, readers should consult the official codes and handbooks or procure the services of an attorney. Copies of the California Codes can be found in each county's library and in law school libraries.



# Glossary of Terms Used in Greenhouse Gas Inventories

## A

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### **Activity Data**

Data on the magnitude of a human activity resulting in emissions or removals taking place during a given period of time. Data on energy use, metal production, land areas, management systems, lime and fertilizer use and waste arisings are examples of activity data. ([IPCC](#))

### **Aerosols**

A collection of airborne solid or liquid particles, with a typical size between 0.01 and 10 micrometer that reside in the atmosphere for at least several hours. Aerosols may be of either natural or anthropogenic origin. Aerosols may influence climate in several ways: directly through scattering and absorbing radiation, and indirectly by acting as cloud condensation nuclei or modifying the optical properties and lifetime of clouds ([IPCC2](#))

### **Afforestation**

Planting of new forests on lands that historically have not contained forests. ([IPCC2](#)) Air Pollutant Any man-made and/or natural substance occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation, and/or materials. ([CARB](#))

### **Anthropogenic**

The term "anthropogenic", in the context of greenhouse gas inventories, refers to greenhouse gas emissions and removals that are a direct result of human activities or are the result of natural processes that have been affected by human activities. ([USEPA2](#))

### **Atmosphere**

The gaseous envelope surrounding the Earth. The dry atmosphere consists almost entirely of nitrogen (78.1% volume mixing ratio) and oxygen (20.9% volume mixing ratio), together with a number of trace gases, such as argon (0.93% volume mixing ratio), helium and radiatively active greenhouse gases such as carbon dioxide (0.035% volume mixing ratio) and ozone. In addition, the atmosphere contains the greenhouse gas water vapor, whose amounts are highly variable but typically around 1% volume mixing ratio. The atmosphere also contains clouds and aerosols. ([IPCC2](#))

## B

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### **Baseline Emissions**

A baseline is a measurement, calculation, or time used as a basis for comparison. Baseline emissions are the level of emissions that would occur without policy intervention or without implementation of a project. Baseline estimates are needed to determine the effectiveness of emission reduction programs (also called mitigation strategies).

**Base Year**

The starting year for the inventory. Targets for reducing GHG emissions are often defined in relation to the base year. Under AB 32, the base year for California's greenhouse gas inventory is 1990.

**Biogenic**

Produced by the biological processes of living organisms. Note that we use the term "biogenic" to refer only to recently produced (that is non-fossil) material of biological origin. IPCC guidelines recommend that peat be treated as a fossil carbon because it takes a long time to replace harvested peat.

**Biogeochemical Cycle**

Movements through the Earth system of key chemical constituents essential to life, such as carbon, nitrogen, oxygen, and phosphorus. ([NASA](#))

**Biomass**

Either (1) the total mass of living organisms in a given area or of a given species usually expressed as dry weight; or (2) Organic matter consisting of or recently derived from living organisms (especially regarded as fuel) excluding peat. Includes products, by-products and waste derived from such material. (IPCC1)

**Biomass Waste**

Organic non-fossil material of biological origin that is a byproduct or a discarded product. "Biomass waste" includes municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural crop byproducts, straw, and other biomass solids, liquids, and gases; but excludes wood and wood-derived fuels (including black liquor), biofuels feedstock, biodiesel, and fuel ethanol. Note: EIA "biomass waste" data also include energy crops grown specifically for energy production, which would not normally constitute waste. ([EIA](#))

**Black Carbon**

Operationally defined aerosol species based on measurement of light absorption and chemical reactivity and/or thermal stability; consists of soot, charcoal and/or possible light absorbing refractory organic matter (Charlson and Heintzenberg, 1995, p. 401). ([IPCC2](#))

## C

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**Carbon Cycle**

All parts (reservoirs) and fluxes of carbon. The cycle is usually thought of as four main reservoirs of carbon interconnected by pathways of exchange. The reservoirs are the atmosphere, terrestrial biosphere (usually includes freshwater systems), oceans, and sediments (includes fossil fuels). The annual movements of carbon, the carbon exchanges between reservoirs, occur because of various chemical, physical, geological, and biological processes. The ocean contains the largest pool of carbon near the surface of the Earth, but most of that pool is not involved with rapid exchange with the atmosphere. ([NASA](#))

**Carbon Dioxide (CO<sub>2</sub>)**

A naturally occurring gas, and also a by-product of burning fossil fuels and biomass, as well as land-use changes and other industrial processes. It is the principal anthropogenic greenhouse gas that affects the Earth's radiative balance. It is the reference gas against which other greenhouse gases are measured and therefore has a Global Warming Potential of 1. ([IPCC2](#))

### Carbon Dioxide Equivalent (CO<sub>2</sub>e)

A metric used to compare emissions of various greenhouse gases. It is the mass of carbon dioxide that would produce the same estimated radiative forcing as a given mass of another greenhouse gas. Carbon dioxide equivalents are computed by multiplying the mass of the gas emitted by its global warming potential.

### Carbon Equivalent (CE)

A metric measure used to compare the emissions of the different greenhouse gases based upon their global warming potential. Carbon equivalents can be calculated from carbon dioxide equivalents by multiplying the carbon dioxide equivalents by 12/44 (the ratio of the molecular weight of carbon to that of carbon dioxide). The use of carbon equivalent is declining in GHG inventories.

### Carbon Intensity

The amount of carbon by weight emitted per unit of energy consumed. A common measure of carbon intensity is weight of carbon per British thermal unit (Btu) of energy. When there is only one fossil fuel under consideration, the carbon intensity and the emissions coefficient are identical. When there are several fuels, carbon intensity is based on their combined emissions coefficients weighted by their energy consumption levels. ([EIA](#))

### Carbon Sequestration

This refers to the capture of CO<sub>2</sub> from the atmosphere and its long term storage in oceans (oceanic carbon sequestration), in biomass and soils (terrestrial carbon sequestration) or in underground reservoirs (geologic carbon sequestration).

### Chlorofluorocarbons (CFCs)

Greenhouse gases covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Because they are not destroyed in the lower atmosphere, CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are being replaced by other compounds, including hydrochlorofluorocarbons and hydrofluorocarbons, which are greenhouse gases covered under the Kyoto Protocol. ([IPCC3](#))

### Climate

Climate in a narrow sense is usually defined as the "average weather" or more rigorously as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years. The classical period is 30 years, as defined by the World Meteorological Organization (WMO). These relevant quantities are most often surface variables such as temperature, precipitation, and wind. Climate in a wider sense is the state, including a statistical description, of the climate system. ([IPCC2](#))

### Climate Change

Climate change refers to a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer). Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use. ([IPCC2](#))

### Cogeneration

means an industrial structure, installation, plant, building, or self-generating facility that has sequential or simultaneous generation of multiple forms of useful energy (usually mechanical and thermal) in a single, integrated system. ([CARB](#))

**Combined heat and power (CHP)**

is the simultaneous production of both electricity and useful heat for application by the producer or to be sold to other users with the aim of better utilisation of the energy used. Public utilities may utilise part of the heat produced in power plants and sell it for public heating purposes. Industries as auto-producers may sell part of the excess electricity produced to other industries or to electric utilities. ([IPCC](#))

**Consistency**

Consistency means that an inventory should be internally consistent in all its elements over a period of years. An inventory is consistent if the same methodologies are used for the base and all subsequent years and if consistent data sets are used to estimate emissions or removals from sources or sinks. ([IPCC](#))

**Continuous Emission Monitor (CEM)**

A type of air emission monitoring system installed to operate continuously inside of a smokestack or other emission source. ([CARB](#))

**Criteria Air Pollutant**

An air pollutant for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples include: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM10 and PM2.5. The term "criteria air pollutants" derives from the requirement that the U.S. EPA must describe the characteristics and potential health and welfare effects of these pollutants. The U.S. EPA and CARB periodically review new scientific data and may propose revisions to the standards as a result. ([CARB](#))

## D

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**Deforestation**

Those practices or processes that result in the change of forested lands to non-forest uses. This is often cited as one of the major causes of the enhanced greenhouse effect for two reasons: 1) the burning or decomposition of the wood releases carbon dioxide; and 2) trees that once removed carbon dioxide from the atmosphere in the process of photosynthesis are no longer present and contributing to carbon storage. ([UNFCCC](#))

**Distillate fuel oil**

A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation. ([EIA](#))

## E

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### **Emissions**

The release of a substance (usually a gas when referring to the subject of climate change) into the atmosphere. ([USEPA1](#))

### **Emission Factor**

A coefficient that quantifies the emissions or removals of a gas per unit activity. Emission factors are often based on a sample of measurement data, averaged to develop a representative rate of emission for a given activity level under a given set of operating conditions. ([IPCC](#))

### **Emission Inventory**

An estimate of the amount of pollutants emitted into the atmosphere from major mobile, stationary, area-wide, and natural source categories over a specific period of time such as a day or a year. ([CARB](#))

### **Emission Rate**

The weight of a pollutant emitted per unit of time (e.g., tons / year). ([CARB](#))

### **Estimation**

is the assessment of the value of an un-measurable quantity using available data and knowledge within stated computational formulas or mathematical models.

## F

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### **Fluorocarbons**

Carbon-fluorine compounds that often contain other elements such as hydrogen, chlorine, or bromine. Common fluorocarbons include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). ([UNFCCC](#))

### **Flux**

Either (1) Raw materials, such as limestone, dolomite, lime, and silica sand, which are used to reduce the heat or other energy requirements of thermal processing of minerals (such as the smelting of metals). Fluxes also may serve a dual function as a slagging agent. (2) The rate of flow of any liquid or gas, across a given area; the amount of this crossing a given area in a given time. (e.g., "Flux of CO<sub>2</sub> absorbed by forests").([IPCC](#))

### **Fossil Fuel**

Geologic deposits of hydrocarbons from ancient biological origin, such as coal, petroleum and natural gas.

### **Fuel Combustion**

fuel combustion is the intentional oxidation of materials within an apparatus that is designed to provide heat or mechanical work to a process, or for use away from the apparatus. ([IPCC](#))

### **Fugitive Emissions**

Emissions that are not emitted through an intentional release through stack or vent. This can include leaks from industrial plant and pipelines. ([IPCC](#))

## G

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### **Geologic carbon sequestration**

It is the process of injecting CO<sub>2</sub> from a source, such as coal-fired electric generating power plant, through a well into the deep subsurface. With proper site selection and management, geologic sequestration could play a major role in reducing emissions of CO<sub>2</sub>. Research efforts to evaluate the technical aspects of CO<sub>2</sub> geologic sequestration are underway. ([USEPA4](#))

### **Global Warming**

Global warming is an average increase in the temperature of the atmosphere near the Earth's surface and in the troposphere, which can contribute to changes in global climate patterns. Global warming can occur from a variety of causes, both natural and human induced. In common usage, "global warming" often refers to the warming that can occur as a result of increased emissions of greenhouse gases from human activities. Also see Climate Change ([USEPA1](#))

### **Global Warming Potential (GWP)**

An index, based upon radiative properties of well-mixed greenhouse gases, measuring the radiative forcing of a unit mass of a given well-mixed greenhouse gas in the present-day atmosphere integrated over a chosen time horizon, relative to that of carbon dioxide. The GWP represents the combined effect of the differing times these gases remain in the atmosphere and their relative effectiveness in absorbing outgoing thermal infrared radiation. The Kyoto Protocol is based on GWPs from pulse emissions over a 100-year time frame. ([IPCC2](#))

### **Global Warming Solutions Act of 2006 (AB 32)**

AB 32 requires the California Air Resources Board (CARB) to develop regulations and market mechanisms that will ultimately reduce California's greenhouse gas emissions by 25 percent by 2020. Specifically, AB 32, requires CARB to: establish a statewide greenhouse gas emissions cap for 2020, based on 1990 emissions by January 1, 2008; adopt mandatory reporting rules for significant sources of greenhouse gases by January 1, 2009; adopt a scoping plan by January 1, 2009 indicating how emission reductions will be achieved from significant greenhouse gas sources via regulations, market mechanisms and other actions; adopt regulations by January 1, 2011 to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas; and convene an Environmental Justice Advisory Committee, and an Economic and Technology Advancement Advisory Committee to advise CARB.

### **Greenhouse Effect**

Trapping and build-up of heat in the atmosphere (troposphere) near the earth's surface. Some of the heat flowing back toward space from the earth's surface is absorbed by water vapor, carbon dioxide, ozone, and several other gases in the atmosphere and then reradiated back toward the earth's surface. If the atmospheric concentrations of these greenhouse gases rise, the average temperature of the lower atmosphere will gradually increase. ([UNFCC](#))

### **Greenhouse Gas**

Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O),

hydrochlorofluorocarbons (HCFCs), ozone (O<sub>3</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). ([UNFCC](#))

### **Gross Domestic Product (GDP)**

The sum of gross value added, at purchasers' prices, by all resident and non-resident producers in the economy, plus any taxes and minus any subsidies not included in the value of the products in a country or a geographic region for a given period, normally one year. It is calculated without deducting for depreciation of fabricated assets or depletion and degradation of natural resources. ([IPCC3](#))

## **H**

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### **Halocarbons**

A collective term for the group of partially halogenated organic species, including the chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), halons, methyl chloride, methyl bromide, etc. Many of the halocarbons have large Global Warming Potentials. The chlorine and bromine-containing halocarbons are also involved in the depletion of the ozone layer. ([IPCC2](#))

### **Hydrocarbons**

Strictly defined as molecules containing only hydrogen and carbon. The term is often used more broadly to include any molecules in petroleum which also contains molecules with S, N, or O. An unsaturated hydrocarbon is any hydrocarbon containing olefinic or aromatic structures. ([IPCC](#))

### **Hydrofluorocarbons (HFCs)**

Compounds containing only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are powerful greenhouse gases with global warming potentials ranging from 140 (HFC-152a) to 11,700 (HFC-23). ([USEPA1](#))

## **I**

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### **Intergovernmental Panel on Climate Change**

The IPCC was established jointly by the United Nations Environment Programme and the World Meteorological Organization in 1988. The purpose of the IPCC is to assess information in the scientific and technical literature related to all significant components of the issue of climate change. The IPCC draws upon hundreds of the world's expert scientists as authors and thousands as expert reviewers. Leading experts on climate change and environmental, social, and economic sciences from some 60 nations have helped the IPCC to prepare periodic assessments of the scientific underpinnings for understanding global climate change and its consequences. With its capacity for reporting on climate change, its consequences, and the viability of adaptation and mitigation measures, the IPCC is also looked to as the official advisory body to the world's governments on the state of the science of the climate change issue. For example, the IPCC organized the development of internationally accepted methods for conducting national greenhouse gas emission inventories. ([USEPA1](#))

## K

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### **Kyoto Protocol**

The Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1997 in Kyoto, Japan, at the Third Session of the Conference of the Parties (COP) to the UNFCCC. It contains legally binding commitments, in addition to those included in the UNFCCC. Countries included in Annex B of the Protocol (most Organization for Economic Cooperation and Development countries and countries with economies in transition) agreed to reduce their anthropogenic greenhouse gas emissions (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride) by at least 5% below 1990 levels in the commitment period 2008 to 2012. The Kyoto Protocol entered into force on 16 February 2005. ([IPCC2](#))

L

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### **Land Use and Land Use Change**

Land use refers to the total of arrangements, activities and inputs undertaken in a certain land cover type (a set of human actions). The term land use is also used in the sense of the social and economic purposes for which land is managed (e.g., grazing, timber extraction and conservation). Land use change refers to a change in the use or management of land by humans, which may lead to a change in land cover. Land cover and land use change may have an impact on the surface albedo, evapotranspiration, sources and sinks of greenhouse gases, or other properties of the climate system and may thus have a radiative forcing and/or other impacts on climate, locally or globally. ([IPCC2](#))

### **LULUCF**

Acronym for "Land Use, Land Use Change and Forestry", a category of activities in GHG inventories.

## M

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### **Methane (CH<sub>4</sub>)**

A hydrocarbon that is a greenhouse gas with a global warming potential most recently estimated at 25 times that of carbon dioxide (CO<sub>2</sub>). Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion. The GWP is from the IPCC's Fourth Assessment Report (AR4).

### **Metric Ton**

The tonne (t) or metric ton, sometimes referred to as a metric tonne, is an international unit of mass. A metric ton is equal to a Megagram (Mg), 1000 kilograms, 2204.6 pounds, or 1.1023 short tons.

Million Metric Tons (MMT) Common measurement used in GHG inventories. It is equal to a Teragram (Tg).

### **Mobile Sources**

Sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes. ([CARB](#))

## Model

A model is a quantitatively-based abstraction of a real-world situation which may simplify or neglect certain features to better focus on its more important elements. ([IPCC](#))

## Municipal Solid Waste (MSW)

Residential solid waste and some non-hazardous commercial, institutional, and industrial wastes. This material is generally sent to municipal landfills for disposal. ([USEPA1](#))

# N

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## Natural Sources

Non-manmade emission sources, including biological and geological sources, wildfires, and windblown dust. ([CARB](#))

## Nitrogen fixation

Conversion of atmospheric nitrogen gas into forms useful to plants and other organisms by lightning, bacteria, and blue-green algae; it is part of the nitrogen cycle. ([UNFCC](#))

## Nitrogen Oxides (NO<sub>x</sub>)

Gases consisting of one molecule of nitrogen and varying numbers of oxygen molecules. Nitrogen oxides are produced in the emissions of vehicle exhausts and from power stations. In the atmosphere, nitrogen oxides can contribute to formation of photochemical ozone (smog), can impair visibility, and have health consequences; they are thus considered pollutants. ([NASA](#))

## Nitrous Oxide (N<sub>2</sub>O)

A powerful greenhouse gas with a global warming potential of 298 times that of carbon dioxide (CO<sub>2</sub>). Major sources of nitrous oxide include soil cultivation practices, especially the use of commercial and organic fertilizers, manure management, fossil fuel combustion, nitric acid production, and biomass burning. The GWP is from the IPCC's Fourth Assessment Report (AR4).

# O

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## Ozone (O<sub>3</sub>)

Ozone, the triatomic form of oxygen (O<sub>3</sub>), is a gaseous atmospheric constituent. In the troposphere, it is created both naturally and by photochemical reactions involving gases resulting from human activities (smog). Tropospheric ozone acts as a greenhouse gas. In the stratosphere, it is created by the interaction between solar ultraviolet radiation and molecular oxygen (O<sub>2</sub>). Stratospheric ozone plays a dominant role in the stratospheric radiative balance. Its concentration is highest in the ozone layer. ([IPCC2](#))

## Ozone Depleting Substances (ODS)

A compound that contributes to stratospheric ozone depletion. Ozone-depleting substances (ODS) include CFCs, HCFCs, halons, methyl bromide, carbon tetrachloride, and methyl chloroform. ODS are generally very stable in the troposphere and only degrade under intense ultraviolet light in the stratosphere. When they break down, they release chlorine or bromine atoms, which then deplete ozone. ([IPCC](#))

## P

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### **Perfluorocarbons (PFCs)**

A group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly CF<sub>4</sub> and C<sub>2</sub>F<sub>6</sub>) were introduced as alternatives, along with hydrofluorocarbons, to the ozone depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are also used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they are powerful greenhouse gases: CF<sub>4</sub> has a global warming potential (GWP) of 7,390 and C<sub>2</sub>F<sub>6</sub> has a GWP of 12,200. The GWP is from the IPCC's Fourth Assessment Report (AR4).

### **Photosynthesis**

The process by which plants take carbon dioxide from the air (or bicarbonate in water) to build carbohydrates, releasing oxygen in the process. There are several pathways of photosynthesis with different responses to atmospheric carbon dioxide concentrations. ([IPCC2](#))

### **Point Sources**

Specific points of origin where pollutants are emitted into the atmosphere such as factory smokestacks. ([CARB](#))

### **Process emissions**

Emissions from industrial processes involving chemical transformations other than combustion. ([IPCC](#))

## R

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### **Radiative Forcing**

A change in the balance between incoming solar radiation and outgoing infrared (i.e., thermal) radiation. Without any radiative forcing, solar radiation coming to the Earth would continue to be approximately equal to the infrared radiation emitted from the Earth. The addition of greenhouse gases to the atmosphere traps an increased fraction of the infrared radiation, reradiating it back toward the surface of the Earth and thereby creates a warming influence. ([UNFCC](#))

### **Reforestation**

Planting of forests on lands that have previously contained forests but that have been converted to some other use. ([IPCC2](#))

### **Regeneration**

The act of renewing tree cover by establishing young trees, naturally or artificially - note regeneration usually maintains the same forest type and is done promptly after the previous stand or forest was removed. ([CSU](#))

### **Residence Time**

Average time spent in a reservoir by an individual atom or molecule. Also, this term is used to define the age of a molecule when it leaves the reservoir. With respect to greenhouse gases, residence time usually refers to how long a particular molecule remains in the atmosphere. ([UNFCC](#))

### **Reservoir**

Either (1) a component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored; or (2) Water bodies regulated for human activities (energy production,

irrigation, navigation, recreation etc.) where substantial changes in water area due to water level regulation may occur. ([IPCC](#))

### **Respiration**

The process whereby living organisms convert organic matter to carbon dioxide, releasing energy and consuming molecular oxygen. ([IPCC2](#))

## **S**

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### **Short Ton**

Common measurement for a ton in the United States. A short ton is equal to 2,000 lbs or 0.907 metric tons. ([USEPA1](#))

### **Sink**

Any process, activity or mechanism that removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas or aerosol from the atmosphere. ([IPCC2](#))

### **Solar Radiation**

Electromagnetic radiation emitted by the Sun. It is also referred to as shortwave radiation. Solar radiation has a distinctive range of wavelengths (spectrum) determined by the temperature of the Sun, peaking in visible wavelengths. ([IPCC2](#))

### **Source**

Any process, activity or mechanism that releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas or aerosol into the atmosphere. ([IPCC2](#))

### **Stationary Sources**

Non-mobile sources such as power plants, refineries, and manufacturing facilities which emit air pollutants. ([CARB](#))

### **Sulfur Dioxide (SO<sub>2</sub>)**

A compound composed of one sulfur and two oxygen molecules. Sulfur dioxide emitted into the atmosphere through natural and anthropogenic processes is changed in a complex series of chemical reactions in the atmosphere to sulfate aerosols. These aerosols are believed to result in negative radiative forcing (i.e., tending to cool the Earth's surface) and do result in acid deposition (e.g., acid rain). ([UNFCCC](#))

### **Sulfur Hexafluoride (SF<sub>6</sub>)**

A colorless gas soluble in alcohol and ether, slightly soluble in water. A very powerful greenhouse gas with a global warming potential most recently estimated at 22,800 times that of carbon dioxide (CO<sub>2</sub>). SF<sub>6</sub> is used primarily in electrical transmission and distribution systems and as a dielectric in electronics. This GWP is from the IPCC's Fourth Assessment Report (AR4).

## **T**

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### **Terrestrial carbon sequestration**

It is the process through which carbon dioxide (CO<sub>2</sub>) from the atmosphere is absorbed by trees, plants and crops through photosynthesis, and stored as carbon in biomass (tree trunks, branches, foliage and

roots) and soils. The term "sinks" is also used to refer to forests, croplands, and grazing lands, and their ability to sequester carbon. Agriculture and forestry activities can also release CO<sub>2</sub> to the atmosphere. Therefore, a carbon sink occurs when carbon sequestration is greater than carbon releases over some time period. ([USEPA3](#))

### **Total Organic Gases (TOG)**

Gaseous organic compounds, including reactive organic gases and the relatively unreactive organic gases such as methane. ([CARB](#))

### **Transparency**

Transparency means that the assumptions and methodologies used for an inventory should be clearly explained to facilitate replication and assessment of the inventory by users of the reported information. The transparency of inventories is fundamental to the success of the process for the communication and consideration of information. ([IPCC](#))

### **Trend**

The trend of a quantity measures its change over a time period, with a positive trend value indicating growth in the quantity, and a negative value indicating a decrease. It is defined as the ratio of the change in the quantity over the time period, divided by the initial value of the quantity, and is usually expressed either as a percentage or a fraction. ([IPCC](#))

## **W**

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### **Water Vapor**

The most abundant greenhouse gas; it is the water present in the atmosphere in gaseous form. Water vapor is an important part of the natural greenhouse effect. While humans are not significantly increasing its concentration, it contributes to the enhanced greenhouse effect because the warming influence of greenhouse gases leads to a positive water vapor feedback. In addition to its role as a natural greenhouse gas, water vapor plays an important role in regulating the temperature of the planet because clouds form when excess water vapor in the atmosphere condenses to form ice and water droplets and precipitation. ([UNFCC](#))

### **Weather**

Atmospheric condition at any given time or place. It is measured in terms of such things as wind, temperature, humidity, atmospheric pressure, cloudiness, and precipitation. In most places, weather can change from hour-to-hour, day-to-day, and season-to-season. Climate in a narrow sense is usually defined as the "average weather", or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years. The classical period is 30 years, as defined by the World Meteorological Organization (WMO). These quantities are most often surface variables such as temperature, precipitation, and wind. Climate in a wider sense is the state, including a statistical description, of the climate system. A simple way of remembering the difference is that climate is what you expect (e.g. cold winters) and 'weather' is what you get (e.g. a blizzard). ([USEPA1](#))