# PLACER COUNTY AIR POLLUTION CONTROL DISTRICT BOARD OF DIRECTORS WORKSHOP - 2004

February 11, 2004 5: 30-7:30 PM

**Placer County Planning Commission Hearing Room** 

# TOPICAL REPORT

# PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

# TOPICAL REPORT

# **OVERVIEW**

This report has been prepared for the Placer County Air Pollution Control District Directors in advance of the 2004 Board Workshop. It is intended to provide information in a format that follows the topical agenda of the workshop, and it should introduce members to "air pollution" and the regulatory environment that has been created to "control" it. Throughout this report, we have keyed on addressing emerging or significant issues. These areas are called out because these issues may affect our operations, resources, or impact the regulatory environment. It is anticipated that with a review of this report, and the material that is contained in the Directors Handbook, that members will have sufficient information to focus during the workshop upon areas of concern, issues of significance, or to ask questions of staff.

# TOPICAL REPORT

# **TABLE OF CONTENTS**

# I. INTRODUCTION/GOVERNANCE/AUTHORITY

Thomas Christofk, Air Pollution Control Officer, Director of Air Pollution Control

- □ Local/State/Federal
  - Overview on Emission Sources
  - Air Basins & Regions
- □ Mission
- □ District Organization
  - Directors
  - Hearing Board
  - District Staff
- □ Program Overview

# II. PROGRAM OVERVIEW/ COMPLIANCE & ENFORCEMENT

Todd Nishikawa, Compliance & Enforcement Manager

- **□** Permitting/Compliance
  - Stationary Source Permitting
  - Title V Federal Operating Permits
  - Gasoline Dispensing
  - Emission Reduction Credits
- □ Inspections and Field Enforcement
  - Inspections and Testing
  - Complaint Investigation
  - Sampling and Analysis Services Contract
- Adoption of Rules and Regulations
  - Authority to Adopt Rules and Regulations
  - Annual List of Regulatory Measures and Public Outreach
- □ Enforcement
  - Action on Violations
  - Mutual Settlement Process
  - Prosecution of Enforcement Cases Not Settled With the District

# II. COMPLIANCE & ENFORCEMENT, continued

- □ Burning Program Overview
  - Burning Categories
  - Agricultural Burning
  - Non-Agricultural Burning
- □ Air Toxics Overview
  - Air Toxics Hot Spots@ Information and Assessment Act of 1987
  - Section 112(g) of the Federal Clean Air Act and Toxics New Source Review
  - Airborne Toxic Control Measures
  - Significant Risk Policy
  - Environmental Justice and Knowledge Based Land Use Decisions

# III. AIR QUALITY PLANNING & MONITORING

Dave Vintze, Planning & Monitoring Manager

- □ Air Quality Planning
- **□** Emissions Inventory Data
- □ Land Use
- □ Clean Air Grants
- □ Air Monitoring Network
- **□** Educational/Outreach Efforts

# IV. FISCAL OVERVIEW

Jane Bailey, Accountant/Auditor II, Administrative Services Manager

- **□** Fund Description
- □ FY 2003/04 Budget Status

# V. RESOURCE PLANNING

Thomas Christofk, Air Pollution Control Officer, Director of Air Pollution Control

- □ Staffing
- □ Facilities
- □ District/County Relationship

# I. INTRODUCTION/ GOVERNANCE/AUTHORITY

# INTRODUCTION/GOVERNANCE/AUTHORITY

# **Local/State/Federal:**

The Placer County Air Pollution Control District (District) is one of 35 local air pollution control agencies established pursuant to Section 40002 of the California Health & Safety Code (HSC). The District has primary responsibility for the control of air pollution from all local sources except emissions from motor vehicles, which is the responsibility of the California Air Resources Board (ARB). The United States Environmental Protection Agency (USEPA) sets limits on how much of a pollutant can be in the air anywhere in the United States. This ensures that all Americans have the same basic health and environmental protections. The Federal Clean Air Act allows individual states to have stronger pollution controls, but states are not allowed to have weaker pollution controls 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, housing patterns, etc. States have to develop state implementation plans (SIPs) that explain how each state will do its job under the Clean Air Act. A state implementation plan is a collection of the regulations a state will use to improve the air 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.

EPA must approve each SIP, and if a SIP isn't acceptable, 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 money 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. Each district is responsible for preparing, adopting, and implementing the air quality plans (SIPs) that seek to achieve and maintain state and federal air quality standards, or to regain attainment of standards that have been exceeded. In some cases, the strategies contained in these plans can only be implemented by local jurisdictions with land use authority. Generally, local air districts have limited authority through the California Environmental Quality Act (CEQA) to comment on land use projects, unless the project requires a permit from the district, in which case the district becomes a responsible agency. The primary authority of the 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.

The Placer County Air Pollution Control District is a "county" district with its jurisdiction being the County of Placer. In comparison with other county air districts, ours 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. Also, 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 is provided technical and program development assistance by the Air Resources Board (ARB), which also has a consultation and oversight role with respect to the local air districts. ARB conducts periodic audits of district programs, with the next one scheduled for 2007. Audits of federal programs may be conducted jointly by ARB and U.S. EPA staff.

#### Emission Sources

Air pollution comes from many different sources: stationary sources such as factories, power plants, and boilers and 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 can also emit a wide variety of types of pollutants. The EPA has these pollutants classified as the six principal pollutants (or criteria pollutants) which are: Ozone; Particulate Matter; Carbon Monoxide; Sulfur Dioxide; Nitrogen Dioxide; and Lead. At this time, the only pollutant for which Placer County does not meet Federal air quality standards is ozone. In our region, excluding the naturally occurring (biogenic/geogenic) sources, the current estimates are that there are about 275 tons per day of ozone precursors in the emission "inventory", with about 72% from mobile sources, and 28% from stationary and area sources. In the near future, based upon EPA's initial documentation, it is probable that we will also be designated as not meeting (or attaining) the Federal standards for fine particulate matter.

# Air Basins

Portions of Placer County are within the boundaries of three air basins, which have been established by the State: the Sacramento Valley Air Basin, the Mountain Counties Air Basin, and the Lake Tahoe Air Basin. Placer County is designated as non-attainment for Federal (with a *Severe* designation) and State ozone ambient air quality standards in both the Sacramento Valley and Mountain Counties Air Basins, which are part of a broader Sacramento Federal Ozone Nonattainment Area (SFONA). Placer County is in non-attainment of State standards for PM<sub>10</sub> in the Sacramento Valley Air Basin, the Mountain Counties Air Basin, and the Lake Tahoe Air Basin. It is expected that all portions of Placer County will be designated as nonattainment with the new National ambient Air Quality Standard for Ozone (8 hour averaging) being implemented in April 2004 and the new standard for particulate matter less than 2.5 microns is size (PM <sub>2.5</sub>).

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.

The Sacramento Valley Air Basin is shared with eight (8) other air districts which are wholly or partially within the Sacramento Valley Air Basin: 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.

The Mountain Counties Air Basin is shared with five (5) 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.

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 exception of the permitting of stationary sources, and complaint response, most air quality issues are addressed by the Tahoe Regional Planning Agency (TRPA).

# **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. We 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 accomplishment of them.

# **District:**

# Board of Directors

As of January 2004, the District's governing board, referred to as "Directors", has increased to nine members, with every jurisdiction in the county having full time representation on the Board. Three seats are held by the County, with each of the six incorporated municipalities having one seat. This configuration of the Board will be reviewed at the end of 2004 to ensure it is representing the geographic diversity of the district and the variation of population between the unincorporated and incorporated jurisdictions. The District Board of Directors 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 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 §40801 HSC, it 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 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 (§40750 HSC), the head of each local air district has the title of Air Pollution Control Officer (APCO). The APCO receives direction from and reports to the District Board on matters of District business. On matters of District business, the District staff other than the APCO, receive their direction from and report to the District Board through the APCO. As to personnel type issues involving any District staff, including employee rights, privileges, and responsibilities, and as to matters related to County services, facilities, and policies, the APCO receives direction from and reports to the District Board and the County Executive Officer (CEO) jointly. Additionally, on personnel related issues, including employee rights, privileges, and responsibilities, District staff generally receive their direction from and report to the APCO, but additionally have access on these issues to any other appropriate County individual 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, than at the request of the City Manager, the APCO will provide administrative or other support to the City Manager on issues related to the services, facilities or staff provided.

The District is organized into three 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 permitting stationary sources of emissions in accordance with applicable State and Federal laws and District regulations; identifying and permitting new sources of pollution; compliance education and response to business inquiries; burning regulations and smoke management; rulemaking; inspecting and investigating to ensure compliance with regulations and permits; alleviating toxic and public nuisance problems through education, intervention, and field enforcement action as necessary; administering the Emission Reduction Credit banking program; initiating enforcement actions and resolving through the mutual settlement process, DA involvement, or litigation, as necessary.

# 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 for adoption; assisting in the development of land use plans; reviewing environmental documents submitted by lead agencies in compliance with the California Environmental Quality Act; preparing environmental documents when the District is the lead agency; inspecting new development to verify mitigation measures were implemented; administering the Clean Air Grant and Offsite Mitigation Programs; providing public outreach and information; operating air monitoring equipment at three existing locations and developing additional ones; 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, technical staff and Board of Directors, including: Clerk of the Board functions; preparation of Board information and action items; tracking, filing, and archiving of documents; fiscal matters to include budget preparation, payroll, accounts receivable, accounts payable, purchasing, and cost accounting/cost allocation; scheduling for staff; oversight of network computers and office equipment; data base management and training; permit administration and coordination; maintenance and control of personnel files and training logs; front counter operations to include customer service and complaint registration/intake; and overall office management functions to include facility maintenance.

# **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 as described above. The major programs can be summarized as:

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

# II. COMPLIANCE AND ENFORCEMENT

# PROGRAM OVERVIEW

# Significant Issues discussed in this section:

- Diesel particulate as a toxic contaminant
- Un-regulated Stationary Source Compliance Plan
- Transport mitigation requirements
- All feasible measures
- Title V Program implementation
- Agricultural source permitting
- Rice Burning Emission Reduction Credits
- ERC availability concerns
- Enforcement augmentation
- Existing SIP commitments
- 1-Hour or 8-Hour Ozone Standard SIP Submittal Control Measures
- The "Clear Skies Initiative"
- New source review reform
- Transport mitigation offset threshold changes
- Particulate matter control measures
- Administrative civil penalties
- Mutual settlement policy & procedures development
- District Attorney alternatives
- Vegetation management visioning project
- Toxic emissions and land use decisions
- Naturally occurring asbestos and fugitive dust control
- UPPR J.R. Yard diesel particulate risk assessment

# PERMITTING COMPLIANCE

# **Stationary Source Permitting:**

The Stationary Source Permitting Program refers to the permitting and enforcement of District Rules and Regulations and federal and state statutes applicable to industrial emissions sources for which the District has authority. District permits are required of any person that builds, erects, alters, replaces, operates, or uses any article, machine, equipment or other contrivance which causes or may cause the issuance of air contaminants, or which eliminates, reduces, or controls the issuance of air contaminants. The District generally does not have permitting jurisdiction over motor vehicles. Under District Regulations a permit is required for any source of emissions exceeding two (2) pounds per day, and a permit may be required of any person that builds or uses any equipment that causes or controls the issuance of air contaminants. Certain types or sizes of equipment are exempt from permit requirements (e.g. small engines, 50 horsepower or less, and residential equipment).

Approximately 500 stationary sources (i.e. industrial facilities), including gas stations, are permitted under almost 1,000 separate permits. Facilities are evaluated for compliance upon initial permitting and annually upon permit renewal. Permits contain limiting conditions for operation to ensure compliance with District Rules and Regulations, and state and federal laws.

District permits include "Authority to Construct" permits, which are the initial permits issued to new or modified facilities; "Permits to Operate", which are renewed annually; and "Title V Federal Operating Permits" issued by the District for facilities subject to federal requirements that are renewed every five (5) years.

The District categorizes the permitted facilities for review internally and reporting to other agencies, primarily the Air Resources Board and U. S. Environmental Protection Agency (EPA). One method is to generally classify facilities in one of three categories, "Major", "Synthetic Minor", or "Minor".

- "Major Sources" are those that have the potential to emit in any year any of the following pollutants in an amount greater than 25 tons of volatile organic compounds (VOCs), 25 tons of nitrogen oxides (NOx), 100 tons of particulate matter (PM-10), 100 tons of carbon monoxide (CO), or 100 tons of sulfur compounds (SOx).
- "Synthetic Minor Sources" are those that have emitted or could emit pollutants greater than one half the Major Source threshold levels but less than the Major Source levels and do not have the potential to exceed the Major Source thresholds.
- "Minor Sources" are those that actually emit less than one-half the Major Source levels.

In the past 10 years, the number of AC permit applications received, excluding gasoline stations, has increased nearly five-fold from 25 per year to more than 124 this past year. The District currently issues 987 permits per year to 497 separate facilities. The increase the number of permitted facilities can be attributed to three factors: (1) an increase in number of businesses in Placer County that are subject to the permitting regulations; (2) the District's top-down approach to permitting to best utilize limited staff resources, which has reached the point where the more numerous smaller emission sources are now being permitted; and (3) the District's continuing

non-attainment status which makes necessary the adoption of more stringent regulations affecting a broader range of businesses.

For each application for a new Stationary Source Permit an evaluation is performed by District Engineering staff, including a compliance review to determine if the applicant is meeting applicable District Rule requirements, a toxics screening, and, if applicable, Best Available Control Technology (BACT) and/or Offsets.

- **BACT:** BACT is the most effective emission control device or emission limit required for the type of equipment to be used. BACT requirements are triggered if the emissions unit has a potential to emit air pollutants greater than or equal to 10 pounds per day of NOx and VOCs, 80 pounds per day of SOx or PM-10, 550 pounds per day of CO, or 3.3 pounds per day lead.
- Offsets: In general, any facility in Placer County that has new increases in emissions and the total emissions after an increase are greater than 7,500 pounds per quarter (15 tons per year) of oxides of nitrogen (NOx), volatile organic compounds (VOCs), carbon monoxide (CO), or particulate matter less than 10 microns in size (PM-10) must offset the emission increase. Offsets are required when sulfur compounds, as sulfur dioxide (Sox) exceed 12,500 pounds per quarter (25 tons/year). Offsets may be provided on site by reducing or purchased from other persons who have obtained certified emission reduction credits (ERCs). For an emission reduction to be registered as a credit it must meet several tests. The emission reduction must be quantifiable and real. Usually the emission reduction must be from the same or another permitted source, and there must be means to determine historical actual emissions. The emissions of the source must have been included in the air quality plan emission inventory. The emission reduction must be permanent. The emissions reduction must also be surplus, that is, a reduction that is not required by a law or regulation.

If approved, a conditional Authority to Construct (AC) permit is issued. Fees are charged based on the equipment rating or the staff time spent on the project. After construction, a Notification of Construction Completion is submitted to the District. District staff inspect each facility to determine if the equipment and operations comply with District Rules and Regulations and AC Permit Conditions. If the operations are in compliance, a Permit to Operate (PTO) is issued. This permit is renewed annually. Annual permit fees are charged based on the equipment rating and the emissions from the facility.

Through the issuance of permits, and compliance activities related to the permits (e.g. inspections), the District enforces compliance with state and federal New Source Review (NSR) requirements; District Prohibitory Rules; state Airborne Toxic Control Measures (ATCMs), federal Maximum Achievable Control Technology (MACT) standards; and National Emission Standards for Hazardous Air Pollutants (NESHAPs). The District's entire permitting program is subject to periodic audit by the California Air Resources Board (ARB) against performance standards. The last audit was performed in 1993, with the next audit scheduled for 2007. The U.S. EPA also conducts periodic audits for compliance with reporting requirements for federal programs.

Stationary source compliance activities, in addition to conducting facility inspections, includes source test observation and report evaluation, evaluation of source criteria pollutant and toxic

emissions, application of new standards to existing facilities, permit preparation, permit database and file maintenance, compliance with CEQA, compliance with state laws regarding siting of schools and siting of emission sources near to schools, preparation of data for emission inventories, assessment of permit fees, assistance in rule development activities, assistance in air quality plan development and evaluation, investigation of complaints, upset/breakdown determinations, staff work for the District Hearing Board including preparing variances, supporting the conduct of enforcement actions, tracking emissions trading, providing public information and education, providing compliance assistance for industry, coordination with neighboring air districts, tracking and implementation of new legislative requirements, and maintaining the expertise of staff in a changing regulatory environment through training.

There are a number of monthly and quarterly reports that the District is required to submit to ARB in order to provide the status of enforcement activities. Three of these programs are Continuous Emission Monitoring (CEM) Reporting, which is a report on emissions exceeding limits, Notice of Violation (NOV) Reporting, which is a report on the issuance of Notices of Violation and the final settlement of the enforcement action; and lastly "Variance Reporting" which is the reporting to ARB regarding granted variances and their status. Some reports, such as the "High Priority Violator" reports for major sources determined to be in violation of emission limits, are forwarded by the ARB to the U.S. EPA for compliance with federal program requirements. In the future much of the federal data requirements may be met through on-line data transmittal via the Aerometric Information and Retrieval System (AIRS) Facility Subsystem.

# **Significant Issue – Diesel Particulate As A Toxic Contaminant:**

The identification of diesel exhaust particulate as an air toxic contaminant that constitutes up to 70% of the known cancer risk in communities that is attributed to exposure to toxic air pollutants may be the paramount toxics issue of this decade. The Air Resources Board's Diesel Risk Reduction Program is their most important priority for reducing toxic air pollutants and this Program alone is designed to achieve a 75 percent reduction in the emissions and associated health risk by 2010.

The Air Resources Board is developing regulations to address vehicle, portable, and stationary, diesel fueled engines. Implementation of the regulations for portable and stationary engines locally will fall upon the District, a difficult task because engines are not well inventoried and control measures are likely to be costly. In order to determine whether the operation of engines should be allowed, site-by-site health risk assessments may be necessary. The identification of diesel particulate as a toxic has also resulted in the on-going analysis by the Air Resources Board of diesel locomotive emissions at the Union Pacific Railroad J. R. Davis rail yard in Roseville, the state air toxic control measure school bus idling restrictions, and other air toxic control measures that are pending.

# Significant Issue – Un-regulated Stationary Source Compliance Plan:

With over 17,000 businesses in Placer County in year 2000 the District initiated a plan to begin a review of business license data and other data sources, including the Yellow Pages, to find other sources of emissions, similar to those currently permitted, which had not previously been identified and are required to have District permits. With Placer County's growth, the "capture" of new and existing businesses subject to permitting, to bring these un-permitted sources into compliance with District rules and regulations, is a

principal District objective. Approximately 200 additional permits have been issued for emission sources identified through this effort and several hundred additional businesses have been screened and determined to be exempt from District permit requirements. Outreach to educate operators of equipment that should be permitted and the permitting of such equipment or state registration, continues as resources are available.

# **Significant Issue – Transport Mitigation Requirements:**

The California Clean Air Act (CCAA or Act) specifically recognizes that local air pollution control districts need to mitigate the impact of pollutants that they generate and transport downwind. State law specifically requires upwind districts to plan for attainment in both their own district and that of the downwind districts, and, at a minimum, to include in their attainment plan all of the mitigation measures required by the Air Resources Board pursuant to Section 39610(c) of the Health and Safety Code.

The Air Resources Board has the responsibility to assess the relative transport contribution of air districts and to establish mitigation requirements. In 2001, for the triennial update, the Board directed staff to pursue the possibility of strengthening the mitigation regulation. The Board adopted amendments to the regulation on May 22, 2003. The actual regulation changes were passed into law and became effective January 3, 2004.

In addition to existing requirements, the amended regulation, when effective, will require equal New Source Review (NSR) "no net increase" thresholds for sources in upwind and downwind areas. The goal of the NSR permitting program is to maintain air quality progress while accommodating economic growth and expansion. This is achieved by offsetting growth in emission increases from new and expanding stationary sources with emission reductions not otherwise required by law, and is known as the concept of "no net increase." The revised regulation mandates that "no net increase" thresholds for upwind districts be as stringent as those that exist for the downwind districts, ensuring that both upwind and downwind neighbors are taking comparable actions to mitigate emissions from new and expanding stationary sources.

The proposed amendments would affect the Bay Area Air Quality Management District (BAAQMD) and the five districts (including Placer) located in the Broader Sacramento Area. As districts that are down wind of the Bay Area, Placer and Broader Sacramento Region will benefit from the lower "no net Increase" threshold at which offsets are required for the Bay Area Air Quality Management District.

However, as these districts are also upwind of the San Joaquin Valley Unified Air Pollution Control District, the air districts are required to amend their "no net increase" thresholds from 15 tons per year to 10 tons per year by December 31, 2004. This will result in these districts achieving the same "no net increase" threshold levels as their downwind neighbor, the San Joaquin Valley Unified Air Pollution Control District.

Staff estimates that the reduction from a 15 ton per year offset threshold to a 10 tons per year offset threshold for NOx or VOC may result in an additional 40 to 50 facilities in Placer County becoming subject to offset requirements. This means that these facilities, because they can emit more than 10 tons per year, must offset any increase in emissions from modifications (e.g. an expansion of operations). Offsets equal to the emission increase must be obtained though on-site reductions or by purchasing emission reduction

credits from others who have voluntarily reduced emissions. The availability of Emission Reduction Credits (ERCs) that can be used as Offsets is a developing concern.

# Significant Issue – All Feasible Measures:

The District must adopt and implement all feasible control measures. In its triennial air quality plan updates (the next will be in 2005) the District must make a finding of compliance with the "all feasible" control measures requirement. The plan's inclusion of all feasible measures is subject to the review and comment of the downwind air districts. The adoption of all feasible measures was already required of the District because of its ozone attainment status under the California Clean Air Act requirements, so this requirement only reinforces the District's existing obligation to seek all feasible emission reductions. When additional feasible measures are identified, the District is required to adopt the measure, or demonstrate that the measure is not needed or has been replaced by an alternative emission reduction strategy.

# **Title V Federal Operating Permits:**

The "Title V" refers to Title V of the federal Clean Air Act and "Title V Federal Operating Permits" are permits containing "all applicable federal requirements" that are issued and enforced by the District. The permitting program is a federally mandated permitting program for facilities designated as "Major Sources" on the basis of their potential to emit quantities of criteria or hazardous permits in excess of defined thresholds or sources which are required to have Title V permits by federal regulation. The Title V permits issued by the District are subject to public comment, and approval by the U.S. EPA. A Title V permit is enforceable by the U.S. EPA as well as the District. The Title V permits are to be renewed every five (5) years. New requirements may also require re-opening of the permit.

As one of the program requirements the District prepared a Title V Program submittal to the U.S. EPA in 1993. This Program was deemed by the EPA to be administratively and technically complete in February 1995, and interim approval was granted effective June 2, 1995. Final approval of California's Title V programs, including Placer's, was effective January 1, 2004. The District currently has five (5) sources subject to Title V, of which four (4) are Major Sources. As of January 1, 2004, three (3) of the permits had been issued by the District with the remaining two (2) in the public review process.

# **Significant Issue – Title V Program Implementation:**

The Title V program was proposed as a mechanism to provide for federally enforceable operating permits incorporating all applicable federal air requirements into one permit that applied to operating facilities. Previous federal permits issued by the U.S. EPA were pre-construction permits issued prior to operation to facilities being constructed. However, although providing some consolidation of federal air pollution requirements into one permit, the Title V program significantly increases the burden of air districts, such as Placer County APCD, that were not previously delegated for enforcement of federal programs (i.e. PSD, NSPS, and NESHAPS). The Title V permits are to include both State Implementation Plan (SIP) requirements established through District rule by adoption and the requirements for federal programs that are enforced by the District. For affected industry Title V results in increased time frames to implement permit modifications, increased record keeping, and increase permitting costs. For the District, Title V requires the development of essentially separate and new permits for Title V sources, increased requirements for inspections and record keeping administration, and

increased enforcement responsibility - over and above that normally required under the California stationary source permitting program. Due to requirements for limiting sources potential to emit in order to avoid applicability of Title V, the District has already had to amend all existing permits to incorporate emission limits, as well as ensured such limits are placed in permits for new facilities.

The District was sued by a public group ("Our Children's Earth Foundation"), along with several other air districts that were sued, for the failure to issue permits in accordance with the District's own regulations, although the delay was largely attributable to the slow development of the federal program. Although settled, the case illustrates the fact that as a program involving federal regulations, the Title V program has a high profile and is of significant interest to many people.

Thus far the District's work on Title V has been funded by a one-time application filing fee of about \$800 for Major sources and lesser fees for Synthetic Minor and Minor sources. In addition, the five sources that are to be issued a Title V permit have been charged the actual hourly costs of permit development. This is in contrast to other air districts that have been assessing Title V fees annually since mid-1990. The District's staff is considering proposing for District Board adoption an annual fee to cover the additional costs of Title V program implementation.

# **Significant Issue – Agricultural Source Permitting:**

The major issue that delayed the final approval of the state's Title V program by U.S. EPA was the state law exempting agricultural operations from air pollution permit requirements. California has had an explicit exemption in state law (Health and Safety Code Section 42310) for decades from permit requirements for Agricultural Stationary Sources. With the exception of open burning, local air districts could not require involuntary permitting of agricultural operations. This exemption presented a conflict with federal law that requires states and local air districts to permit emissions sources, including agricultural operations, which are considered "Major". Agricultural operations that are defined as Major Sources of air pollution (e.g. currently in the Sacramento area Major Sources include sources that can emit 25 tons per year of NOx or VOCs) require a federal "Title V" permit that is issued by either a local district or state under 40 CFR Part 70, or the US EPA under 40 CFR Part 71.

Under the threat of federal sanctions if the exemption was not removed, SB 700 (Florez) was passed eliminating the exemption as of January 1, 2004. In concert with the exemption removal, U.S. EPA gave final approval to the state Title V program effective on the same date. Pursuant to SB 700, any district rule or regulation affecting stationary sources that are agricultural operations adopted on or before January 1, 2004, is applicable to an agricultural source. The removal of the historical exemption for agricultural operations from District permitting may require permitting of some agricultural operations, resulting in an increased burden on District permitting and inspection resources.

Under the new legislation the District will have to adopt a regulation by July 1, 2006, following state developed guidelines for large Confined Animal Facilities (CAFs), such as dairies and feedlots. Although the guidelines have not yet been developed, the District staff do not believe that any Placer County operations will require CAF permits. The legislation will also require the District to adopt by July 1, 2006, new control measures to

reduce emissions from agricultural practices, unless it is determined in a public hearing that agricultural practices do not significantly cause or contribute to a violation of state or federal air quality standards. However, districts may exempt from the new regulations sources found in a public hearing not to exceed a de minimus level of more than one ton of particulate matter, nitrogen oxides, or volatile organic compounds per year, in aggregate.

The District is required under SB 700 to permit sources with actual emissions that exceed the one-half of Title V Major Source emission thresholds. The District may permit agricultural sources of air pollution with actual emissions <u>less</u> than one-half the Major Source emission thresholds, but only if the following three findings are made: (1) the sources is not a large CAF subject to permits; (2) permits are necessary to enforce reductions; and (3) permits are not significantly more burdensome than permits required for other similar sources of air pollution.

# **Gasoline Dispensing Facility Regulation:**

In accordance with state regulations, the District requires the control of gasoline vapors emitted during the transfer of gasoline from a tanker truck into a gasoline storage tank (Phase I) and from the storage tank into a vehicle (Phase II). These requirements are intended to reduce both the volatile organic compound emissions as well as benzene emissions, a California Air Toxic Contaminant. Approximately 190 gasoline facilities are permitted. Because of the number of facilities permitted and the special state certification requirements that apply to installed equipment, the District treats Gasoline Dispensing Facilities (GDFs) as a separate program.

In order to increase the efficiency of both Phase I and II systems, the ARB adopted Enhanced Vapor Recovery (EVR) regulations in 2002. A timeline was adopted that requires all permitted facilities to upgrade their equipment. The upgraded equipment will better capture vapor emissions and overall increase the effectiveness of the air pollution control equipment. This also decreases the vapor emission loss, which then increases the amount of gasoline in the tank. By April 1, 2005, all underground storage tanks at stations will need to be upgraded to the new Phase I "Enhanced Vapor Recovery" (EVR) equipment under a state program that seeks to fix existing problems with service station vapor recovery systems, as well as the phased implementation of new standards over a 4-year period for above ground tanks and

Phase II equipment. The changes should achieve a total of 25 tons per day in statewide VOC emission reductions over the performance of existing systems.

# **Emission Reduction Credits:**

In conducting the permit evaluation for a new or modified emission source (i.e. New Source Review), if the potential of a facility to emit exceeds a specified threshold, the increases in emissions must be offset by matching reductions elsewhere – resulting in "no net increase" in emissions. A program where the emission reductions that are required to offset emission increases may be purchased is sometimes referred to as being a "market-based" program or a "trading" program. The potential to emit threshold at which offsets are required is currently 15 tons per year of NOx or VOCs as set by the California Clean Air Act and the District's "Serious" state ozone non-attainment status, with a higher threshold limit applying to sulfur compounds (SOx).

Existing emission trading programs operate like other commodities trading programs, except they have a net goal of realizing benefit for the environment rather than economic "profit". The environmental benefit is realized when emissions are reduced. Regulations establish requirements to reduce emissions, based on the targets established in a district's plan to attain clean air standards. If a company makes greater emission reductions than the regulations require, it can get "credit" for those reductions – hence the term "Emission Reduction Credits" or ERCs.

In Placer County, which is in the "Severe" classified Sacramento Federal Ozone Non-attainment Area, with the exception of the Lake Tahoe Basin portion, the minimum off site offset ratio is 1.3 to 1, meaning that at least 1.3 times more reductions in emissions are required when the reductions take place at a different location to offset the increase in emissions from the new or modified emission source. The quantity of reductions required is higher than the increase to provide a net air quality benefit and to account for the distance from where the reduction occurs to the where the increase occurs. To make up for the reduced local benefits if the reductions are from another location, the greater the distance between the locations of the emission increase and emission reduction – the greater the offset ratio. For non-attainment pollutants and precursors the ratio for a reduction obtained from a distance of up to 50 miles away is 2.1 to 1 (i.e. the reduction must be more than twice the increase).

The credits held by a company can be traded on the credit trading market. The value of the credits is determined by how much other companies are willing to pay to obtain the credits. This value fluctuates depending on how many credits are available, and how many companies need them. Other companies are willing to pay to obtain credits that they can use to meet their own emission reduction obligations, or to use as "offsets" for new emissions from projects the company wishes to undertake.

The U.S. EPA has established guidelines to ensure the quality and fairness credit trading programs. In order to be eligible for "credit" and use, emission reductions must meet the following five criteria: 1) real, 2) permanent, 3) enforceable, 4) verifiable, and 5) surplus. The federal guidelines are fairly proscriptive about what each of these terms means (for example, surplus means that the reductions are not mandated to occur under any state, federal, or local regulations, and the guidelines explain how this is interpreted). If the reductions do not meet all five tests, they cannot receive credit under the trading program. This means they cannot be used by other businesses to meet emission reductions/offset obligations, nor can they be used by the air district to fulfill emission reduction commitments in the local attainment plan; in other words, they have no value.

Credit trading programs that are carefully run and use high quality emission reduction credits benefit the environment in two ways. First, they reward, and therefore promote, actions by business to make real, permanent, enforceable, and verifiable emission reductions beyond what is otherwise required by regulation. Even when the credits generated are sold or used to offset emissions increases, rules require that more reduction credits be used than new emissions generated. There is, therefore, a net benefit to the environment. Second, and more important, is the way the high cost of ERCs pushes pollution control efficiency to continually improve. When businesses have to offset new emissions, they usually have to purchase ERCs on the credit market. In many regions of California (especially those where air quality is worse), ERCs are scarce and their cost is very high. Not only does this encourage more businesses to reduce emissions in order to generate credits, it also creates a big incentive for businesses to invest in

state of the art equipment when they start out or expand, in order to reduce the number of ERCs the business has to buy to offset its project.

# **Significant Issue – Rice Burning Emission Reduction Credits:**

The Connelly-Areias-Chandler Rice Straw Burning Reduction Act of 1991 outlined by law the reduction in rice stubble burning on an annual basis until the only burning that can take place is for disease management. The "Phasedown" Act provided that the reductions in emissions resulting from the rice straw burning phasedown *do qualify as surplus* and, thus *are eligible* for emission reduction credits (ERCs).

An issue that was raised is the difference between the filing requirements for ERCs between the rule requirements of air districts in the Sacramento Federal Ozone Nonattainment Area (i.e. Placer County APCD, Sacramento Metropolitan AOMD, and Yolo-Solano AQMD) and the Northern Sacramento Valley air districts where the majority of the state's rice is grown. The Placer County APCD, Sacramento Metropolitan AQMD, and Yolo-Solano AQMD rules follow the original agreed upon model rule, which required applications to be filed by certain deadlines. If applications were not filed by the deadlines established then the growers lost the ability to claim ERC credits that were later mandated as part of the statutory phasedown in rice stubble burning. This requirement is similar to the stationary source ERC rule requirement that facilities seeking shutdown credits must file applications within 180 days of the shutdown. The Northern Sacramento Valley Air Districts, including Feather River AQMD, a portion of which is in the Sacramento Federal Ozone Non-attainment Area, elected to amend their biomass ERC rules to allow applications to be filed at later dates. These issues are of concern to growers because of the potential marketability of the ERC for new power plants and other new industry. Most significantly, the District's Biomass ERC Rule 506 provided the initial application date (December 1, 1996) for those eligible to receive 100% of emission reduction credits

Most significantly, the District's Biomass ERC Rule 506 provided the initial application date (December 1, 1996) for those eligible to receive 100% of emission reduction credits based on historical actual emissions. If a grower wished to receive ERCs for permanently ceasing up to 100% of the burning that had been burned historically, as indicated by burning that had occurred during the baseline years of 1988-1992, then an application needed to be file by December 1, 1996. Although notice of the application filing period was provided to growers by a mailing from the District, and from the California Rice Industry Association, as well as by a workshop put on by the District, no initial applications were received from Placer County growers.

Following the December 1, 1996, filing deadline, Rule 506 provided a cut-off date (May 1 of each year) for the submittal of subsequent applications for the reductions in open biomass burning reductions occurring in the previous or current calendar year ending December 31. For example, in 1995 a grower that was previously required to cease burning 30 percent due to the Phasedown, and in the current year of Phasedown had ceased to burn an additional 10 percent, could file an application by May 1, 1996, to receive ERCs for up to 70% of the historically burned acreage by agreeing to permanently not burn that portion of the baseline acreage that was still being burned. The amount of ERCs to be received is adjusted based on the acreage historically burned.

The District received its only complete Biomass ERC application on August 31, 2000, when the Phasedown was 62 percent, leaving 38% available to burn, and previous year's Phasedown which was 2 percent. Accordingly, the applicant is eligible for the 2 percent of the previous year's Phasedown and up to 38 percent of the baseline acreage, or a

maximum credit of 40 percent of the baseline acreage. Currently, the Phasedown is at its minimum level of 25% of the historical acreage, or 125,000 acres, whichever is less, with burning only allowed for the purposes of controlling of rice diseases.

The District Board, at it's August 9, 2001, meeting considered these issues and decided not to relax Rule 506 and allow new applications for rice burning ERC credits, other than for the 25% of acreage historically burned that can still be burned under the Phasedown program.

This matter, however, continues to be a significant issue because Feather River AQMD is seeking to have the State Implementation Plan (SIP) emission inventory for rice burning amended so that rice burning ERCs applied for after December 1, 1996, can be used from the southern portion of Sutter County that is in the Sacramento Federal Ozone Nonattainment Area. Effectively, Feather River AQMD is seeking to update the 1990 baseline inventory to add rice burning emissions from South Sutter County, including 222.3 tons of NOx that was omitted from the inventory in order to make those emissions available for ERCs that can be used as offsets in the Sacramento Federal Ozone Nonattainment Area. This means that to reach the planned emission reduction goals, additional reductions equal to the ERCs issued by Feather River would need to be achieved by the five (5) air districts in the Sacramento Federal Ozone Nonattainment Area (Sacramento, Yolo-Solano, Feather River, Placer, and El Dorado).

Sacramento, Yolo-Solano, and Placer did not adopt proposed rule amendments to change the eligibility requirements, such as a change to remove the application ERC filing deadlines. It is felt that the U.S. EPA would not approve a rule change that relaxed the provisions for creating biomass ERCs because of the Severe designation of the Sacramento Federal Ozone Non-attainment Area. There is also the question of whether the U.S. EPA agrees that rice ERCs claimed after the state mandated phasedown was concluded are really surplus. An October 30, 2003, letter from U.S. EPA however does indicate that if the baseline inventory includes the burning emissions that U.S. EPA would accept those ERCs when used - provided the district where the ERCs are created has an offset-generating rule that is to be incorporated into the SIP that make the rice burning reductions enforceable and permanent.

Of concern to the District is that South Sutter County rice growers may benefit from Feather River AQMD having relaxed its ERC rule from the model rule at the expense of businesses region-wide from whom addition emissions reductions may be sought in future air quality plans to offset the additional rice emissions being added to the baseline emission inventory. In addition, the allowing the use of Sutter County ERCs garnered through the relaxation of Feather River AQMD's ERC rule is unfair to Sacramento, Yolo-Solano, and Placer growers who were not afforded the same opportunity to obtain more ERCs through having a liberal ERC rule adopted by their respective air districts. This issue is not yet resolved.

# **Significant Issue – ERC Availability Concerns:**

The availability of Emission Reduction Credits (ERCs) to be used as offsets for new industry or to expand existing businesses is of concern to most non-attainment air districts, and it is of particular concern to those districts that did not have a large base of dirty industries from which ERCs could be generated.

During the public hearing on the amendments to the State's Transport Mitigation regulation, District staff commented upon the lack of available offsets in the Sacramento region and the economic consequences of slowed industrial growth that could result from restrictions on new business and the expansion of existing businesses. Under the transport mitigation regulation the District's offset threshold may be reduced from 15 tons per year for non-attainment pollutants and precursors to 10 tons per year (i.e. sources will require offsets at a lower threshold). The Air Resources Board acknowledged this comment in the resolution adoption of the amended regulation and directed the Air Resources Board's Executive Officer to "work closely with the districts to address the availability of offsets."

As a sign of the widespread concern over this issue among air districts, the California Air Pollution Control Officers Association (CAPCOA) has called for a conference to be held in the Spring of 2004 to critically evaluate the effectiveness and viability of ERC programs in California and develop potential solutions ensuring the essential goals of those programs being met in the future.

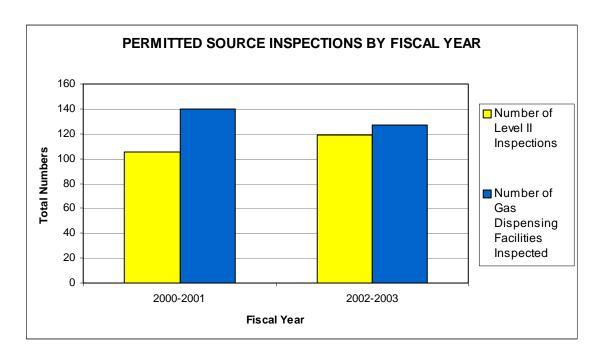
# INSPECTIONS AND FIELD ENFORCEMENT

# **Inspections and Testing:**

The District seeks to inspect all permitted stationary sources (i.e. industrial facilities) granted Permit(s) to Operate biannually, with a goal of inspecting facilities annually. Major emission sources are inspected at least annually. Permits to Operate are updated annually based on the results of inspections, and the incorporation of any new regulations that apply.

The District's Engineers or Specialists observe the conduct of stack emission tests that have been required by the District through permit conditions or by special request. Because the District does not have the personnel or equipment to perform these tests, the tests are usually conducted by independent contracting firms certified by the Air Resources Board.

In order to maximize the District's resources and minimize the duplication of efforts, the District has a Memorandum of Understanding with the Placer County Department of Weights and Measures for the conduct of inspections at gasoline facilities. Weights and Measures inspectors conducting weights and measures inspections also inspect vapor recovery equipment for compliance with the District vapor recovery rules. GDF facilities are inspected annually and are required to conduct annual source testing to assure that the systems permitted are operating correctly and in compliance.

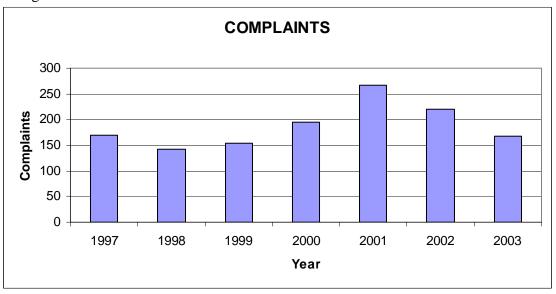


# **Complaint Investigation:**

In addition to the inspection of permitted sources, District staff also investigate all complaints that are received directly by the District or received by referral through the Placer County Sheriff's Office Dispatch Center. The California Air Resources Board's program evaluation criteria require a response to complaints within 24 hours. The complaints may concern emissions from permitted facilities or unknown odors, but more frequently the complaints are in regard to smoke and odors from illegal burning or the complaints are about dust. The number of complaints has averaged more than 200 per year over the past three years. Field investigations are conducted whenever the complaint situation is on going and a field presence may aid in identifying the cause of the problem, halting the problem, gathering evidence for enforcement actions, and providing education to potential violators. Field investigations may also be conducted to support fire agencies that have been called to fires that are in violation of air pollution control regulations for burning. To provide improved complaint response capability in the area east of Donner Summit, the District has a contract with Northern Sierra AQMD, the air district serving Nevada County and which has staff stationed in the Truckee area. On an "as-needed" and on-request basis, a Northern Sierra AQMD air quality specialist will investigate complaints on behalf of the District. Similarly, the District has also had a contract for field services in the Tahoe Basin. contracts enable the District to provide a better response to residents at a lower cost than would be possible with a District staff person who would be dispatched from Auburn.

As a means to better enforce burning regulations, and foster cooperative efforts with local fire agencies to address problem burning, the District works closely with many fire agencies in a collaborative Memorandum of Understandings (MOU). Fire agencies may forward or refer burning incidents that are also air pollution violations to the District for enforcement. The fire agency may recommend that a warning be given, or that penalties are warranted. The MOU is the basis for the District to seek reimbursement to a fire agency for costs expended in suppressing an illegal fire, but only if the District is successful in an enforcement action. To date the following fire agencies have signed MOU's with the District: Penryn FPD, South Placer FPD, Auburn City FD, Loomis FPD, Placer Consolidated FPD and Rocklin FPD. With or without an MOU the District supports fire agencies requesting District support for the

enforcement of air pollution violations or for a field response to an illegal burn. Educating the public regarding proper and legal burning techniques, and stopping problem burners, benefits both fire agencies and the Air District.



# **Sampling and Analysis Services Contract:**

The District has a services "as-needed" contract with Hazard Management Services, Inc. for air sampling and analysis services, and naturally occurring asbestos soil sampling and analysis services. This contract provides the District with a resource to conduct air sampling and analysis in response to complaints or for permit compliance purposes that is normally not available to small air districts. The contract also provides for naturally occurring asbestos services that allow the District to assess whether naturally occurring asbestos exists at any location, and if it exists whether it poses a significant health concern.

# **Significant Issue – Enforcement Augmentation:**

In FY 2002-2003 the District hired two (2) part-time extra-help staff persons to augment the District's field response capabilities with a focus on investigating residential burning, dust from construction activities, and off-regular business hours complaints. The District continued this augmentation to staff resources in FY 2003-2004. The extra-help personnel have enabled more educational contacts, an off-hour response capability, and a greater District presence in the field – all at a lower cost to the District than overtime for permanent staff members that are already working full-time. The extra-help personnel may be dispatched to complaints or to support fire agencies after District business hours and on weekends and holidays. The extra-help resource also allows the District to have periodic patrols conducted in different parts of the Placer County to provide educational outreach to help prevent violations of District regulations as well as to find violations that need to be stopped. The extra-help personnel respond to burn complaints in the fall through spring seasons and respond to dust complaints during the summer, in addition to conducting field inspections scheduled by the District management.

# ADOPTION OF RULES AND REGULATIONS

# **Authority to Adopt Rules and Regulations:**

The District is responsible for the enforcement of District Rules and Regulations adopted pursuant to authorities granted by the HSC, Division 26, Part 3, "Air Pollution Control Districts", and Part 4, "Non-vehicular Air Pollution Control" (commencing with Section 40000) - the performance of such acts as may be necessary, and the enforcement of all applicable provisions of state and federal law.

In general terms, the District adopts rules and regulations intended to achieve and maintain the state and federal ambient air quality standards by requiring compliance with adopted emission prohibitions and limitations, and the application of emissions reduction controls, and/or measures, for mitigation and for the collection of fees. Portions of Placer County are within the boundaries of three air basins, which have been established by the state: Sacramento Valley Air Basin, Mountain Counties Air Basin, and Lake Tahoe Air Basin. In 1993 when the District combined each air basin's individual set of rules into one set, the rules specific to each air basin were retained or combined in an amended rule.

Due to the District's federal and state Ozone Non-Attainment status for the Sacramento and Mountain Counties Air Basin portions of Placer County, the District and the California Air Resources Board collectively are responsible for compliance with the original federal Clean Air Act of 1977, as well as the amendments enacted in 1990, which require the development and periodic updating of air quality plans that become part of the State Implementation Plan (SIP). In the development of these plans the District must prepare inventories of stationary sources and area sources to aid in determining the most effective emission reduction measures to pursue including the consideration of non-mobile source measures, including transportation control measures within their authority. Once an air quality plan is adopted and incorporated into the SIP the District is required to submit local measures, such as emission reduction rules, that are committed to in the adopted air quality plans, for inclusion in SIP. District rules adopted to meet SIP commitments are reviewed by the Air Resources Board, for approval, before they are forwarded to the U.S. EPA. The U.S. EPA's approval of these rules appears in the Federal Register. A failure to adopt rules required to meet SIP commitments, in addition to impairing the regions ability to reach air quality attainment goals, can result in federal sanctions (e.g. increased offset ratios, and withholding of highway funds). Both Acts require the adoption of "all feasible control measures".

The District is not delegated (i.e. has not requested delegation) to enforce federal air pollution regulations administered by the U.S. Environmental Protection Agency (U.S. EPA). The District is not delegated with New Source Performance Standard (NSPS) or Prevention of Significant Deterioration of Air Quality (PSD) permitting or review responsibilities and authority. However, even though not delegated for these programs, the District is responsible for implementation of the Title V Federal Operating Permit Program – and therefore through Title V permits the District has been made responsible for the enforcement of all applicable federal requirements contained in those permits, including all of the afore mentioned federal programs.

# **Annual List of Regulatory Measures and Public Outreach:**

The District is required to publish an annual listing of new regulatory measures that may be considered for adoption. 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 to the modification of any existing rule that the District finds is necessary to preserve the original intent of the rule or to increase opportunities for alternative compliance methodology.

In addition to the publishing of the annual list of regulatory measures to be considered each year, the District is required to publish in newspapers of general circulation a notice regarding the time and place of the public hearing where a new rule or a revision to an existing rule may be considered for adoption by the District Board. The publication of the notice is required at least 30 days in advance of the public hearing date. In addition to these legally required notices, the District performs outreach to involve affected industry in the rule development process. If the proposed rule is of general interest or possibly of interest to an industry sector, the District will send mailed notices regarding the proposed rule to all interested parties and, depending upon the interest, will hold one or more workshops to present the proposed rule and receive comments from the public and interested parties. Whenever possible the District sends mailed information directly to the business that may or are affected by a proposed rule. The District uses permitted source mailing lists, industry associations, and the Yellow Pages to identify businesses. The proposed rules are also forwarded, when appropriate, to the Air Resources Board and U.S. EPA for review and comment prior to the rule being heard for adoption. Affected parties and the general public may also comment on the proposed rule at the public hearing where the rule is to be considered for adoption, however District staff try to resolve all known comments before the public hearing takes place.

# **Significant Issue – Existing SIP Commitments:**

In the 1994 Sacramento Area Regional Ozone Attainment Plan that was adopted into the State Implementation Plan, the District committed to the adoption of control measures. Although the last of these commitments was finally met in 2003, a number of adopted rules have yet to be submitted to U.S. EPA approval, or if submitted, have not yet been approved. Adopted rules need to be submitted and rules found to be deficient by U.S. EPA need to be revised and resubmitted.

# Significant Issue – 1-Hour or 8-Hour Ozone Standard SIP Submittal Control Measures:

To a greater or lesser degree all air quality plan SIP submittals contain stationary source control measures that are to be implemented by the local air districts. In the Sacramento region the emission reductions that can be obtained from stationary source measures is diminishing because the measures implemented earlier have already obtained the least costly and most feasible reductions. Because of our ozone non-attainment status the District has been required by the California Clean Air Act to adopt both Best Available Retrofit Control Technology (BARCT) applicable to existing sources and All Feasible Measures. The remaining reductions possible are from measures that are often costly for industry and the districts, and although feasible they may be technology forcing (i.e. requiring the development of new technology or formulations to comply). The emission reduction strategies in future plans need to be carefully weighed for cost of implementation and the cost of regulation versus the quantity of emissions reductions to be achieved.

# Significant Issue – The "Clear Skies Initiative"

The Bush administration's "Clear Skies Initiative" is embodied in the Clear Skies Act of 2002 and Clear Skies Act of 2003. The Clear Skies legislation provides for the establishment of caps on sulfur dioxide (SO2), nitrogen oxides (NOx) and mercury emissions from power plants at levels 70% below year 2000 emission levels. The Clear Skies Initiative is structured to achieve ambitious air quality goals through a market-based cap and trade approach that rewards innovation, reduces costs, and guarantees results. The successful nationwide cap and trade system under the Acid Rain Program served as the model for the Clear Skies Initiative.

U.S. EPA predicts that nationally by 2020 there will be a 6% reduction in NOx due to Clear Skies over 2000 levels, while  $SO_2$  and mercury remain unchanged. This compares to a national projection of 67% reduction in NOx by 2020 over 2000 levels, a 73% reduction in  $SO_2$ , and a 69% reduction in mercury.

Clear Skies would not change the health-based air quality standards for ozone and fine particles; those standards will still have to be met. Clear Skies would not change federal Clean Air Act requirements for sources not covered by Clear Skies. Clear Skies would do nothing to change the fundamental provision contained in the federal Clean Air Act that permits each state to adopt more stringent regulations on power plants (and other sources) under its jurisdiction.

It appears that the Clear Skies cap and trade program will have minimal impacts upon California because non-attainment is not primarily due to stationary source emissions, such as emissions from power plants. In the ozone non-attainment areas of California, including Placer County, many power plants that would be addressed by Clear Skies are newer and have undergone New Source Review at construction – resulting in relatively good control technologies versus the controls, if any, installed on old power plants in attainment areas. In addition, most non-attainment areas districts in California, including Placer County, have prohibitory regulations that already set minimum emission standards for boilers and power plants. Finally, California has fewer of the coal-fired power plants prevalent elsewhere in the United States that can produce significant quantities of SO<sub>2</sub> and mercury.

California is grouped as a "Zone II State" for the purposes of Clear Skies implementation (the Zone II area includes Alaska, American Samoa, Arizona, California, Colorado, the Commonwealth of Northern Mariana Islands, the Commonwealth of Puerto Rico, Guam, Hawaii, Idaho, Montana, Nebraska, North Dakota, New Mexico, Nevada, Oregon, South Dakota, Texas west of Interstate 35, Utah, the Virgin Islands, Washington, and Wyoming). As a Zone II State, California is not included in the 2004 NOx State Implementation Plan ozone season cap in 19 Eastern States and Washington D.C., so the first year of the Clear Skies cap and trade program applicable to California is a cap for NOx (Phase I) in 2008. Annual caps for mercury and SO<sub>2</sub> go into effect in 2010. Reduced annual caps for NOx, SO<sub>2</sub>, and mercury go into effect in 2018. The District will need to follow the progress of the development of the Clear Skies implementing regulations.

# **Significant Issue – New Source Review Reform:**

On December 31, 2002, U.S. EPA promulgated a new regulation requiring mandatory reform of new source review (NSR) rules applicable to major stationary sources. These

reforms generally allow for a wide variety of modifications to escape NSR (including BACT and offsets). There is a concern that U.S. EPA's mandatory rule will weaken district NSR rules throughout the state. A forced relaxation of our NSR rules would allow for additional air pollution that could undermine efforts to attain and maintain federal ozone standards. States and local districts that implement NSR through SIP-approved rules have until January 2, 2006 to modify their rules to incorporate NSR reform, although any rules modified after December 31, 2002, must incorporate these reforms. In addition, states and local districts that implement NSR or PSD rules through direct delegation must address these reforms by March 3, 2003. There are six California districts that implement PSD through direct delegation (Bay Area, Kern County, San Diego County, Santa Barbara County, Shasta County, and South Coast).

In the view of state and local air quality agencies nationwide, this regulation is a relaxation of current NSR requirements. The regulation allows capital projects that cause significant increases in actual emissions to be undertaken without any requirements for the application of modern control technology, without any provision for emissions reductions to offset the emissions increases in non-attainment areas and without any opportunity for air agencies or the public to review air quality impacts or address any public health concerns. This arbitrary cost-based exemption will allow most modifications that heretofore have been subject to NSR and the installation of modern air pollution controls to circumvent these requirements, thereby obstructing our efforts to attain and maintain health-based air quality standards.

A number of states including California have sued U.S. EPA over the NSR reform requirements and a number of other states have intervened on the side of U.S. EPA. Seven California districts have also sued (Monterey, Santa Barbara, Ventura, South Coast, San Joaquin, Sacramento, and Yolo-Solano). All except South Coast filed jointly. In addition, many public interest and industry groups have filed and a court order has consolidated many of the cases. In addition, the court denied a motion to stay NSR reform, but granted a motion to expedite the litigation. The bases for litigation include U.S. EPA's failure to solicit comment on the mandatory nature of the rule and the rule's contravening the Clean Air Act by precluding the right of states and local districts to establish more stringent regulations. Litigation may encourage U.S. EPA to move more responsively and more reasonably in determining program equivalency.

The Placer County Air Pollution Control District will be required to amend the NSR rule to incorporate the federal NSR Reform provisions by January 2, 2006. However, if the District revises it's NSR rule after December 31, 2002, as may be necessary to meet state Transport Mitigation requirements (See Below), the federal NSR Reform provisions must be incorporated at that time. Although historically state and local programs have been approved by the U.S. EPA if they were at least as stringent as the federal program, it is feared the U.S. EPA may not approve locally adopted NSR rules that do not include the less stringent provisions of the NSR Reform.

State Senate Bill SB 288, the Protect California Act of 2003, was passed by the Legislature and approved by the Governor on September 22, 2003. The legislation prohibits air districts from amending their new source review rules or regulations to be less stringent than those rules or regulations that existed on December 30, 2002. This

means that state law prevents the District from incorporating the NSR Reform provisions if the result is a relaxation of the requirements.

It is uncertain what the outcome will be from the litigation against the federal NSR Reform provisions. It is equally uncertain whether U.S. EPA in the interim will accept as equivalent local district NSR rules that include the reform provisions but are also more stringent. Although revision of the District's NSR rule may be desired or necessary to meet other state or federal regulation before the required revision date of January 2, 2006, revision of the rule now will trigger review by U.S. EPA for the incorporation of the NSR Reform requirements. Bifurcation of the District's NSR rule to separately address federal (Major Source) New Source Review and local (non-Major Source) New Source Review may be considered to limit any deleterious affect of the NSR Reform requirements. The District must also satisfy the requirements of SB 288 that prohibit the adoption by a local district of any NSR provision that is less stringent than those in existence on December 30, 2002. This combination of factors most likely dictates that any planned revision to our NSR rule be delayed until after the issue is clarified by the court cases and, if necessary, the state statute restrictions are lifted.

# Significant Issue – Transport Mitigation Offset Threshold Changes:

On May 22, 2003, the Air Resources Board adopted a revised Transport Mitigation regulation. The actual regulation changes were passed into law and became effective January 3, 2004.

The proposed amendments would affect the Bay Area Air Quality Management District (BAAQMD) and the five districts (including Placer) located in the Broader Sacramento Area. These air districts are required to amend their "no net increase" thresholds for NOx and VOCs from 15 tons per year to 10 tons per year by December 31, 2004. This will result in these districts achieving the same "no net increase" threshold levels as their downwind neighbor, the San Joaquin Valley Unified Air Pollution Control District.

Staff estimates that the reduction from a 15 ton per year offset threshold to a 10 tons per year offset threshold for NOx or VOC will result in an additional 40 to 50 facilities in Placer County becoming subject to offset requirements.

The requirement to implement the revision of the District's New Source Review rule by December 31, 2004, would result in the District triggering the federal NSR Reform requirement that any NSR rules modified after December 31, 2002, must incorporate the reforms at that time. The District would otherwise have until January 2, 2006, to modify the rule to incorporate NSR Reform. Because of the complexity of NSR Reform issues and uncertainty because of on-going litigation, District staff does not propose submitting to U.S. EPA a revised New Source Review rule lowering the offset triggers, as required by the state regulation, until the NSR Reform issues are settled. Although legal counsel review should be obtained, it is possible that the District can revise the rule to meet the Transport Mitigation requirements without triggering the requirement to include the NSR Reform requirements because the District's existing NSR Rule is not SIP approved.

#### **Significant Issue – Particulate Mate Matter Control Measures:**

Senate Bill SB 656 (Sher) establishes requirements that the state Air Resources Board, in consultation with districts, not later than January 1, 2005, establish a list of the most

readily available, feasible, and cost-effective control measures to reduce PM2.5 and PM 10 or both, based on rules, regulations and programs existing as of January 1, 2004. This legislation for state and federal particulate matter non-attainment areas is similar to the existing California Clean Air Act that primarily addresses requirements for state and federal ozone non-attainment areas.

The legislation requires the Air Resources Board and each district to adopt an implementation schedule for the most cost-effective local measures from the list. The measures are to be prioritized based on the effect individual measures will have on public health, air quality, and emission reductions, and on the cost-effectiveness of each control measure.

This means that in addition to the "All Feasible" NOx and VOC measures required by the California Clean Air Act because of the District's ozone non-attainment status, the District must evaluate, adopt and implement new particulate matter control measures.

# **ENFORCEMENT**

The Enforcement Program refers to the overall administration of enforcement activities by the District. The District has primary state responsibility for the control of air pollution from all local sources of emissions in Placer County, other than the emissions from motor vehicles that are the responsibility of the California Air Resources Board. The District is responsible for the enforcement of Rules and Regulations adopted by the District Board of Directors, and the enforcement of applicable provisions of state and federal law. Compliance with air pollution rules, regulations, and laws, is sought through the inspection of stationary sources of air contaminants; by placing sources subject to District permit requirements under permit; by evaluating new emission sources, modified sources, and permitted sources for Rule or permit condition compliance; by the investigation of complaints regarding air pollutant emissions; and by establishing and implementing programs for the reduction of area wide emissions.

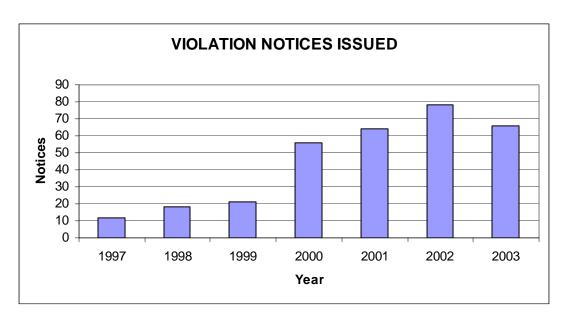
# **Action on Violations:**

When a violation of District Rules and Regulations, permit conditions, or of state or federal law occurs, one of three actions is taken: (1) A warning may be issued if the violation is minor, the violator has no history with the District, and the violation is not at a facility permitted by the District; or (2) A Notice to Comply (NTC) may be issued that requires compliance by a given date (usually 7 to 30 days) for a minor violation that does not involve an emissions violation and is not a chronic or repetitive violation; or (3) A Notice of Violation (NOV) is issued in the field, or by the issuance of an NOV letter from the District office, for emissions violations, violations that are not considered minor, and violations where a penalty is recommended for punitive or deterrent effect.

District staff may issue warnings, Notices to Comply, or Notices of Violation in the field, or they may return to the District office for a records and database check or to confer with management before a decision is made on the enforcement action to be taken.

Warnings that are issued are logged in the inspection or complaint record and in the
District's database and typically do not require follow-up unless there is a repeat
violation at a later date.

- Notices to Comply are logged and tracked for completion of the required remedial actions within the time period specified, however if the violation is corrected while the inspection is on going no further action is taken beyond a note in the inspection record. If a violator does not make the corrections required by a Notice to Comply and report the completion to the District in the time given, enforcement action may be taken for both the original minor violation(s) and willful or negligent non-compliance with the Notice to Comply.
- Notices of Violation are evaluated by the District's Manager of Compliance and Enforcement for disposition. If the violation has not been halted and the operations either stopped or returned to a condition complying with District, state, or federal regulations, as may be applicable, a written notice is issued to the violator outlining the potential penalties for the violation and the additional penalties that may apply if the violation is not corrected. The violator is advised that corrective actions are required for emission violations. Usually, having provided this notice to the violator, a violation that is allowed by the violator to continue or that is allowed to reoccur will be considered a willful and intentional violation. If a violation is not corrected an injunctive "Order for Abatement" may be sought by District staff from the District Hearing Board. Uncorrected administrative violations (e.g. not paying fees or not providing information requested) may result in permit suspension or revocation. Once the violation is halted the Manager of Compliance sand Enforcement determines the penalties to be sought with regard to the violations that have been documented.



#### **Mutual Settlement Process:**

The California Health and Safety Code establishes both civil and criminal penalties that can be applied to air pollution violations, including violations of District, state, and federal, rules, regulations, laws, and orders, that are enforced by the District.

• Criminal penalties range from a misdemeanor punishable by a fine of not more than \$1,000 or imprisonment in the county jail for not more than six months, or both; to public offense punishable by a fine of not more than \$250,000, or imprisonment in the state

prison for not more than one year, or both. If the defendant is a corporation the maximum fine may be up to one million dollars (\$1,000,000). Each day during any portion of which a violation occurs is a separate offense. The Code does not preclude punishment under other provisions of law that provides for more severe punishment.

• Civil penalties range from a penalty of not more than \$1,000, to a penalty of not more than \$250,000. If the defendant is a corporation the maximum penalty may be up to one million dollars (\$1,000,000). Each day during any portion of which a violation occurs is a separate offense. The Code does not preclude fines or monetary penalties from being collected for Business and Professions Code violations instead of Health and Safety Code air pollution violations.

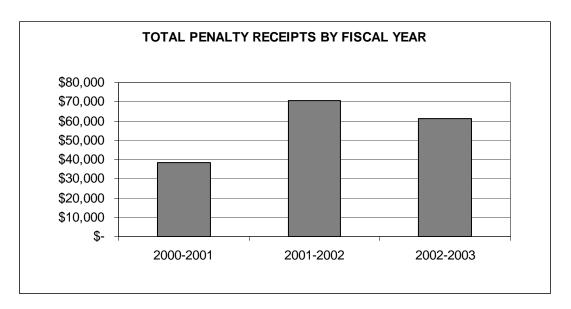
When a violation of District Rules and Regulations, permit conditions, or of state or federal law, results in the issuance of a Notice of Violation (NOV) the case may be settled through a mutual settlement process, or failing an agreement being reached, by prosecution as a civil or criminal case.

State law provides for the mutual settlement of an enforcement case by the District with the alleged violator. Guidelines for conducting mutual settlement programs have been developed by the California Air Pollution Control Officer's Association (CAPCOA) and the Air Resources Board. Mutual settlement is essentially an out-of-court negotiated settlement of the case. In issuing a settlement offer the District outlines the civil penalty liability based on the number and severity of the violations; preventative and corrective actions taken; compliance history; the financial burden that may be posed by the penalty; fire agency suppression costs, if any; enforcement resources expended; and the deterrent value of a monetary penalty to future violations. The mutual settlement offer by the District is always a significantly reduced monetary penalty to promote an out-of-court agreement. The District agrees to close the case without further enforcement action to be taken if the alleged violator pays the penalty and agrees to not violate in the future. An offer is made to meet with the alleged violator if he or she wishes to provide additional information concerning the alleged violation, or merely to discuss the violation. In agreeing to pay the penalty the alleged violator is not required to admit guilt.

More than 90% of the Notice of Violation cases are eventually settled through the mutual settlement process. Of the remaining ten percent, about 5% are referred to the Placer County District Attorney's Office for prosecution, and about 5% are rescinded or administratively closed. Enforcement cases may be administratively closed for first offenses when the alleged violator is not responsive to a negotiated settlement and the if the minor nature of the violation does not warrant the cost and resources that would be required to prosecute as a civil or criminal complaint. In these cases, if a future violation occurs then the fact of the prior violation may be considered and would most likely result in the case being prosecuted to the end. Enforcement cases may also be closed if the evidence does not suggest that the case can be supported in court. Notices of Violation may be rescinded or closed if the alleged violator shows that he or she is not responsible for the violation, or if there would be no deterrent value in pursuing the case (e.g. the alleged violator has gone to prison on some other matter, or left the state).

In some cases, particularly where the violation was egregious or where there is a concern over future compliance, or for both reasons, the District may offer to defer payment of a portion of the penalty for some period of time (usually 3 years) and furthermore agrees to forgive the deferred penalty if no new violations occur in that period. In a form of stipulated agreement, the alleged

violator agrees to pay a portion of the penalty now, and to pay the balance of the penalty that was deferred if a new violation is discovered. If a new violation is discovered and the deferred penalty is not paid the District may seek a court order for penalty payment, costs, and interest. The District has found the stipulated agreements to be very effective is gaining compliance and in deterring future violations, and if violations occur – immediately penalizing the repeat violation. The District may take separate enforcement action on the new violation and seek additional penalties if the new violation warrants, thus far, however this has not been found to be necessary.



# **Significant Issue – Administrative Civil Penalties:**

In order to reduce the number of violations that must be processed though the mutual settlement process, the District adopted Rule 806, Administrative Civil Penalties. This rule implements a procedure whereby minor violations may be handled using a schedule of fines that are levied administratively and that do not require the sometimes lengthy negotiations that can be involved in a mutual settlement. The concept is that minor violations, such as minor gas dispensing defects or a failure to maintain required records be listed or categorized in a schedule along with associated monetary fines that are adopted by the District Board. When these minor violations are documented the fine would be billed to the source and if not paid when required the fine may be forwarded to The administrative civil penalty with a maximum penalty of \$500 per violation and \$2,000 per violator per violation event, would apply to first offenses and minor violations. Repeat offenses and more severe violations would continue to be handled under the mutual settlement program where higher civil and criminal penalties Rule 806 provides for an appeal to the Air Pollution Control Officer, would apply. which may be followed by a judicial appeal.

In order to implement the Administrative Civil Penalty program a schedule of fines needs to be developed for District Board consideration and approval. The District's Compliance and Enforcement Section staff have the development of a fines schedule as a goal for FY 2003-2004.

# **Significant Issue – Mutual Settlement Policy & Procedures Development:**

District management, and in particular the Manager of Compliance and Enforcement who negotiates enforcement settlements for the District, utilize state law concerning air pollution civil penalties in reaching or attempting to reach a negotiated settlement of enforcement cases. While the broad criteria of what considerations are to be made in determining appropriate penalty amounts is defined and the upper limits of what is provided by law for monetary penalties, the setting of penalty offers is based on precedent (i.e. the application of similar penalties in similar circumstances for enforcement consistency) and the Manager's judgment. While some discretion is required in the negotiation process, a Mutual Settlement Policy & Procedure that provided for violation factors to be considered, the weighting to be applied to these factors, and the upper and lower bounds of penalties, would be a helpful guideline for District Management. Many California air districts have put into place administratively or adopted policies of this type. While excessively high penalties may be of general concern, in actuality if an alleged violator perceives a penalty offered as being excessive he or she will not settle with the District and will either seek to negotiate the violation with the District Attorney's Office or litigate the case. It is more likely that District Management without a guideline will make a lower offer or settle for a lesser amount than perhaps should be the case. In any event, the development of a Mutual Settlement Policy & Procedure is planned.

# **Prosecution of Enforcement Cases Not Settled With the District:**

If a Notice of Violation cannot be settled with an alleged violator through the mutual settlement process, either because an agreement cannot be reached or the alleged violator does not respond to the District's offer the case may be referred to the Placer County District Attorney's Office for further disposition. State law provides for the air pollution violations to be prosecuted by an attorney representing the District; the County District Attorney on behalf of the District; or by the state Attorney General, on behalf of the District. The District at this time does not have an attorney to prosecute enforcement cases so they are usually referred to the District Attorney. An attorney with the Placer County Counsel's Office represents the District in an advisory capacity in regard to enforcement matters.

State law requires that when a case is prosecuted by an attorney representing the District or by the Placer County District Attorney's office, all penalties and fines that are collected after costs are deducted be deposited in the District treasury. In cases handled by the state Attorney General's Office on behalf of the District, one-half of the fines or penalties collected, after costs, is paid to the District treasury and one-half is paid to the state General Fund.

# **Significant Issue – District Attorney Alternatives:**

The District could bring violations that are less than \$5,000 to small claims court for adjudication, in lieu of forwarding such cases to the Placer County District Attorney's Office. This would provide a venue for pursuing an enforcement action after an attempt at mutual settlement has been unsuccessful. Cases that would otherwise be dropped due to the potential cost of further prosecution, or that would otherwise burden the Placer County District Attorney's case load, might be filed as small claims court actions. This is an option that has been used by other air pollution control districts and so is known to be feasible. Implementation is awaiting the availability of resources to manage the small claims court case(s) and appear before the court on behalf of the District.

Another option that may be considered is for the District to hire or, what is more likely considering cost and workload, contract for the services of an attorney to represent the District in prosecuting civil or criminal complaints.

# **BURNING PROGRAMS OVERVIEW**

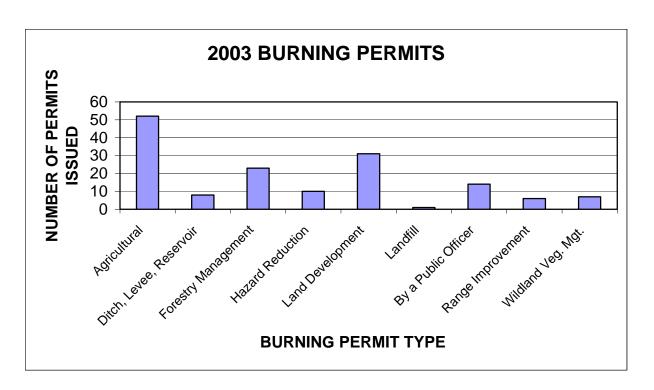
# **Burning Categories:**

The California Health and Safety Code identifies the types of burning that are allowed under state law. Burning is divided into Agricultural and Non-Agricultural Burning. District Rules and Regulations further define these types of burning and the conditions under which each of them may be conducted. Under the California Health and Safety Code and the California Code of Regulations – Title 17 the District authorizes the use of burning for about ten types of burning activities in Placer County. This includes:

- Agricultural Burning, both of field crops such as rice stubble and non-field crops, such as trimmings from Christmas tree farms or commercial orchards
- Forest Management Burning, such as prescribed fire activities or timber logging clean up operations
- Range Improvement Burning, such as clearing of land to increase forage for animals
- Levee, Ditches, Right of Way and Reservoir Clean Up burning
- Fire Hazard Reduction Burning
- Land Development Burning
- Public Officer/Fire Training
- Residential Burning

Except for residential burning, all other types of burning require a burn permit from the District in addition to any fire agency permit needed. The District issues burn permits for all outdoor burning except residential burning. On an annual basis, about 130 burn permits are issued for Agricultural and Non-Agricultural Burning.

All burning including residential burning must be done on a permissive burn day. Burn Day information is provided daily on the District's voice-mail in cooperation with state and local fire agencies to integrate fire safety/hazard information into the message, such as declaring no burn days because of high fire danger. The voice-mail system has been tailored to provide different messages for different areas of the county. The District further cooperates with fire agencies in the area of prescribed burning, in the enforcement of burning regulations, and in educating the public regarding open burning requirements.



# **Agricultural Burning:**

Placer County has about 16, 000 acres of planted field crops including 14,000 acres planted in rice and 1,350 acres of orchards. (Crop information from the Agricultural Department's 2001 Crop Report.) Much of the residue from these crops was burned historically, however, in 1992, the state legislature passed the 1992 Rice Straw Reduction Act to reduce the smoke impacts from the burning of rice straw. This law mandated the reduction of the rice straw burning to 25% of historical levels and only that rice stubble which is certified (by the County Agricultural Commissioner) to have a certain percentage of disease can be burned.

The Rice Reduction Act phase down in rice stubble burning, including a 1998 amendment (SB 318), was as follows:

Allowed Burning	Burning Reduction
90% of acres planted 80% of acres planted 70% of acres planted 60% of acres planted 50% of acres planted 40% of acres planted 40% of acres planted 38% of acres planted 35% of acres planted 25% of acres planted*,	Burning Reduction  10% 20% 30% 40% 50% 60% 60% 62% 65% 75%+
acres total for the basin	
	90% of acres planted 80% of acres planted 70% of acres planted 60% of acres planted 50% of acres planted 40% of acres planted 40% of acres planted 38% of acres planted 35% of acres planted 25% of acres planted*, No more than 125,000

<sup>\*</sup> Only those fields with the certified presence of disease can be burned.

The District staff works with ARB and the Sacramento Valley Air Basin Agricultural Burn Coordinator to allocate the amount of acres that can be burned daily under the expected meteorological conditions.

Additionally as part of the Agricultural Burning Program, the District Board of Directors adopted in 2001 the District's Smoke Management Program to manage burning activities that use fire as a management tool (also called Prescribed Fire). Those agencies, companies or individuals that plan to conduct a prescribed fire are required to work with the District to minimize air quality impacts from smoke. District staff worked extensively with the Mountain Counties Air Basin air districts and with land management agencies and private businesses in the development of the program. The air districts and land management agencies and private businesses meet biannually as the Mountain Counties Smoke Management Alliance to cooperatively implement a vegetation management program that includes burning from Mariposa County in the south to Plumas County in the north, and burning in the California portion of the Lake Tahoe Air Basin to the east.

#### **Non-Agricultural Burning:**

Non-agricultural burning includes hazard reduction, fire training, right-of-way, land development and residential burning. These types of burning are done mostly in the unincorporated areas of the County, with residential burning within municipalities often governed by local ordinances. Beginning January 1, 2004, the Air Resources Board's "Airborne Toxic Control Measure (ATCM) to Reduce Emissions of Toxic Contaminants from Outdoor Residential Waste Burning" requirements on residential burning became effective. This ATCM mandates that burn barrels be eliminated for use in burning. Additionally, the ATCM prohibits the burning of all refuse, including paper and cardboard that under existing District rules previously could be burned. This leaves only vegetation, burned on the property where grown, as being the sole material that can be legally burned. The ATCM provided the opportunity for a partial exemption from the regulation in low population density areas for the continued burning of paper and cardboard. The District requested such an exemption for the Iowa Hill area, an area that has limited garbage collection service. The Air Resources Board approved the partial exemption for the Iowa Hill area. The exemption will be reviewed in two years by the District to determine if the exemption is still needed.

#### **Significant Issue – Vegetation Management Visioning Project:**

To address the yearly crop of vegetation grown each year, while providing for the increase in smoke impacts on our population, the District initiated the formation of a Vegetation Management Working Group in 2003. This group is comprised of fire officials, district staff, fire safe councils, solid waste representatives and county planning. The Vision Statement is: "Placer County will promote vegetation management options to: reduce fuels; conserve ecological values; promote public health and safety; foster alternative opportunities in lieu of burning and confine open burning to those areas and activities where it is the appropriate management technique."

A goal of the Working Group is to produce a guideline document that identifies and categorizes vegetation management methods for different vegetation types and prioritizes the management options by the best method(s) for different geographic/demographic areas. This will both serve as a recommendation on the preferred management method(s) that should be used in different areas and identify areas where resources are needed to enable the preferred management methods to be used. It is expected that a guidelines

document will be available for evaluation in mid to late 2004. These dynamic guidelines will be used for determining how to economically and environmentally dispose of unwanted vegetation in Placer County.

#### AIR TOXICS OVERVIEW

Since the earlier 1980's, concern over the health impacts of airborne toxic contaminants has resulted in a growing number of mandates for the assessment and control of such contaminants. The need to address toxics has become paramount in air district project siting evaluations, as advancements in science of toxics have occurred, more and more compounds were determined to have acute or carcinogenic risks that needed to be evaluated and addressed. The District reviews new facilities that are proposed for siting near existing schools, and advises school districts of the existence of facilities that may emit toxic air contaminates that are located near proposed new school sites. The District also implements regulations that are applicable to specific categories of industry (e.g. state Air Toxics Control Measures, federal Maximum Achievable Control Technology Standards, and National Emission Standards for Hazardous Air Pollutants). In addition to the aforementioned programs, the District is involved in implementing two other programs pertaining to the air toxic emissions of stationary sources, the Air Toxics "Hot Spots" Information and Assessment Act of 1987, and Section 112(g) of the federal Clean Air Act.

#### **Air Toxics "Hot Spots" Information and Assessment Act of 1987:**

Local air districts are tasked with reviewing and evaluating the emission inventory plans and reports submitted by industry, prioritizing the facilities based on risk, requiring high priority facilities to conduct detailed risk assessments, and requiring "significant risk" facilities to reduce their air toxic emissions.

The Placer County Air Pollution Control District currently has thirteen (13) large facilities that are either being evaluated for risk through the "Hot Spots" program, or are being tracked as required by the program. The District reviews and re-prioritizes facilities though periodic toxic emission inventory updates reflecting changes in operation since the original inventories in 1989-1993. This is a reduction from the 70-80 large facilities that were initially evaluated through the program. Approximately 81 small facilities, such as gasoline stations, are being evaluated through the industry-wide assessment portion of the program.

Because the District has not had personnel with the time or the training to oversee the Hot Spots submittals, the District maintains an agreement with the Monterey Bay Unified Air Pollution Control District for the services as the district's air toxics expert.

#### Section 112(g) of the Federal Clean Air Act and Toxics New Source Review:

The Section 112(g) provisions of the federal Clean Air Act were designed to ensure that emissions of toxic air pollutants do not increase if a facility is constructed or reconstructed before the U.S. Environmental Protection Agency issues a Maximum Achievable Control Technology (MACT) or air toxics regulation for that particular category of sources or facilities. Provisions of 112(g) apply to any new stationary source that will emit or has the potential to emit 10 tons per year of any hazardous air pollutant (HAP) or 25 tons per year of any combination of HAPs, or any installation at a developed site of a new process or production unit which in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAPs. In essence 112(g) requires that any new facility that would be a large source of toxic air pollutants have the best available emission controls.

In order to assure that lower levels of toxic emissions for new facilities or modified facilities do not result in significant health impacts, the District conducts a toxics screening to evaluate the risk posed by the discharged pollutants when toxics are know to be emitted.

#### **Airborne Toxic Control Measures:**

The California Air Resources Board identifies air toxic contaminants through a program that specifically addresses the evaluation and control of substances that may be toxic air contaminants. Once a toxic substance is identified the Air Resources Board develops and adopts airborne toxic control measures (ATCMs) that are applicable to the toxic substance. These measures are implemented and enforced by local air pollution control districts. Among ATCMs that have been adopted is the "Airborne Toxic Control Measure (ATCM) to Reduce Emissions of Toxic Contaminants from Outdoor Residential Waste Burning" the requirements of which became effective on January 1, 2004. Another is the "Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations" that became effective in 2002. Other ATCMs are being developed for the control of diesel particulate from stationary and portable diesel engines.

Federal Maximum Achievable Control Technology (MACT) standards are similar to ATCMs and they are also are implemented by air districts. MACT standards become effective as ATCMs when they are promulgated as a matter of state law.

#### **Significant Risk Policy:**

The District has collected air toxics emission inventory data from individual facilities in accordance to the Air Toxics Act. Based on the air toxics emission inventory data collected, facilities meeting certain criteria must prepare and submit health risk assessments to the District. If, based on those health risk assessments, the District identifies significant health risks associated with any facility, the facility operator must notify all exposed individuals. A determination of what is a "significant health risk", for purposes of public notification, must be made by the District as part of this process.

The District Board on April 11, 2002, adopted a significant health risk notification threshold level:

• The cancer risks threshold is generally agreed to be acceptable if the cancer risk is less than 10 chances per million. A risk of 10 per million is the probability that 10 people would get cancer due to the carcinogenic emissions from a facility out of one million people equally exposed to the same emissions.

Carcinogenic risks: ten or more in a million (> 10 in 1,000,000)

• The Acute and Chronic (non-cancer) threshold is generally agreed to be acceptable if the acute or chronic Hazard Index value is less than one. A hazard Index equal to or greater than one is highly likely to cause adverse acute or chronic health effects. Adverse health effects range from relatively less serious eye irritation to very serious effects (e.g. hindered reproductive development, nervous system effects, heart attack, etc.).

Noncarcinogenic risks: hazard index (HI) or total hazard index (THI) of one or greater (HI or THI  $\geq 1.0$ )

In accordance with the adopted policy, the District requires that a facility notify the exposed public if the cumulative carcinogenic or non-carcinogenic health risks as presented in the health risk assessment exceed one or both of the significant risk thresholds. The District will make this determination only after the risk assessment has been reviewed and approved in accordance with the requirements of the California Health and Safety Code Sections 44360, 44361 and 44362.

In addition, the District will require that the facility operator conduct an airborne toxic risk reduction audit and develop a plan to implement airborne toxic risk reduction measures that will result in the reduction of emissions from the facility to a level below the significant risk threshold levels for the exposed public, pursuant to Health and Safety Code Section 44391.

#### **Environmental Justice and Knowledge Based Land Use Decisions:**

Traditionally the air district programs have been focused on reducing emissions to levels required by prohibitory rules or to levels enabled by the best available control equipment. Toxics emission sources pose new concerns in that the emission can directly threaten public health and the risk posed by emissions from one facility may be combined by risks created by the emissions of neighboring facilities.

In the past few years, as a result of the maturing air toxic pollution analysis capabilities, there has been a shift building from just limiting emissions from equipment to looking at the health impacts resulting from the emissions that are discharged. The Air Resources Board's (ARB) "Environmental Justice Policies", adopted in 2001, state that ARB shall dedicate resources and work with local air districts to develop narrowly tailored remedies to reduce emissions, exposures, and health risks in communities. While these policies are not directly applicable to air districts, the Policies provide a guideline for how air districts may address the same issues.

Although ARB is developing Air Toxics Control Measures for the reduction of toxic emissions from specific categories of emission sources, such as the reduction of diesel emissions from stationary and portable diesel engines, other control efforts will be necessary to address the health risks posed by toxic air pollutants. ARB will continue to prioritize efforts to reduce cumulative emissions of toxic air pollutants by considering the public exposure to, and the health risk caused by, those toxic air pollutants. The air districts, including Placer, are on the front-line in implementing Environmental Justice measures.

The development of remedies based on the impact of air pollution upon communities rather than solely limiting the emissions from specific items of equipment or from specific processes is a paradigm shift in air pollution policy. Although control measures have always been health based, the goal was a reduction in emissions in the broad-based "ambient" air quality, and not to the local impacts that need to be evaluated for toxic air pollutants. Underlying these Policies is a recognition that the state and air districts need to engage community members in a meaningful way and provide people with the best possible information about the air they breathe and what is being done to reduce unhealthful air pollution in their communities. In particular, a goal of Environmental Justice is to make information related to air pollution and community health more accessible to the residents of low-income and minority communities so that they can take a more active role in decisions affecting air pollution in their communities.

The Environmental Justice Policies are intended to promote the fair treatment of all Californians and cover the full spectrum of ARB and air district activities. While the primary focus is meeting ambient air quality standards and reducing health risks from toxic air pollutants, efforts such as air monitoring and research are needed to better understand the connections between air pollution and health. Effective enforcement of air pollution control requirements in all communities is also critical to achieving environmental justice. Education and outreach complete the picture in terms of providing the opportunity for the full participation of all communities.

#### **Significant Issue – Toxic Emissions and Land Use Decisions:**

The toxics programs that the District is required to implement require existing facilities to reduce health impacts upon neighbors, either residential or business, that exist at the time the risk is assessed. Although facilities are required to update their emission inventories every four years, the District's program would not preclude new property uses near an existing facility that exacerbates the health risk situation. The dissemination of "Hot Spots" information and other toxics assessment data may provide the planning commissions and land use decision makers with a tool to include the consideration of air toxics in planning.

Another useful tool for land use decision makers would be a means to assess the effects of cumulative exposure to or from a project. The District's air toxics programs do not currently address the cumulative health effects of pollutants that are discharged by a variety of sources. The issue of the assessment of the cumulative impacts of the emissions from industrial facilities, vehicles, consumer products, etc. is a current concern of air pollution regulators nationwide. Air monitoring and sampling for the purpose of determining the concentration of toxics in the air may be one avenue by which this question may be addressed. The Air Resources Board recently released the Hotspots Analysis and Reporting Program (HARP) software. This software provides a wide array of air dispersion and health risk assessment functions in one integrated package. HARP is one of the first tools that enable the District to analyze the health impact from multiple emission sources to evaluate cumulative impacts in a Geographic Information Systems (GIS) based program. Unfortunately, the tools to quantify synergistic affects from the intermingling of pollutants are still not available. The District is working on improving its criteria and toxic pollutant emissions inventories and linking the data to GIS coordinates so as to enable the use of District data in project evaluations, and potentially for future consideration in land use decisions.

#### **Significant Issue – Naturally Occurring Asbestos and Fugitive Dust Control:**

The "Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations" became effective November 19, 2002.

This regulation generally requires notification of the District for construction (including road construction and maintenance) or grading operation, quarries, and surface mines when the activity occurs in areas where ultramafic rock, serpentine, or naturally-occurring asbestos may be found. In Placer County these areas are predominately in the Auburn and Foresthill areas, and in the Tahoe National Forest. Naturally occurring asbestos is found with deposits of ultramafic rock and serpentine. When construction, grading, or excavation activities are to be performed in these mapped areas, and when ultramafic rock, serpentine, or naturally occurring asbestos is discovered during construction, best available dust mitigation measures are required. For construction

activities over one acre in size where ultramafic rock may be found, an Asbestos Dust Mitigation Plan must be submitted to the District for approved. Separate requirements are stated for road construction and maintenance activities - primarily dust control by watering.

Implementation of this regulation requires District coordination with City and County planning, building, and public works departments - particularly for Placer County and the City of Auburn. For example, land use environmental documents and grading permits should include an evaluation of whether ultramafic rock may be disturbed during construction and require the notification of the District and use of best available dust mitigation measures. The discovery of ultramafic rock after construction commences should also be addressed.

On April 10, 2003, the District Board adopted a revision to Rule 228, <u>Fugitive Dust – Lake Tahoe Air Basin</u>. The Rule was amended to apply to the entire District with a focus primarily on the control of fugitive dust from construction and grading activities, and from track-out onto public roadways. However, unless specifically exempted from provisions of the rule <u>any</u> man-made dust that exceeds the standards established would be a violation of the Rule. The establishment of these standards provides firm limits on dust generation that the staff of the District can enforce in the field. The standards can also be recognized by the public as setting the bar with respect to the degree of dust control that is required. The standards removed the subjectivity that exists in determining whether a "public nuisance" violation has occurred and must be met for the purpose of an overall air quality improvement as well as for a beneficial localized reduction in dust impacts. The revised Rule incorporated the requirements of the state's Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, for disturbed areas of one acre and less in area, and references the requirements of the ATCM for disturbed areas greater than one acre.

The District provided notices regarding the regulation to all public works, planning, and building departments in Placer County. In addition the District revised and re-printed an Air Resources Board brochure for property owners and renters. The District continues work on a template Asbestos Dust Mitigation Plan with he assistance of a consultant hired for this purpose.

#### Significant Issue – UPRR J.R. Yard Diesel Particulate Risk Assessment:

The District's primary goal is to achieve and maintain clean air standards, and healthful air quality, throughout Placer County. With the identification of components of diesel particulate as a toxic air contaminant by the California Air Resources Board (ARB) in 1998, and in response to concerns expressed by some Roseville residents, in 2000, the District sought to determine whether Placer County residents are being adversely impacted by emissions discharged by emission sources located at the J. R. Davis yard. Lacking the internal resources at that time to conduct an analytical and empirical analysis of the situation, and understanding that ARB was beginning to evaluate diesel toxic emissions in many categories, the District made a request to ARB for the conduct of an assessment of the health risk posed by yard operations upon the surrounding community. The District requested the assessment for the dual purposes of disclosing to the public the potential health impacts of yard diesel particulate emissions and of identifying the need for diesel particulate emission reductions. The District was advised that ARB was

interested in working with the District to estimate the exposure associated with diesel particulate emissions from current and future rail yard operations in Roseville. The California Air Resources Board's report on diesel particulate exposure and risk assessment of the operations at Union Pacific Railroad Company's J. R. Davis yard in Roseville, California is anticipated to be finalized and released to the District in Spring 2004.

There are three steps in the process of determining the exposure of the public to the emissions, and these steps have required numerous data exchanges and discussions between the technical staff from ARB and UPRR. The steps are: developing the emissions inventory (e.g. the time, location, and quantity of emissions discharged); conducting air dispersion modeling to determine exposure concentrations; and determining the potential increased risk to public health. At all steps appropriate ARB, U.S. EPA, and California's Office of Health Hazard Assessment (OEHHA) guidelines should be followed. The District has been kept appraised of the progress of these steps, but has not been involved in the technical aspects of the data interpretation. Due to the complexities of the assessment process and the sensitivity of the chosen air dispersion modeling parameters on the output data, the District has indicated that if ARB and UPRR cannot agree on the data, that it would be appropriate for the final assessment report to contain appropriate "dissenting" data and explanation of the difference in opinion.

The District has focused upon seeking ARB assistance in addressing three "macro" objectives for this assessment.

- □ What is the risk to the public being exposed to the emissions from the facility?
- □ What does it mean, in comparable terms, to other sources of diesel emissions?
- □ What can be done to reduce the emissions, and thereby reduce the risk?

Accordingly, the District's specific objectives for the risk assessment and its presentation are as follows:

- Obj. 1: Provide an Accurate Assessment: The assessment should be accurate. If a choice is to be made in assumptions or methodology, the preference of the District is toward including the worst-case scenario with regard to estimating public health impacts. Less health conservative scenarios and approaches are acceptable only for comparison purposes. The uncertainties associated with all assumptions and methods should be disclosed. Whenever possible ARB approved assessment methods should be used.
- Obj. 2: Provide Full Disclosure to the Public: The assessment should fully disclose the input data, data sources, assumptions, and methodologies. A purpose of the assessment is to provide the public with factual information on the actual or potential health impacts of yard operations. The District requested this assessment for this purpose. The inclusion of information concerning data uncertainties, error margins, the conservativeness of assumptions, and differing viewpoints, are essential parts of full disclosure.
- Obj. 3: Provide a Factual Presentation of the Assessment to the Public: Because of the complex nature of dispersion modeling and risk assessment methods a simplified explanation of the risk assessment process and findings is recognized as being an aid

in informing the public. The District does not wish to create unfounded concern, nor does the District wish to provide a bias with regard to the meaning of the assessment to individual members of the public. The objective of the District is to provide as much factual information as is appropriate to inform members of the public regarding the significance of the assessment results to their individual circumstances. Emphasis should be placed upon the conservative nature of modeling and risk assessment and that the intended purpose of such evaluations is to provide comparative risk information for populations. The risk assessment results are not intended to accurately state risks to individuals. The risk assessment information should be placed within a comparative context to other sources of like emissions.

- Obj. 4: Identify Mitigation Measures for Risk Reduction: As indicated in the background information, another purpose of the District's requesting the assessment was to identify whether yard emissions were such that reductions in risk, usually to be achieved through reductions in emissions, were warranted. For the determination of significance the use of normalized (approved) assessment methods and results are required. The use of the assessment model to determine appropriate and effective mitigation strategies to reduce risk is a desirable methodology. In order to identify mitigation measures, the assessment should identify the sources of diesel particulate emissions so that separate sources can be evaluated for risk reduction feasibility.
- Obj. 5: Develop and Implement a Risk Reduction Plan: Reducing emissions will ultimately reduce the level of exposure and risk to the public from diesel exhaust. Some reductions in emissions have already been implemented by actions taken by UPRR, and others will occur as Federal engine and fuel standards take effect over time. A Risk Reduction Plan should be created with short, mid, and long-term strategies identified and then implemented to effect quantifiable emissions reductions.
- Obj. 6: Follow-up the Analytical Assessment with an Air Monitoring Program: Developing an air monitoring "protocol" and program to follow in release of the risk assessment results would allow for actual air pollutant concentrations to be measured, providing a check on the validity of the modeling (anticipated to be conservative) and also would provide empirical information concerning risk reduction measures. It is recognized that there are inherent inaccuracies and concerns in developing and conducting air monitoring that would need to be resolved (issues such as air pollutant speciation and "background" clutter), and an effort to define these parameters and solve the technical difficulties should be undertaken, along with identification of the resources to implement such a program.

# III. AIR QUALITY PLANNING & MONITORING

## **PROGRAM OVERVIEW**

#### Significant Issues discussed in this section:

- Transportation Conformity Lapse
- 8-Hour Ozone Standard SIP Development
- New Particulate Matter Attainment Plan
- Countdown to Attainment Has Begun
- Rate of Development In Placer County
- Monitoring Network Expansion
- Roseville /UPPR Air Monitoring Study

#### AIR QUALITY PLANNING & MONITORING

#### **Air Quality Planning:**

The Air Quality Planning Program refers to the District's activity associated with the development of federally mandated regional air quality attainment plans and local general plans adopted by jurisdictions within Placer County.

Regional Air Quality Attainment Plans, which become part of the State Implementation Plan (SIP) submitted to the U.S. Environmental Protection Agency (EPA) refer to developing holding capacity emission estimates from photochemical modeling, emission inventories and control strategies that can be implemented to bring Placer County and the region into compliance with Federal Ambient Air Quality Standards. The Federal Clean Air Act Amendments (CAA) requires areas that exceed health based ambient air quality standards to develop attainment plans that bring the area into compliance within a mandated time contained in the CAA. The Sacramento Federal Ozone Non-Attainment Area (SFONA) includes all of Sacramento and Yolo Counties and portions of Placer, El Dorado, Sutter and Solano Counties. The SFONA is classified as a severe non-attainment area and has a federally mandated November 2005 attainment date. If the SFONA fails to attain the health based ambient air quality standard for ozone by this date, stationary sources of emissions will incur additional permitting requirements and monetary costs and transportation projects that increase roadway capacity could be put on hold.

District staff provides varying levels of assistance to local jurisdictions during the general plan update process, depending on their specific needs. At a minimum, District staff will comment on proposed land use maps and general plan goals and policies, or participate with general plan committees to develop strategies to minimize new developments impacts on air quality. These long-term planning documents can have a substantial effect on the regions ability to attain and maintain health based ambient air quality standards. The land use designations, goals, policies and implementation measures contained within long range plans directly affect the amount of air pollutant emissions emitted from various land uses, primarily associated with vehicle use. The rapid rate of population, housing and employment growth occurring throughout Placer County and the associated increase in vehicle miles traveled is negating the emission reductions benefits occurring from new lower emission vehicles entering the inventory. The way Placer County and its Cities develop will directly affect the overall increase in the rate of vehicle miles traveled and subsequent mobile emissions.

#### **Significant Issue - Transportation Conformity Lapse:**

The Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP) are required to be in conformity with regional air quality plans or SIPs, in nonattainment areas. The regional motor vehicle emissions estimated to result from buildout of the MTP and TIP must not exceed the mobile source emission budgets contained in the SFONA's SIP in order to meet this conformity requirement. In their conformity determination, SACOG must use the mobile emission budget and planning assumptions contained in the SIP. The problem is that the Federal Highway Administration (FHWA) notified the region that as of December 31, 2002, SACOG could no longer use the mobile emission budgets and planning assumptions contained in the 1994 SIP, and must use the most recent motor vehicle emission data and planning assumptions available for the region. In order for SACOG to be able to use the new emission budgets and planning assumptions, the Air

Districts would have to update the 1994 SIP to include this new information. This is not a simple task.

The work of updating a SIP to meet CARB and EPA requirements is extremely resource intensive. Emission inventories must be verified and updated through permit reviews and surveys. Photochemical modeling must be performed that demonstrates that the existing or proposed emission budgets and control measures will result in the region attaining the federal health based ambient air quality standard as required by November 2005. Photochemical modeling relates air pollutant emissions to concentrations of ozone in the ambient air through a sophisticated computer model that simulates the formation of ozone based on historical meteorology, air quality, and emissions data. Various emission control scenarios are run in order to determine the emissions level or carrying capacity for attaining the federal ozone standard in the Sacramento region. For the 1994 SIP, one such emissions carrying capacity level indicated was 137 tons per day of ROG and 98 tons per day of NOx for the non-attainment area in the year 2005.

The 1994 SIP that was prepared by the Air Districts of the Sacramento region and approved by the EPA set forth a program that was expected to result in the SFONA attaining the 1-hour health based ambient air quality standard for ozone by November 2005. The 1994 SIP established stationary source and mobile source emission budgets and control measures that conformity determinations would be compared against. The Air Districts are required to re-evaluate the control measures contained in the SIP every three years and submit a Milestone report to EPA demonstrating that the Air Districts are meeting their obligations and confirming that nothing substantial has changed that would prevent the region from attaining the standards as planned. The 2003 Milestone report submitted to EPA concluded that the region is meeting all of its control measure obligations contained in the 1994 SIP.

However, due to an impending transportation conformity lapse that this region could incur as early as October 2004, the Air Districts of the Sacramento region initiated an update to the 1-hour SIP in 2002. Two primary Goals were developed between the Air Districts and SACOG; minimize the length of a conformity lapse; and prevent a "bump-up" to an extreme non-attainment designation. The initial SIP update schedule provided for submittal of the 1-hour SIP to CARB and EPA in November 2004 or early 2005.

The Air Districts of the SFONA budgeted approximately 1.6 million dollars for this update, with SACOG providing \$300 thousand dollars from a Cal Trans grant. This District has provided approximately \$168,000 to the SIP development effort, in addition to substantial staff time, and has committed an additional \$24,000 for the CEQA work. The Air Districts requested modeling assistance from CARB due to their expertise in photochemical modeling and emission inventory development. A consultant was hired to provide a separate photochemical modeling analysis, partially because CARB was and is assisting other regions of the State that are updating their SIP and could not guarantee the timing of the SFONA modeling study.

Another team of consultants was hired to identify and prepare an evaluation of the potential control measures that the region could include in their SIP if the results of the photochemical modeling indicated that additional emission reductions were needed to demonstrate attainment. Staff from the five air districts of the SFONA have been meeting regularly to review and coordinate the consultants work. Over 300 control measures were evaluated for cost

effectiveness and general public acceptability. Another consultant has been retained and has begun work on the environmental analysis as required by the California Environmental Quality Act. In addition, numerous public workshops have been held to garner the public's input to the process and identify additional control measures that should be evaluated.

This staff has regularly updated our Board of Directors as to the issues and key decision points and times of the SIP update. Complicating the SIP update are changing regulatory requirements related to the implementation of the new 8-hour ozone standard and to conformity regulations, both of which substantially affect the current 1-hour SIP update. The photochemical modeling, however, is the critical link in the entire SIP update process. The CARB recently released its results of the photochemical modeling for the Sacramento Region and has determined that approximately 30 plus tons per day of reactive organic gas and nitrogen oxide emission reductions are needed in order for the SFONA to attain the federal 1-hour standard by November 2005.

The CARB modeling results essentially block one of the SIP options considered by the region and presented in the Road Map to Attainment. If the amount of emissions needed for attainment were low (less than 10 tons/day), the Air Districts would continue on the path of submitting a new 1-hour SIP to EPA with new emission budgets that would alleviate a conformity lapse.

The next option for the region to consider as a result of the modeling results would be for the region to voluntarily "bump-up" from a severe to an extreme non-attainment designation under the CAA. A bump-up to the extreme designation would impose additional significant monetary costs to job producing manufacturing industries throughout the SFONA. This option would violate one of the SIP Update goals, but would end the conformity problem.

Another option would have the region not prepare a 1-hour SIP update and wait to see if the region attains the 1-hour federal ozone standard by November 2005. If we don't attain by then, the Air Districts would be required to then prepare another attainment plan that demonstrates attainment by 2010. The region would not be bumped up to an extreme non-attainment designation and the increased costs to job producing industries throughout the SFONA would not be as severe as under a bump up to the extreme designation.

The third option for the region to consider as a result of the modeling was to prepare an early 8-hour plan that would be required under current EPA guidance in May 2007. This option would result in an approximately 20-30-month conformity lapse but would spare the region from bumping up to an extreme non-attainment designation.

A new option may have recently become available. In April 2004 when EPA will promulgate final conformity regulations. There is a chance that these new conformity regulations may create an opportunity to set new conformity budgets with an early 8-hour SIP standard rate of progress (ROP) plan. The ROP analysis does not require photochemical modeling but demonstrates that the region has adopted all of the control measures contained in the 1-hour SIP and has achieved all other emission reduction targets. The CARB has recommended to EPA that ROP plans be allowed as a bridge between the phasing out of the existing 1-hour standard and the implementation of the new 8-hour standard. This option is the most favorable option to the region to solve the conformity problem. The Air Districts have prepared a preliminary ROP analysis and have determined that the region would meet EPA requirements. Therefore, SACOG

could prepare the necessary conformity determination with little or no conformity lapse and the region would not have to bump up the extreme non-attainment designation.

It should be noted that under a transportation conformity lapse, all projects within the MTP and TIP will continue to receive funding for the phase of development they are in at the time of the lapse. However, in a lapse, no transportation projects can proceed to the next phase until the lapse is lifted, or unless the project is classified as an exempt project (non capacity increasing with no air quality impacts). Also, if all projects within the TIP stay on schedule, a conformity lapse will not occur until July 2005.

A transportation conformity lapse ends when there is a new conforming transportation plan based on a new motor vehicle emission budget from an updated SIP or a new conformity rule is implemented by the EPA and SACOG demonstrates that the MTIP and TIP conform to the new requirements.

#### **Significant Issue - 8-Hour Ozone Standard SIP Development:**

The new federal 8-hour ozone standard is expected to take effect in April 2005. The Air Districts of the Sacramento region will be required to prepare a new attainment plan for approval by the EPA no later than May 2007. The 8-hour attainment plan will have to contain new photochemical modeling, stationary, area and mobile source control measures to demonstrate attainment. The date at which the region will need to attain the new standards by will be dependent on our final designation from EPA, but is anticipated to be around 2013 for the SFONA.

#### **Significant Issue - New Particulate Matter Attainment Plan:**

The Sacramento Valley Air Basin portion of Placer County is proposed to be designated as non-attainment by EPA for the new Particulate Matter 2.5 standard. The Air Districts of this new non-attainment area will have to prepare an attainment plan similar to the existing ozone attainment plan. Emission inventories for PM 2.5 will have to be established and control measures developed to bring the region into attainment. Development of the PM 2.5 SIP will require monetary and staffing commitments by the District. In addition, new control measures are likely to be developed for all sources of particulate matter emissions within Placer County and the region.

#### Significant Issue - Countdown to Attainment Has Begun:

Countdown began in 2003 to demonstrate attainment of the Federal 1 hour Ozone Ambient Air Quality Standards by the 2005 deadline established by the Federal Clean Air Act. The region had six overall exceedances of the standard in 2003, with two of the monitoring sites recording three violations. The criteria that must be met to demonstrate attainment is no more than one violation per monitoring site averaged over three years. Thus, these sites that each recorded three violations this past summer cannot exceed the standard at all for 2004 and 2005 for the region to attain. There is a very low probability of this occurring. The Air Districts of the region can request from EPA two one year extensions if monitoring data indicates that attainment is achievable. This would occur if during 2005 we did not have more than two exceedances at any one monitoring station. This would allow the Air Districts to use 2006 and 2007 monitoring data combined with 2005 data to demonstrate attainment.

#### **Emission Inventory:**

There are approximately 500 emission source categories in the emission inventory. The Air Resources Board (ARB) staff is responsible for updating and maintaining 404 area source categories and air quality management 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 and data to better reflect local conditions.

The area wide source emission categories, which include both stationary and other mobile sources, are divided into four types of emission sources. Aggregated point sources are many small point sources, or facilities, that are not inventoried individually but are estimated as a group and reported as a single source category. Examples include gas stations and dry cleaners. Area wide sources include source categories associated with human activity and emissions 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 geogenic sources. Other mobile sources include categories such as off-road equipment (e.g., lawn and garden equipment) and recreational boats. Collectively, these types of sources are referred to as area source categories.

The Motor Vehicle Emissions Inventory is an accounting of those pollutants attributable to both on-road and off-road mobile sources. On-road motor vehicles include motorcycles to eighteen wheel tractors, while off-road sources cover tractors to bulldozers. The Air Resources Board has maintained these inventories, which are the product of population, activity and emissions, for over 25 years.

The ARB's Planning and Technical Support Division 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 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 of 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 varied 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.

To determine to what extent various sources within the region are responsible for ozone precursor production, emission inventories have been developed for reactive organic gases (ROG) and nitrogen oxides (NOx). These two air pollutants are produced by stationary sources, such as industrial equipment, and mobile sources, which include cars and trucks. The baseline

inventory represents actual emissions that are calculated using reported or estimated process rates and emission factors. Motor vehicle emission calculations include consideration of the fleet mix, vehicle miles traveled, speeds, and vehicle emission factors.

The baseline emission inventories are projected into the future based on expected growth rates of population, employment, industrial/commercial activity, and energy use. The emission forecasts also take into account the anticipated emission reduction effects from previously adopted control measures. Emission inventories are constantly being updated and improved to better reflect the conditions within the region and to better determine the contribution of various sources to air pollution.

#### Land Use / California Environmental Quality Act:

The District's Land Use Program primarily consists of providing assistance to developers and land use planning agencies regarding the location of new development throughout Placer County and compliance with the California Environmental Quality Act (CEQA) related to air quality issues. Staff also provides review of District actions subject to CEQA.

District staff attend predevelopment meetings when requested by a lead agency, or meet with developers independently to discuss the potential air quality impacts from their project and to develop strategies that can be implemented by a project to reduce the projects impact on local and regional air quality. The District maintains a "menu" of air quality related measures that project applicants and lead agencies can choose from to offset the impacts from new development to the extent feasible and to comply with CEQA. Staff also attends public meetings to assist lead agency staff in explaining sometimes complex and technical air quality issues to the public and elected officials.

When the District is the Lead Agency for a project, such as a new rule adoption, the District prepares the initial study to determine if a categorical exemption (CE), negative declaration (ND) or environmental impact report (EIR) is needed to comply with CEQA. As a Responsible Agency for a project, the District coordinates the preparation of the CEQA document (CE, ND or EIR) with the lead agency. In general, the CEQA requires responsible agencies to use the CEQA document prepared by a lead agency when deciding to approve a District permit for a project. This keeps the project applicant from having to duplicate the CEQA process when the District must issue a permit to operate for a project that is simultaneously going through a lead agencies CEQA process.

#### **Significant Issue - Rate of Development In Placer County:**

Placer County's population has been either the first or second fastest growing in the State over the past few years. In addition, Placer County's rate of job growth was the fastest in the nation in 2003. Other parts of the Sacramento region are experiencing similar rates of growth, with the increase in vehicle miles traveled making it difficult for the region to meet federally mandated ambient air quality standards. In the 1994 SIP, the Districts of the region committed to reducing one ton per day of ozone precursor emissions from land use and two tons per day from off-road heavy duty diesel construction equipment.

To meet this obligation, the Air Districts have developed CEQA significance thresholds to evaluate new development against to determine if a particular project will result in a significant air quality impact. If a project is expected to exceed the CEQA thresholds from the project alone or will contribute substantially to cumulative air quality impacts

occurring within Placer County, mitigation measures are recommended for the project to partially reduce their impacts.

These significance thresholds are 82 pounds per day for nitrogen oxide, reactive organic gas and particulate matter emissions and 550 pounds per day for carbon monoxide emissions. In addition to these standards, the District uses the concentration limits in the State and Federal ambient air quality standards as significance thresholds. These thresholds are consistent with the offset requirements used for stationary sources of emissions that require a permit from the District.

Land use development projects such as residential, commercial, industrial and public facilities are considered "indirect sources" of emissions because they do not emit air pollution directly. An indirect source may be defined as "any facility, building, structure or installation, or combination there of that *generates or attracts mobile source activity* that results in the emissions of any pollutant for which there is a state ambient air quality standard". The manner in which new development occurs can have a significant effect on emissions from indirect sources.

The region's emission inventory is approximately 70% to 80% on road and off road mobile sources. Air Districts have limited direct authority over these sources of emissions. Districts throughout the State are researching the air quality benefits that could be achieved through an Indirect Source Rule, which is authorized through Health and Safety Code Section 40716(1). The San Joaquin Unified Air Pollution Control District is in the process of drafting an Indirect Source Rule to mitigate emissions from land use projects. District staff are working with the San Joaquin District as they develop their Indirect Source Rule to determine if any studies undertaken can be used for a Placer County indirect source rule.

#### **Clean Air Grants:**

The District's Clean Air Grant Program provides financial incentives to sources of air pollution that are not required by law or regulation to reduce their emissions. Funding from the program comes from primarily two sources. Assembly Bill 2766 was passed in 1990 that provided authority to the District to impose a \$4.00 surcharge fee on vehicles registered within our jurisdiction. The surcharge revenues are to be used solely to reduce air pollution from on-road motor vehicles and for related planning, monitoring, enforcement and technical studies necessary for the implementation of the California Clean Air Act of 1988.

The second source of funding comes from new land use projects that during the environmental review process were determined to result in potentially significant project alone or cumulative air quality impacts. Projects normally implement all feasible mitigation measures possible onsite and then contribute into the District's Offsite Mitigation fund in-lieu of implementing their own off-site mitigation program. Participation in the District's established Offsite Mitigation Program saves the applicant the costs associated of creating and operating their own off-site mitigation program.

The District Board of Director's has approved Clean Air Grant projects totaling \$2,320,000 since the 2000/2001 fiscal year. For fiscal year 2003/2004, the District is offering \$750,000 to fund projects that reduce air pollution within Placer County and its jurisdictions. The Clean Air Grant

application period is currently open, with applications being accepted between 1/12/04 and 3/12/04.

#### **Air Monitoring Network:**

There are four air monitoring stations located within Placer County. One station is operated by the California Air Resources Board (CARB) in Roseville and monitors for ozone, carbon monoxide, particulate matter, nitrogen dioxide and toxic air contaminants. The remaining three sites are operated by the District. The Colfax, Auburn and Lincoln sites all monitor for particulate matter concentrations and the Colfax and Auburn sites also monitor for ozone.

The particulate matter monitors collect 24-hour samples (12 midnight to 12 midnight) once every six days. District staff retrieve and weigh the exposed filters within two to three days after a run day to determine the particulate matter concentration. The one in six day particulate matter monitoring program is used throughout the State and provides a consistent methodology to evaluate PM concentrations statewide. This monitoring method however, does not provide PM concentration readings hourly or in "real time" in which the District can use to issue health warnings if PM concentrations increase above health based standards.

The District has recently purchased two "real time" PM monitors that will provide the District will the capability to monitor PM concentrations hourly and issue health warnings if warranted. The District is in the process of identifying locations in Meadow Vista and the City of Lincoln to locate the new monitors. The ozone analyzers operated by the District provide hourly ozone concentration readings. The District's monitors are accessed daily by CARB and the contractor for the regional Spare the Air Program to determine when Spare the Air days are called. District staff performs daily, weekly and monthly quality assurance checks on the ozone instruments to ensure they are operating within federally mandated limits.

#### **Significant Issue - Monitoring Network Expansion:**

The Sacramento Valley Air Basin portion of Placer County is proposed to be designated as non-attainment by EPA for the new PM 2.5 standard. The Air Districts of this region will need to expand their air monitoring capabilities for PM 2.5 in order to understand the extent of the problem and to help guide the development of control strategies. The financial costs to the District to purchase additional monitors and to provide the staff time necessary to operate the new monitors could be considerable.

#### **Significant Issue – Roseville/UPRR Air Monitoring Study:**

The District is in the process of developing a particulate matter monitoring plan for the area around the UPRR facility in the City of Roseville. The CARB has agreed to provide technical assistance and monitoring equipment (if available) for a multi-year study in order to characterize the particulate matter 2.5 (PM2.5) concentrations in and around the Roseville facility. The District is also discussing with the UPRR management any opportunities for their contribution to the study. A minimum of four monitors is needed for this study.

The District has received two new PM 2.5 continuous air monitors and associated calibration equipment from the Sacramento Metropolitan Air Quality Management District (SMAQMD) to use in this study. The PM2.5 monitors were purchased by the SMAQMD with EPA 103 grant funds and loaned to the District. Staff will begin looking for monitoring sites for these two monitors and continue to pursue other monitoring

equipment from other sources to complete the monitoring network around the UPRR facility.

#### **Educational / Outreach Efforts:**

The District's Public Information Program participates in local and regional efforts to educate the community about the adverse effects of poor air quality and how the public can help solve the problem. District staff attend public events such as fairs and earth day celebrations providing clean air information through displays and handouts. Some of the regular programs supported by the District are described below:

#### Spare the Air

The Spare The Air program educates residents of the Sacramento Federal Non-Attainment Area about poor air quality threatening our health as well as how to decrease the problem. The program issues a Spare The Air Advisory when the region's air quality is forecast to be unhealthy by using real time air monitoring data and the Air Quality Index. It also provides a free service to the public, Air Alert and Employer Network that notify each participant by pager or e-mail when the air quality is expected to be unhealthy. The primary objective of the Spare the Air Program is to encourage the public to change their behavior on days when the region is expected to exceed the health based ambient air quality standard. The Spare The Air Program is supported by the local Air Districts, and managed by the Sacramento Metropolitan Air Quality Management District. A web site <a href="www.sparetheair.com">www.sparetheair.com</a> is available for more air quality information, including previous years air monitoring data, monitoring sites, and registration for Air Alert or the Employer Network.

#### Planet Polluto

Saving Planet Polluto is a free interactive CD-ROM adventure developed to teach children about air pollution and its impact on our lives. Through a variety of challenges, children learn about air quality terms, the Air Quality Index, the health effects of air pollution, how to maintain a car's engine to reduce emissions, how ground-level ozone and particulate matter pollution are formed and how to make healthy land use and transportation choices. It's a bright-animated journey into space for 4<sup>th</sup> through 8<sup>th</sup> graders. Save Planet Polluto is the joint effort of the Sacramento Metropolitan Air Quality Management District, JHME Advertising Design Public Relations, Sky's The Limit Interactive and Sonoma Technology Inc. It was developed under a grant from the U.S. EPA Office of Transportation and Air Quality. It can be obtained from the Spare The Air website or the local air district.

#### Mow Down

Mow Down is an annual program for residents of Placer County and the Sacramento Region to trade in their gas-powered lawn mowers for a substantial discount on new cordless electric mowers. Residents from El Dorado, Placer, Sacramento, Yolo and Solano counties register for a voucher either by phone or on the Internet, then take their old mower to a centralized location to trade in for a voucher worth \$225.00 toward a new \$400.00 mower. This program is extremely popular and unfortunately there are always many more interested individuals that are turned away due to a shortage of funding. The Mow Down program started in 1997 and since that time has recycled over 6600 gasoline mowers with approximately 68 total tons of emissions reduced annually. For 2004, the program anticipates funding for seven hundred mowers. This air quality success story is a collaborative effort between Sacramento Municipal Utility District, Air Districts and private businesses such as Black and Decker.

#### Clean Air Challenge

The Clean Air Challenge Curriculum is designed for 8<sup>th</sup> to 10<sup>th</sup> graders to study air pollution by following the investigative efforts of two interns working for the mayor of a large city. They must investigate and learn about ground level ozone formation, federal health standards, non-attainment areas, fossil fuel combustion and alternative fuels. Lab work is required as well. The goal is to propose solutions for the non-attainment problems. The curriculum meets the California Curriculum Standards as well as the National Science Education Standards. Teacher training is available at no cost with a stipend of \$125.00; also included is free lab equipment and supplies. The Placer County Office of Education endorsed the curriculum and is offering teacher workshops on February 20 and 21, 2004.

Indoor air quality Tools for Schools is a free kit provided by U.S. EPA for school maintenance personnel help them to recognize, identify, solve and prevent indoor air problems. It provides practical actions that can be carried out by the school staff without the need for training. It also provides information on the benefits of understanding and maintaining good indoor air quality. Schools present a unique set of factors like tight budgets, larger student numbers per classroom, use of portable classrooms not originally designed for school service and maintenance of additional ventilation systems. Tools for Schools uses a 19 step method management plan to assist school personnel for preventive maintenance, emergency response, establishing and updating polices, setting repair and upgrade priorities, assessing other possible indoor air containments and more. A kit can be ordered on the Internet by going to: www.epa.gov/iaq/schools

# IV. FISCAL OVERVIEW

#### FISCAL OVERVIEW

#### **Fund Description:**

Previous to late 1999, it was discovered that the District was in jeopardy of needing assistance from the County or other agencies in order to sustain operations. The District obtained the assistance of the County Executive in December 1999 to have a General Manager assigned. Within the next fiscal cycle (Fiscal Year 2000-01), the District's fiscal situation stabilized due to the District staff's hard work in restructuring, obtaining a new database program, permitting additional stationary sources and focusing on collecting revenue. By Fiscal Year 2002-03, the District was no longer deficit spending its operational fund (Unrestricted Fund).

The District operates on the revenue streams that fund the Unrestricted Fund (see bullet below) and does not participate in Placer County's General Fund. The revenue is paid directly to the District and is processed (receipted, posted to a receivable, reconciled to a receipt log and a summary is posted to the District's revenue accounts through Placer County's accounting system PAS -- Performance Accounting System). The revenue is then deposited to the Placer County Treasurer Department located at 2962 Richardson Drive in Auburn, California. The funds are maintained in a separate fund used solely by the Placer County Air Pollution Control District (PCAPCD).

The District pays for its supplies, services and contracts through the payable system included in PAS and adheres to the policies for encumbering funds and paying vendors that are established for Placer County. Some exceptions have been made for the District because of the independence of operation that the District desires to maintain and that allows the District to enhance the resources available through contracts for special services. An MOU between Placer County and the District is in the process of being established and should be in place by the end of this fiscal year, June 30, 2004.

The District also handles its payroll through the County because the District's employees are Placer County employees working for the District as "ex officio" employees. As such, the District adheres to all of the County's policies and regulations regarding personnel.

The District receives revenue from a variety of sources that are dispersed into four separate funds:

#### Unrestricted Fund

The following revenue is used for the general operation (unrestricted by program constraints) of the District and is derived from the following sources: Permit Fees, Fines, Interest, State Subvention, Per Capita Assessment and Miscellaneous Revenue.

#### DMV Fund

DMV - AB 2766 Fees (a portion of State Vehicle Registration Fees) plus Interest is restricted to the DMV Fund use for eligible programs that include efforts to reduce mobile source emissions and to carry out the California Clean Air Act Mandates. These activities include air monitoring, air modeling, emission inventory assessment and identification, control strategies, air quality planning, public information, and direct incentives to reduce tail pipe emissions. The DMV Fund also receives revenue from the Placer County Planning Department for environmental and land use reviews

derived from a portion of the fees charged by the Planning Department for building and land development applications. This revenue is used to offset the work done by the District's planning section.

#### Mitigation Fund

Mitigation Revenue is for programs to reduce emissions such as wood stove replacements, lawn mower swap-outs (MOWDOWN program), chipper purchases, and other projects in accordance with the Board approved policy. These revenues are unpredictable because they are project oriented and therefore are not budgeted. These funds are restricted as to the use as defined by the specific mitigation program.

#### Backup Generator (BUG) Fund

This was a one-time funding provided in March 2002 from the California Air Resources Board to mitigate the impact of backup generators (BUG) emissions associated with the past energy crisis. This fund was included in the FY 2002-03 budget and was earmarked for external projects. This fund was fully expended by the end of FY 2002-03 with \$115,000 encumbered for Clean Air Grants.

The District seeks to cover all the costs of operating the District through permit fees, fines, state subvention and invoicing for services rendered. However, some costs are not recoverable because of services provided by the District that are beneficial to the public at large. The District sought and received a \$.50 Per Capita Assessment that amounted to \$137,800 in the Budget for Fiscal Year 2003-04. This resource stream may become even more important should the State of California eliminate the revenue for subvention through the California Air Resource Board (CARB).

In the budget for Fiscal Year 2003-04, a special fund was established for the Non-Tort Defense Fund. \$30,000 was set aside from the Unrestricted Fund at the suggestion of the Placer County Risk Management Department for covering the defense of litigation resulting from Non-Tort cases. The District intends to grow the Non-Tort Defense Fund to \$70,000 over the next several fiscal cycles.

The District has since Fiscal Year 2000-01 granted over 2.3 million dollars in Clean Air Grants for projects that will effectively reduce emissions in Placer County. Another \$750,000 or more (dependent on additional funding) in Clean Air Grants will be awarded in Fiscal Year 2003-04 bringing the total Clean Air Grants awarded from Placer County Air Pollution Control to over 3 million dollars.

#### 2003/04 Budget Status:

Currently the District's fiscal picture is right in line with the Budget for Fiscal Year 2003-04 -- actually slightly better – Revenues are up by 19% and Expenditures are down by 14% as of December 31, 2003.

## V. RESOURCE PLANNING

### Significant Issues discussed in this section:

- Resource Demands
- Resource Enhancements

#### RESOURCE PLANNING

#### **Staffing:**

As was outlined in the Organizational Resource Development Plan (included in the Director's Handbook), our District has and continues to function with a permanent staff to population ratio below the "average" for air quality management agencies statewide (the average being about 8 FTE's per 100000 population served while ours is slightly above 4). The need for staff resources is driven both by regulatory program mandates and level of service demands dictated by public health, citizen, business, and jurisdictional inputs. District management has been working to optimize the staffing ratio by streamlining operations and leveraging resources in innovative ways. The streamlining of operations was initially accomplished through the Operational Initiatives Plan undertaken in early 2000, which identified fifteen processes or program areas for improvement. The results from the successful implementation of this plan laid the foundation for the current operating configuration and resource enhancements, which have been approved by the Board. Current staffing allocations have been made and future ones are being planned according to the specific goals and objectives as specified in our Mission. Examples of leveraging of resources can be seen in multiple service contracts for engineering support, air sampling, toxics screening, and data base development in addition to numerous operating agreements with local agencies and departments in mutual aid and/or pay for service types of relationships. Additionally, the District is making excellent use of both student interns and extra help employees to aid in program delivery.

#### **Significant Issue-Resource Demands:**

In many ways, the demands placed upon our District are unique within the context of "normal" local air regulatory agencies statewide. The reason for this is because the vast majority of air districts are either primarily rural or primarily urban in nature. The rural districts typically are small, deal with issues generally related to agriculture, and have a minimal number of stationary sources, which are likely less complex from a permitting perspective. They also tend to be in attainment of the Federal health based air standards. The urban districts tend to be large, deal with complex issues both within their permitting and planning programs, have numerous active enforcement issues, and tend to be in non-attainment of health based air quality standards. These urban districts tend to have a good balance of staffing resources to address the issues.

Our district is both rural and urban, and is facing the pressures of both. For example, we are the only district in the state that shares a portion of three separate air basins (Sacramento Valley, Mountain Counties, and Lake Tahoe). Each of these air basins has unique requirements and necessitates on-going staffing commitments to participate in basin wide measures to formulate and address planning and regulatory issues. We also have numerous large and complex stationary sources, ranging from high tech computer chip manufacturing plants to large lumber processing facilities, biomass plants, and hundreds of smaller sources accounting for close to a thousand active permits. This requires skilled and proficient staff who are trained across a wide range of engineering and technical disciplines and who are generally multi-tasked. Our technical staff interface daily with some of the top engineering consultants in the country and our work is subject to close scrutiny and oversight by regulatory, environmental, and corporate entities. The pressure to conduct our engineering analysis and turn around permit applications in a timely manner is enormous (although statutorily we are allowed 180 days). To compound the situation, we have thousands of acres of planted crops to manage with respect to

burning activities, and the county is covered with large tracts of forested land with built up fuel loads. These lands are subject to wild land fires, either prescribed or unintentional, and thus we need to actively manage our open burning and smoke management programs on a daily basis. We are host to the largest rail yard facility in the western United States, and have an interstate highway, pipelines, and rails running through our county. Additionally we are experiencing significant air quality planning challenges as Placer County has been the fastest growing county in the state for the past several years and was recently identified as being one of the top job producing areas in the country. This requires active participation in numerous local and regional planning venues and organizations to both represent and protect our city and county's interests as well as to fulfill our regulatory and public health commitments. At the same time, there is a desire to retain the rural character of the county, which supports agricultural operations and open space. Thus, the pressures from the urban and rural interface places air quality right in the center of many issues.

Because of these things, and the fact that air quality concerns are moving to the forefront with respect to transportation planning, business regulations (which impact core economic viability), and public health awareness (we have the worst air quality with respect to ozone concentrations in Northern California), it is apparent that the District staffing resources need to keep pace with the demands.

#### **Significant Issue-Resource Enhancements:**

In recognition of the demands being placed upon the District, the Board has provided significant fiscal support through the enactment of an annual per capita assessment placed upon the jurisdictions commencing this fiscal year (H&S 40701.5(b)), and also with the authorization of an increase to the DMV surcharge on registered vehicles in Placer County (H&S 44225). These fiscal enhancements have allowed for selected staffing augmentations per the Organizational Resource Development Plan, and the overall positive impacts can be seen in program improvements across the board in the key performance indicators established and tracked by management. These key indicators track and record 42 specific items within 7 categories on a quarterly basis so that adjustments to operations can be made should the performance "flag" reveal it. Some of the trend lines from these key indicators were provided in the Directors Handbook.

In order to keep pace with the demands for services throughout the foreseeable future, the District will need to use a combination of targeted staffing increases, contracts, and operating agreements to provide program delivery. Management estimates that the staffing will need to increase from the thirteen (13) full time allocated positions today to twenty (20) by 2011. Any requests for an increase in permanent staffing levels will only be made after an evaluation of the overall costs and benefits associated with the increase. An integral part of this evaluation will be a review of other alternatives for program or service delivery, and recommendations for increases will only be made if it makes business sense to do so. That said, the following planning premises were used in estimating the future staffing needs:

- Tie the resource enhancement requirements to the population growth over time. Experience indicates that as the population grows, so do the demands placed upon District resources.

- Maintain a conservative staffing to population ratio and strive for continuous efficiencies through the use of information technology (IT) and interagency support agreements.
- Utilize contractor support and selected temporary/extra help personnel in lieu of permanent staff until stable revenue sources to support the increased permanent staff are realized.

#### **Facilities:**

One of the operational constraints currently being faced is limited office space for the existing staff. The District leases 3500 square feet of office and storage space at the DeWitt Center from Placer County at a rate of about \$2080 per month excluding maintenance costs. Existing staffing levels have consumed all available space, and some employees (interns and extra help) are sharing workstations. The District has been identified as a tenant in the new county Land Development Building that will commence construction this spring, with anticipated completion in early 2006. The new building will accommodate the floor space requirements for the District's anticipated staffing increases through 2016. An issue that needs to be resolved is the lease rate that will be leveled upon the District as a tenant in this new building. The APCO has identified this as an item to discuss with county facilities management and the Executive Officer, and information will be provided to the Board as discussions unfold.

#### **District/County Relationship:**

As was explained earlier within the Introduction section of this report, the APCD is an independent special district and staff are Placer County employees working for the district as ex officio employees and officers. Staff, by being county employees, are subject to the codes and policies of Placer County, which at times may not be in the best interest of the District as it undertakes its mission and accomplishes its objectives. Because of this relationship, and the fact that the governing authority resides with elected officials from all jurisdictions, it became apparent that the details of the relationship needed to be formalized and memorialized. That process has been undertaken, and a draft document has been developed which addresses the services provided by the County to the District and exceptions or variances to specific policies for District personnel and operations. The document also clearly defines the reporting relationship of the Air Pollution Control Officer to the County Executive Officer and the Board of Directors, and specifies that the APCO serves at the direction of the Board and reports to the Board on all matters relevant to District business. Final negotiations on the relationship are being undertaken, and it is anticipated that an agreement will be presented to the Board this year.