

## **CHAPTER 8**

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## 8. IMPLEMENTATION SUPPORT ACTIVITIES

### 8.1 INTRODUCTION

In addition to the implementation of the control measures described in this 2001 Clean Air Plan (2001 Plan), there are other programs and regulations that can help bring about the attainment of air quality standards. These include the APCD's **New Source Review (NSR)** permitting process, the federal **transportation conformity and general conformity** regulations and **pollution prevention** programs. In addition, the APCD works cooperatively with other federal, state, and local agencies to reduce emissions through the environmental review requirements of the **California Environmental Quality Act (CEQA)** and the **National Environmental Policy Act (NEPA)**. The land use policies adopted by the county and incorporated cities under their **general plans and ordinances** also serve to control emissions to some degree. Finally, programs and policies traditionally associated with **transportation planning** also contribute to attaining air quality standards and are addressed in this chapter.

### 8.2 APCD PERMIT REGULATIONS

The APCD's NSR permitting program reduces air pollution by imposing Best Available Control Technology (BACT) and emission offsets on projects whose emissions qualify them for these requirements. The intent of this permitting program is to eliminate or reduce the number and severity of violations of the state and federal ozone standards and to help achieve expeditious attainment of these standards. As such, businesses are issued a permit only if their emissions will not (1) cause or contribute to any new standard violations; (2) increase the frequency or severity of any existing standard violations; and, (3) delay the timely attainment of any standard. Also, for new or modified sources that emit air pollution at levels over certain thresholds, federal NSR guidelines require that the permitting of the source result in a net air quality benefit. The provisions of the rule that establish emission offset requirements ensure such net air quality benefits are realized.

The New Source Review program is relied upon in the 2001 Plan to address pollution from new and modified stationary sources and for providing mitigation measures to ensure that such new or modified sources will not cause or interfere with attainment and maintenance of state and federal clean air standards. Thus because most new sources or modifications of existing sources of air pollution are permitted under the APCD's NSR rules, all significant stationary sources of air pollution will be fully mitigated through the APCD's NSR provisions.

More specifically, Rule 802, Non-Attainment Review, applies to new or modified sources of non-attainment pollutants and their precursors. Rule 803, Prevention of Significant Deterioration (PSD), applies to sources of attainment pollutants.

If the County is designated attainment for the federal health standard and yet remains non-attainment for one or more of the state health standards, new and modified sources that emit pollutants or pollutant precursors for which the County is designated by the state as non-attainment will be subject to the provisions of Rule 802 as well as to Rule 803. However, Rule 802 applies only to new and modified sources that have the potential to emit non-attainment pollutants. Thus, if the County is designated as attainment for both the state and federal health standards, the permitting of new and modified sources will be conducted only under Rule 803, Prevention of Significant Deterioration.

Rule 803 contains thresholds for both BACT and offsets. Although these thresholds are less stringent than the corresponding thresholds in Rule 802, they are set at levels intended to apply to sources with net emission increases (NEI) that exceed significant levels. The intent of Rule 803 is to ensure that emissions from new and modified sources of air pollution do not cause air quality degradation in areas designated attainment. New or modified sources with NEI exceeding the Rule 803 thresholds would be required to apply BACT and offsets, as applicable.

Rule 806 allows a company that reduces emissions beyond what is required by permits and rules to "bank" these reductions as Emission Reduction Credits. These credits have a market value and can be used by its owner or sold to companies that need emission offsets. Several large oil and gas projects in Santa Barbara County have provided and used Emission Reduction Credits as

part of the permitting process. These Emission Reduction Credits have resulted in cleaner air in Santa Barbara County and have provided businesses a means to reduce operating costs.

When Santa Barbara County's federal ozone classification was changed to "serious" nonattainment in 1997, the current NSR program was evaluated and determined to be at least as stringent (or more stringent) than the requirements mandated for "serious" areas. The existing regulations have been an integral part of Santa Barbara County's strategy in attaining the federal ozone standard and are adequate to provide for the maintenance of the standard. No revisions to the current NSR program are anticipated in this 2001 Plan.

### **8.3 CONFORMITY REGULATIONS**

Other than emissions subject to the APCD's NSR rule, emission increases are also governed by two APCD rules, Transportation Conformity (Rule 701) and General Conformity (Rule 702).

#### **8.3.1 TRANSPORTATION CONFORMITY**

Rule 701, as amended, is identical to the federal transportation conformity regulation promulgated by EPA on August 15, 1997 except for a Transportation Control Measure substitution provision and the interagency consultation provision. Its purpose is to prevent uncontrolled increases of on-road motor vehicle emissions from undermining the strategy established in the 2001 Plan. To this end, conformity determinations or exemptions are required for the adoption, acceptance, approval, or support of transportation plans, programs, and projects funded or approved under Title 23, U.S.C. of the Federal Transit Act. Essentially, transportation conformity ensures that future transportation investments do not jeopardize the County's efforts to attain the federal standards and makes attainment of these standards a goal of transportation planning instead of a consequence.

In order for significant transportation improvement projects to be funded, they must be included in a conforming Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP). An RTP is a long range (20 year) multi-modal plan to improve a region's state

highways; local streets, road and bikeways; airport and marine facilities; transit, paratransit and passenger rail services. As a guide for the development of these systems, the RTP describes the priorities for making investments in Santa Barbara County's transportation system. An FTIP is a multi-year program of transportation projects that are funded primarily from federal sources. The FTIP is developed and adopted by the metropolitan planning organization (Santa Barbara County Association of Governments) on a biennial basis. Once adopted, the FTIP is submitted to the California Transportation Commission and federal funding agencies.

For a conformity determination to be made, the on-road mobile source emissions incorporating all applicable projects in a plan (RTP) or program (FTIP), taken as a whole, cannot exceed the maximum allowable (i.e., emissions budget) on-road mobile source emissions established in this 2001 Plan. To perform such an analysis, modeling must be performed to ascertain this total vehicle activity (vehicle trips, vehicle miles of travel and vehicle speed distributions) resulting from the implementation of the plan or program. These data are then applied to on-road mobile source emission inventory models to generate total emissions. Rule 701 requires that the assumptions and tools used for this modeling exercise represent the latest acceptable methods as recognized by the federal transportation and air quality planning agencies (i.e., Federal Highway Administration and EPA). In addition, it must be demonstrated as part of conformity that all emission reducing transportation programs and projects that were credited in this 2001 Plan (i.e., transportation control measures) are being expeditiously implemented. As part of the latter assessment, it must be demonstrated that the RTP and FTIP each facilitate the implementation of air quality improving projects and programs. If delays in project/program implementation have occurred, a description of how the RTP or FTIP will bring the project/program back on schedule is required.

Since EPA's approval of the 1998 Clean Air Plan, SBCAG has prepared conformity determinations for the 1999 RTP and the 2000 FTIP. As required by Rule 701, consultation between SBCAG, the APCD, other affected federal, state and local agencies and the general public have occurred during these conformity determinations.

### 8.3.2 GENERAL CONFORMITY

In order to assure that federal agencies do not take or support actions, which are in any way inconsistent with the effort to achieve the federal standards, EPA promulgated the federal general conformity rule on November 30, 1993 (58 FR 63214). Rule 702 incorporates this federal rule in verbatim form. General conformity is intended to assure that a federal action does not adversely affect the attainment and maintenance of federal standards. The rule covers direct and indirect emissions of criteria pollutants or their precursors that are caused by a federal action and exceed specified *de minimis* levels. Certain federal actions are not subject to conformity determinations - e.g., an action that includes major new or modified stationary sources that require a permit under the new source review or prevention of significant deterioration provisions of the federal Clean Air Act.

As Santa Barbara County is designated a “serious” ozone non-attainment area, general conformity determinations are triggered for nonexempt federal actions whose emissions exceed 50 tons/year of any ozone precursor. Santa Barbara County has attained the federal one-hour ozone standard and has applied for redesignation as a maintenance area. Upon redesignation as a maintenance area the exemption threshold will be 100 tons. The following criteria are used to determine the conformity of nonexempt federal actions <sup>1</sup>:

1. The action is in conformity if its emissions are specifically identified and accounted for in the applicable state implementation plan (SIP)<sup>2</sup>.
2. If the emissions from the action are fully offset so there is no net emissions increase, the action is in conformity.
3. Where EPA has approved a revision to an area’s attainment or maintenance demonstration after 1990, an action is in conformity if the emissions from the action, together with all other

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<sup>1</sup> For further detail, see Title 40, Code of Federal Regulations, Part 51.858.

<sup>2</sup> The applicable SIP means the portion or portions of the SIP, or its most recent revision, which has been approved by EPA under Section 110 of the Clean Air Act.

emissions in the non-attainment or maintenance area, do not exceed the emissions budgets specified in the applicable SIP. This criterion is known as the “budget” test.

4. Where EPA has not approved a revision to an area’s attainment or maintenance demonstration after 1990, an action is in conformity if its emissions do not increase emissions with respect to baseline emissions. For Santa Barbara County, the baseline emissions reflect the historical activity levels that occurred in the geographic area affected by the federal action in the calendar year 1990. The baseline emissions are the total direct and indirect emissions calculated for future years using the historic activity levels and appropriate emission factors for future years <sup>3</sup>. This is known as the “build/no build” test.

## **8.4 POLLUTION PREVENTION PROGRAMS**

### **8.4.1 INNOVATIVE TECHNOLOGY GROUP**

The APCD’s Innovative Technology Group (ITG) was established in 1988 in connection with conditions of approval for the development of two new oil and gas facilities. The ITG program promotes the development, testing, and application of clean fuels and energy projects to reduce emissions of NO<sub>x</sub> and ROC. To date, ITG has implemented over 25 programs to demonstrate low emissions technology for both mobile and stationary sources. Present and past projects have included providing incentives for the purchase of new alternative fueled vehicles or repowering existing vehicles with alternative fueled engines, providing incentives to accelerate the replacement of older gasoline and diesel engines with new, modern, low emissions conventionally-fueled engines, purchasing and scrapping older and more polluting automobiles, a commuter bus program, research to develop low NO<sub>x</sub> gas turbines, solvent use reduction programs and fuel cells.

Reductions in ozone precursors from ITG projects have amounted to over 1,400 tons. Funding for ITG programs comes from several sources, including contributions from oil and gas development projects as part of their permitting requirements, motor vehicle surcharge fees

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<sup>3</sup> The future years are defined at 40 CFR 51.859(d).

collected with annual vehicle registration, CARB's Carl Moyer Program, and from mitigation requirements associated with CEQA. The continued success of the ITG program lies in our ability to leverage ITG funds with additional funding from other organizations in order to obtain greater emission reductions than would be possible with the use of ITG funds alone. The APCD is committed to the continued application of innovative ways of reducing pollution from a wide range of sources.

#### 8.4.2 OUTREACH AND EDUCATION PROGRAMS

APCD has a number of outreach and education programs to encourage positive voluntary choices to reduce or prevent pollution. Since motor vehicles represent the major source of smog-forming pollution in Santa Barbara County, several of APCD's outreach and education programs promote alternatives to gasoline-powered automobiles and accelerated adoption of alternate-fuel vehicles.

Over the past three decades, APCD has implemented a number of regulatory programs to achieve air pollution reductions, and we have seen our county's air quality improve. Many of the most cost-effective regulatory strategies have already been implemented, and outreach and education programs are increasingly important as a means to achieve long-term pollution reductions, and to support a long-term trend toward improved air quality in the County.

These programs are directed at a range of audiences, from school children to business owners, and use many different tools and strategies to help people understand air quality issues, and make choices that help keep the air clean.

Tools used by outreach and education initiatives include the following:

- APCD website, which provides information about the County's air quality and APCD programs, and links to additional information from other local, regional and national agencies and organizations.



- Printed materials, including the APCD bi-monthly newsletter and printed brochures and handouts.
- Computer-based interactive tools, including “Air World,” information available in a kiosk and via CD-ROM on a computer system.
- Videos, including APCD’s videos “The Air We Breathe,” and “ITG Video” and videos developed by others.
- Hands-on activities and demonstrations at community events.
- Educational and informational visits to schools, business organizations, and community and industry groups.
- Demonstrations of new pollution prevention technologies and techniques.
- Demonstrations of alternate-fuel vehicles.
- Advertising and publicity.
- Participation in cooperative efforts with local and regional partners.
- Customizing materials and programs provided by other agencies, including California Air Resources Board, the federal Environmental Protection Agency, other air districts nationally via the STAPPA/ALAPCO Outreach and Education Committee, and other state air districts, via the California Air Pollution Control Officers (CAPCOA) Outreach Committee.

Outreach and Education Programs include the following:

- ❑ Business Assistance, Outreach and Recognition Program
- ❑ School Programs
- ❑ Alternate Transportation Outreach Programs
- ❑ Cooperative Community Programs

#### 8.4.2.1 Business Assistance, Outreach and Recognition Program

The Business Assistance, Outreach and Recognition Program provides a variety of resources, including helping businesses navigate the permitting process, achieve and maintain compliance

and access information on pollution prevention. This program is designed to meet the needs of the business community and help them reduce their impact on air quality.

#### Permitting and Compliance Assistance

The Business Assistance Program provides help with understanding APCD rules, filling out forms and preparing reports. The Business Assistance Representative also helps a business apply for a permit and understand permit conditions.

#### Educational Site Visits

Upon request, the Business Assistance Representative can conduct on-site evaluations of business operations. These visits provide the opportunity for a business to receive an evaluation of their efforts to control air pollution and guidance on how to improve.

#### Business Assistance Line

The Business Assistance Line is a dedicated phone line designed to provide a single point of contact within the APCD. The goal is to answer questions immediately or to place the caller in touch with the most qualified staff member to address the issue.

#### Customer Feedback

As part of the Business Assistance Program, feedback forms are periodically sent out to businesses after receiving a permit, being inspected, or performing a source test. This process allows businesses and the public to rate the APCD's performance and make suggestions for improvement.

#### Pollution prevention

The Business Assistance Representative can put businesses in touch with technical, and in some cases, economic assistance to develop pollution reducing strategies. The APCD participates in the Tri-County Pollution Prevention Committee (TCP2C). The TCP2C is made up of representatives from local government agencies and non-profit groups from Ventura, Santa Barbara and San Luis Obispo counties. This committee shares information on pollution prevention strategies that can then be passed on to businesses. In the future, the TCP2C may

also develop outreach materials directed toward specific industries. The APCD is also a member of the National Pollution Prevention Roundtable (NPPR). The NPPR provides a forum for learning from and sharing information with pollution prevention providers throughout the United States and the world.

#### Business Focus section of On the Air newsletter,

The Business Focus section of the APCD's newsletter highlights issues of particular interest to local businesses.

#### Demonstrations and workshops

From time to time, the APCD hosts demonstrations of new and innovative technologies aimed toward introducing companies to new options for their operations. For example, in partnership with the Western Regional Pollution Prevention Network, the APCD hosted a demonstration of the Laser Touch. The Laser Touch, developed by the Iowa Waste Reduction Center, is a new device that attaches to manual paint spray guns and uses a laser to help painters properly target what they are painting. Less paint is used, and less air pollution is generated. All local auto body shops and surface coaters, as well as paint suppliers, were invited to the demonstration to see the technology in action, ask questions, network, and discuss options for implementation of the technology.

#### Business Web Pages

Business Assistance information included on the APCD website includes informational brochures, Business Focus, frequently asked questions, links to permit application forms and APCD Rules and Regulations, and pollution prevention information. This section of the website provides businesses with online access to the resources within the APCD.

#### Green Awards

The Green Award, which began in 1994, is a recognition program for local businesses that go above and beyond in their daily operations to minimize their impacts on the environment. The Green Award is presented to five companies each year during Pollution Prevention Week in September. The Green Award Consortium is made up of the APCD, Santa Barbara County

Public Works – Solid Waste Division, Santa Barbara County Public Works – Water Resources Agency, Traffic Solutions, and the Community Environmental Council. Businesses are judged on their efforts to reduce air pollution, reduce use of hazardous materials, reduce traffic, conserve water, recycle and create less waste.

The Green Award has evolved over time to be a desired award businesses strive for. Recipients of the Green Award report voluntarily making comprehensive and measurable changes to their operations in order to win the award. The Green Award encourages companies to take a look at how they do business and rewards those that demonstrate exceptional commitment and innovation.

#### 8.4.2.2 School Programs

APCD has a number of programs to educate children and youth about air pollution and choices they can make to help keep our air clean. As the County continues to grow, it is increasingly important to bring up future generations to be responsible adults who will make thoughtful choices. APCD's school programs are designed to be responsive to teacher requests, and county needs, and to take advantage of available resources and materials. APCD is also involved in cooperative programs with other agencies and organizations, and community coalitions to promote use of alternate transportation to school.

The programs vary as resources become available, and as education and community partners focus on new areas. The following brief overview of current APCD school programs provides an example of the range of projects; we may focus on different areas in the future.

##### The Safe Routes to School through Safe Communities Project

APCD is part of a community coalition working to create safer routes for kids to take to school, and to promote safety education, and awareness of the benefits of walking and biking to school. Other partners in the coalition, which is currently focusing on the greater Santa Barbara area, include the City of Santa Barbara Public Works Department, the County of Santa Barbara Public Works Department, the Santa Barbara Bicycle Coalition, the Santa Barbara Area Council of

PTA's Safety Committee, the City of Santa Barbara Police Department, and a variety of other partners, including school principals and administrators.

The Safe Routes to School Project is working on a range of strategies to help schools find solutions to their traffic problems, including the development of safe routes to school maps, incorporation of transportation into the school curriculum, bicycle and pedestrian safety instruction, and programs that make the choice to bike, walk, or take alternate transportation to school a viable option for more families

The project has the potential to offer benefits, not only in the near term, in alleviating traffic problems and reducing air pollution, but also into the future, as the kids who have adopted positive alternate transportation habits become adults.

#### Kids Care for Clean Air Calendars

APCD and Traffic Solutions sponsor a calendar contest annually to focus attention on the transportation-air quality connection. The contest is publicized to schools, youth groups, after-school programs, and parents. Contest winners receive a savings bond and their pictures appear in the calendar. The grand prizewinner, whose picture appears on the cover, is awarded an additional prize, such as a new bicycle. Some of the schools and organizations with winning students hold additional events to honor their contest winners; for example, one school announced its winner in a special assembly, and the winner autographed calendars for the school's teachers. The contest and the calendar, which is distributed throughout the county, bring additional attention to clean air/alternate transportation messages throughout the year.

#### Classroom and Youth Program Visits and Tours

APCD visits classrooms and after school and youth programs throughout the county, with presentations that range from pre-school level through high school, and include hands-on demonstrations. APCD also conducts tours of monitoring stations, and APCD's monitoring lab on request, for all ages of students, including students at Santa Barbara City College.

Through a program titled “Cruising the Clean Air Ave. (Alternate Vehicle Education),” APCD is taking an electric vehicle (EV) on loan from the California Air Resources Board (ARB) to classrooms, with a presentation on air pollution. In addition to EVs, APCD has demonstrated compressed natural gas vehicles, dual-fuel vehicles and hybrid vehicles at schools and youth programs, and has used mini electric vehicle kits in classrooms to teach air pollution and science concepts.

#### Materials for Teachers

APCD provides teachers with materials, including curricula and activities. APCD also participates in teacher trainings, so teachers can incorporate air pollution-related activities into their programs throughout the school year.

#### California Regional Environmental Education Community (CREEC) Network

APCD participates in the CREEC Network, an environmental education consortium and clearinghouse. CREEC provides a way for APCD to interface with other organizations and groups providing environmental education materials, and to stay current with state and regional environmental education trends. In addition, APCD uses the CREEC website and email lists to promote school programs.

#### Computer-based Materials

APCD is distributing ***Air World*** to schools, a CD-ROM system for PC computers. ***Air World*** highlights the transportation/air quality connection, using celebrities to lead viewers through different worlds and air pollution facts and issues. Developed by Ventura County Air Pollution Control District with a grant from the U.S. Environmental Protection Agency, Air World has been customized with information on Santa Barbara County’s air, featuring video clips showing county kids, and business and community leaders talking about our air and what we can do to keep it clean. APCD first launched ***Air World*** at Santa Maria Discovery Museum for Clean Air Month 2000, and will launch a new kiosk housing for the computer information system in 2001.

APCD’s website includes pages worth specific information and links for students and teachers, including a link to Smog City, an interactive air pollution game. APCD will provide additional

computer-based materials to students and teachers as they become available, including a “Planet Polluto” game currently under development by Sacramento Air Quality Management District.

#### Santa Maria Valley Industry Education Council

APCD is a member of the Santa Maria Valley Industry Education Council, which promotes and coordinates efforts by businesses and organizations in the Santa Maria Valley to support schools in the area, and offer additional materials and opportunities for students. APCD participates in school events put on by the council, such as a Career Day last year at a middle school in Santa Maria, for which two members of APCD’s staff demonstrated a hybrid vehicle and talked about air pollution and their jobs as inspector and public information specialist.

#### 8.4.2.3 Alternate Transportation Outreach Programs

A number of the programs already discussed above incorporate a focus on alternate transportation. APCD also has projects with the primary focus of promoting alternate transportation and early adoption of clean-fuel vehicles and technologies.

#### Take a Vacation from Your Car

Take a Vacation from Your Car is a cooperative effort led by APCD and the American Lung Association of Santa Barbara and Ventura Counties, with participation by a wide range of partners, including the Santa Barbara Conference and Visitors Bureau & Film Commission (CVB), the Santa Barbara Region Chamber of Commerce, the Santa Barbara Metropolitan Transit District, Amtrak, the Santa Barbara Industrial Association, the Santa Barbara Bicycle Coalition, Traffic Solutions, representatives from tourist-oriented businesses, and a variety of others. The goal of the project is to promote car-free ways to get to, and around, the Santa Barbara area, and to position car-free travel as an attractive feature of a vacation.

Reducing emissions from cars driven by visitors to the area is important for a number of reasons:

- ❑ Visitor-generated pollution occurs at the highest levels during the smog season, i.e., April through October.

- ❑ Visitor-generated pollution occurs intensively in the southern portion of the County, the area with the greatest number of smog (ozone) exceedances.
- ❑ Increased traffic produced by visitors in this area adds to the congestion problem, which results in additional pollution.

In addition, positioning car-free travel as a fun way to get around town will also strengthen efforts to promote alternate transportation to residents.

The project received a grant of Congestion Management and Air Quality (CMAQ) funds and has been working to increase the visibility of alternate transportation options for tourists. The project was recently highlighted in *Profiles of Local Clean Air Innovation*, a report by the National Association of Local Government Environmental Professionals (NALGEP).

The project has supported promotion of an electric bus route for use by visitors and residents to take from the waterfront area to the Mission and the Botanic Garden, which previously was not served by any public transportation. The ad campaign for the bus route featured residents sending family visitors off on the electric bus, providing an illustration of how promotional efforts of this project target both visitors and residents.

The project is developing:

- ❑ A website for visitors, [www.santabarbaracarfree.org](http://www.santabarbaracarfree.org), to be marketed via advertising in travel publications and on travel websites, and other avenues;
- ❑ A one-stop brochure for visitors;
- ❑ A system for placement of informational materials and an MTD traveler kiosk in central visitor areas;
- ❑ A publicity campaign to reach local and travel media.

#### Alternate-Fuel Vehicle Demonstrations

APCD provides demonstrations of EVs, hybrid vehicles, compressed natural gas vehicles, and alternate-fuel vehicles to businesses and organizations on request. Additional demonstrations are part of community events such as Earth Day.



#### Support of State and APCD Incentive Programs

APCD's outreach and education programs also promote awareness of incentives offered by the state, such as the zero-emission vehicle incentive, and incentives offered through APCD's Innovative Technologies Group. Examples of supportive efforts include the following:

- ❑ A Clean Air Month event at Costco, featuring test drives of the General Motors EV-1, promoting awareness of APCD's EV incentive, and of advanced vehicle technologies in general. The event also featured displays of other types of EVs, electric bikes, and informational materials on air pollution and transportation technologies.
- ❑ An event celebrating the introduction of mini electric pickups in state park campgrounds along the coast of our county, a joint effort by APCD, Friends of the Channel Coast State Parks, and California State Parks, Channel Coast Division.
- ❑ Ongoing publicity and promotional efforts for a variety of programs ranging from diesel repower programs to old car buyback programs.

#### 8.4.2.4 Cooperative Community Programs

APCD leads and participates in a number of cooperative community efforts around specific issues or specific events. Examples follow; different initiatives may be undertaken as new issues and needs arise.

#### Earth Day

APCD participates in Earth Day events around the county. As part of the Santa Barbara Earth Day 2000 coalition led by the Community Environmental Council, APCD helped plan the event held at Santa Barbara City College in celebration of the thirtieth anniversary of Earth Day. APCD also participated in the Earth Day 2000 event in Santa Maria, which celebrated the opening of the new Santa Maria Natural History Museum, and in events in Santa Ynez and Carpinteria.

APCD's participation typically includes: children's activities, including clean-air pledges, hands-on demonstrations and craft activities; demonstrations of advanced vehicle technologies, including hybrids, EVs, and CNG vehicles; and information and materials on a range of air quality topics. APCD also includes partners, including the American Lung Association of Santa Barbara and Ventura Counties, and their activities and materials.

#### Clean Air Month

APCD works with the American Lung Association (ALA) of Santa Barbara and Ventura Counties to promote awareness of air pollution issues during Clean Air Month, celebrated nationally by the ALA in May every year. Clean Air Month activities have included visits to Farmers Markets with ALA volunteers displaying actual human lungs to sponsoring EV test drives at Costco, and launch of *Air World* at the Discovery Museum.

#### Pollution Prevention Week

APCD works with a group of local agencies and organizations to promote pollution prevention awareness every year during national Pollution Prevention Week, typically the third week of September. Past efforts have included radio and print ad campaigns (including public service spots), and development of a cooperative website, [www.greendifference.org](http://www.greendifference.org), to provide information on a variety of local and national pollution prevention programs and resources.

### 8.4.3 CLEAN CITIES PROGRAM

The APCD is part of a local coalition working towards a Clean Cities designation issued by the U.S. Department of Energy. The program is a voluntary, locally based government/industry partnership that will expand the use of alternatives to gasoline and diesel fuel. Clean Cities works directly with local businesses and government to shepherd them through the goal-setting, coalition-building and commitment process necessary to establish the foundation for a viable alternative fuels market. The APCD is among the stakeholders who are jointly developing a Clean Cities program plan which will include Clean Cities Goals, organizational structure, analysis of the local alternative fuel vehicle market, and commitments from fleet operators and

others who will purchase and maintain alternative fuel vehicles and invest in refueling infrastructure.

## **8.5 APCD ENVIRONMENTAL REVIEW PROGRAM**

The California Environmental Quality Act (CEQA) requires every project that is not exempt from CEQA be analyzed to disclose the potential significant adverse environmental effects of the project, to identify alternatives to the projects and to indicate the manner in which those significant adverse effects can be mitigated or avoided. The National Environmental Policy Act (NEPA) applies to projects undertaken or funded by federal agencies.

The APCD's environmental review program consists of the following:

1. As a lead agency, the APCD analyzes and prepares environmental documents on its own discretionary activities, such as, clean air plans, rules and regulations; and discretionary APCD permits which do not require a land use or other agency permit.
2. As a responsible or cooperating agency, the APCD reviews environmental documents prepared by other lead agencies or jurisdictions under CEQA or NEPA to reduce or avoid impacts to air quality and to ensure that the lead agency's environmental document is adequate to fulfill the CEQA requirements for APCD permits.
3. As the local agency with jurisdiction over the air resources of the County, the APCD is a concerned agency under CEQA and NEPA. The APCD provides guidance to mitigate adverse impacts to air quality from development projects in the county as well as offshore sources.

The determination of what constitutes a significant adverse effect is made by the jurisdiction with the primary permitting authority over a proposed project, usually an incorporated city, a county agency, or a state agency (implementing CEQA) or a federal agency (implementing NEPA). The APCD, as an independent local agency, has adopted its own thresholds of significance in its *Environmental Review Guidelines* (rev. November 16, 2000) to implement CEQA.

The APCD also provides guidance on how to quantify and mitigate adverse project-related air quality impacts, and how to determine consistency with adopted air quality plans in its guidance document “Scope and Content of Air Quality Sections in Environmental Documents”. This document is updated periodically as new emission factors and models become available.

Certain land use-related emissions are exempt from APCD rules and regulations but are regulated wholly or in part by the county and incorporated cities through their General Plan policies, zoning ordinances or by other agencies through their regulations, or indirectly through the provisions of CEQA and NEPA. State guidelines for implementing CEQA require all environmental impact reports to include a discussion of any inconsistencies between a proposed project and applicable general plans and regional plans, the latter of which include clean air plans. The discussion is intended to identify projects which would run counter to the efforts identified as desirable by agencies in regional plans to solve large-scale environmental problems such as air and water pollution. This analysis may lead to projects being modified to reduce any inconsistencies. To be consistent with the adopted air quality plan, the direct and indirect emissions associated with a project subject to CEQA must be accounted for in the adopted plan’s emissions growth assumptions. Additionally, the project has to be consistent with policies in the adopted air quality plan.

The APCD recommends energy conservation measures for all projects to reduce the need for natural gas and electricity. Although there are currently no power plants in Santa Barbara County<sup>4</sup>, a portion of our electricity comes from burning fossil fuels, which contributes to regional air pollution. To mitigate some of these impacts of land use development on air quality, the APCD encourages pollution prevention principles including "green" buildings whose location, design, construction and energy systems reduce the use of non-renewable energy resources, such as:

**Energy Conservation:** Buildings should increase energy efficiencies beyond Title 24 compliance in project design. The following are examples of innovative measures that should be incorporated into project building plans where ever feasible:

- Photovoltaic or wind generators
- Duct system within the building thermal envelope, or insulated to R-8
- Passive cooling strategies: Passive or fan-aided cooling planned for or designed into structure, a cupola or roof opening for hot air venting or underground cooling tubes
- Outdoor lighting designed for high efficiency, solar-powered or controlled by motion detectors
- Natural lighting in buildings
- Building siting and orientation to reduce energy use
- Summer shading and wind protection measures to increase energy efficiency
- Use of concrete or other non-polluting materials for parking lots instead of asphalt;
- Use of landscaping to shade buildings and parking lots;
- Installation of energy efficient appliances and lighting;
- Installation of mechanical air conditioners and refrigeration units that use non-ozone depleting chemicals.
- Installation of sidewalks and bike paths.
- Installation of covered bus stops to encourage use of transit.
- Site preparation for installation of an electric vehicle charging station
- Display kiosk with air quality and alternative transportation educational materials.

**Green Materials and Practices:** Proposed building plans should include green building materials and pollution prevention practices, such as:

- At least 50% of exterior of local masonry; plaster or cementitious siding; recycled, salvaged or certified sustainably harvested wood; recycled roofing material or combination cement-fiber roofing; 30-year rated life on minimum 50% of roof
- At least 50% interior floor of tile, stone, finished concrete; cork or natural linoleum, carpet and pad (tacked) of recycled content or natural content, minimal finishes
- All insulation to be 100% recycled content, wet-blown, and/or cellulose with UL fire retardant
- The use of light colored water based paint and roofing materials.

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<sup>4</sup> There are cogeneration facilities and one peaking unit in the County.

- At least 80% of interior and exterior paints and finishes to be water-based or low VOC and adhesives to be solvent-free.
- Prepare a construction waste management plan to encourage material re-use and minimize waste.
- During project grading and construction reduce NO<sub>x</sub> emissions from construction equipment by adhering to APCD recommendations.

The APCD has also developed a standardized offsite mitigation program (*Offsite Mitigation Program for Mitigating Air Quality Impacts: Manual of Procedures*, November, 1994). The offsite mitigation program manual provides guidance on mitigating emissions from short-term emissions associated with the construction of a stationary source of air pollution or a land use development project. The program currently does not apply to long-term emissions, which result from the operational phase of land use development projects. The effectiveness of these measures varies with project location, project type and the availability of other programs and services. The APCD has assisted the County and the cities in tailoring feasible programs to meet the emission reduction requirements for projects whose emissions exceed the threshold of significance.

## **8.6 MOBILE SOURCE/TRANSPORTATION CONTROL POLICIES**

### **8.6.1 REDUCING EMISSIONS BY VEHICLE CONTROLS**

While emissions from light duty vehicles are becoming cleaner due to the natural turnover and modernization of fleets, it is still possible to reduce emissions from light duty vehicles further. In addition, there is also a need to consider programs to reduce emissions from other on-road emission sources such as medium and heavy-duty vehicles. Emission controls for on-road mobile sources are the responsibility of both the ARB and USEPA. As identified in Chapter 5 there are two potential strategies that can be implemented locally to more expeditiously obtain additional emission reductions from light duty on-road vehicles: 1) enhanced vehicle inspection and maintenance (Smog Check), and 2) old car buy-back (i.e., voluntary vehicle scrapping) program. This plan currently identifies enhancements to our local Smog Check program as a contingency measure and continues an old car buy-back program. In addition, given that

medium and heavy-duty vehicles are a significant source of emissions, more emphasis will be focused on programs that can reduce emissions from these sources. As already discussed, the Innovative Technology Group has and will continue to pursue projects and programs that will address medium and heavy duty vehicles through both engine retrofit/replacement and the introduction and promotion of alternative fuels.

### 8.6.2 ALTERNATIVE FUELS

The application of clean fuel technologies requires an approach that addresses the fuel distribution and implementation challenges. APCD's experience has revealed that the promotion and integration of alternative fuels into the existing infrastructure can be difficult. For example, promoting compressed natural gas technologies requires a consistent quality and supply of the fuel in order to be successful. The infrastructure aspects of product delivery must be dealt with up-front (i.e., fueling infrastructure must be available before vehicles are purchased). In addition, our experience with retrofitting vehicles has had limited success. Therefore, priority should be given to transportation investments for fueling infrastructure followed by the purchase "new" alternative fuel vehicles versus retrofit vehicles.

### 8.6.3 TRAVEL DEMAND MANAGEMENT AND SYSTEM EFFICIENCY

Single occupancy vehicle trips during peak traffic hours generate significant emissions and contribute to local traffic congestion. The stop-and-go traffic associated with congestion further increases the magnitude of the emissions as well as the number of incidents and accidents. These problems can be addressed with improvements to the efficiency of the transportation system and continued implementation of the travel demand management program. Projects such as signal synchronization and the application of smart technology in bus routing, schedule information, and ticket distribution can reduce congestion and the associated emissions. Travel demand management programs such as the Traffic Solutions Rideshare program offer alternatives to single occupancy vehicle travel. Further, technological solutions (e.g., telecommuting) also provide alternatives to vehicle trip making. Chapter 5 of this Clean Air

Plan outlines each of these programs to reduce the impacts associated with the single occupancy and mandates their continuation.

#### **8.6.4 PROMOTING TRANSIT**

A shift from single occupancy vehicles to public transit will aid greatly in reducing congestion. In addition, a concurrent shift in aggregate public transit fleet fueling to alternative fuels (i.e., electric, CNG) will also offer significant air quality benefits over time. The continued utilization of higher emitting gasoline and diesel fueled transit vehicles will compromise transit's contribution to air quality improvement as the percentage of newer and cleaner passenger autos/trucks grows as a result of fleet turnover. The Metropolitan Transit District (MTD), which serves the South Coast portion of Santa Barbara County, has taken an important step in this direction. In 1999 MTD, as part of a competitive bidding process, was awarded \$9,100,000 of federal Congestion Mitigation and Air Quality (CMAQ) to purchase electric powered buses. To reduce congestion and air pollution, additional efforts should be taken to continue promoting the eligibility of transit projects for CMAQ and state motor vehicle surcharge funds that emphasize alternative fuels. New or expanded transit services employing alternatively fueled vehicles should be emphasized. Clean, expanded transit operations will require additional funding. Co-operative efforts to identify these funding sources should be undertaken.

### **8.7 CONGESTION MANAGEMENT PROGRAM**

With the passage of Proposition 111 in 1990, new requirements for the transportation planning process require urbanized counties, such as Santa Barbara County, to prepare, adopt, and biennially update a Congestion Management Program (CMP). The intent of the CMP legislation was to address the problem of increasing congestion on California's highways and principal arterials through a coordinated approach involving state, regional, county, and city transportation and land use agencies, transit providers and air pollution control districts. The CMP was also intended to facilitate an integrated approach to programming transportation improvements. By creating a forum for state, regional, and local transportation and land use agencies to address



regional and multi-jurisdictional issues related to congestion, land development, and air quality, the CMP ensures that limited transportation funds are more efficiently invested.

The CMP legislation requires member agencies to prepare deficiency plans for CMP system facilities located within their jurisdictions that fail to meet the CMP traffic Level-of-Service (LOS) standard. Santa Barbara County's CMP LOS standard is LOS D. The legislation requires that deficiency plans to either mitigate the deficiency at its location through capital improvements or alternatively, implement system-wide improvements that benefit circulation and air quality. The APCD has developed a list of 12 strategies that may be pursued when a jurisdiction elects to implement system-wide improvements in lieu of capital improvements. If a CMP facility exceeds the LOS standard and does not have a Congestion Management Agency-approved deficiency plan, then the local jurisdiction in which the facility is located is at risk of losing new gas tax revenues provided by Proposition 111.

There are two primary purposes deficiency plans serve in the CMP process. First, they ensure a jurisdiction will not be found in nonconformance with the CMP for exceeding the CMP traffic LOS standard. Secondly, they serve to increase the funding priority of any improvement identified through the deficiency planning process. This greatly increases the likelihood that a local jurisdiction will obtain funding to implement congestion relief or air quality benefiting projects. Some of the competitive funding programs which explicitly consider, as part of the project selection criteria, whether proposed projects are identified in a CMP deficiency plan include: the federal Surface Transportation Program; the federal Congestion Mitigation and Air Quality program; the State Regional Improvement Program and, Santa Barbara County's vehicle registration fee program administered by the Air Pollution Control District.

## **8.8 VEHICLE EMISSIONS MITIGATION PROGRAM**

The APCD is proposing to develop a new program, the Vehicle Emissions Mitigation Program or VEMP, as a mitigation measure option that the County, incorporated cities and other lead agencies in Santa Barbara can use to mitigate air quality impacts of development projects pursuant to the California Environmental Quality Act (CEQA). The VEMP will not be a new

APCD regulation or mandated program. Rather, it would be a voluntary model mitigation measure that CEQA lead agencies could use to mitigate project-related reactive organic compound and nitrogen oxide emissions by reducing emissions from other sources. The VEMP will be included in the APCD's CEQA guidelines as one of several possible air quality mitigation measures.

The focus of the VEMP is to mitigate project emissions through programs that reduce emissions from motor vehicles thorough technology-based emission reduction strategies funded by the project proponent. The amount of funding would be commensurate with the amount of emissions to be mitigated and would be determined by the lead agency. Examples of emission reduction programs that could be implemented through the VEMP include:

- Clean fuels/low emission vehicle programs(s).
- Funding a mobile source emission reduction fund established and controlled by the lead agency.
- Other equivalent measures and/or programs approved by the lead agency.

It is anticipated that the VEMP for Santa Barbara County would be patterned after the VEMP already established by the Ventura County APCD.

## **8.9 CONCLUSIONS**

Attainment of air quality standards will not occur with only the efforts of the APCD. Implementation of programs by the federal and state governments and a cooperative local effort must continue. As described in this chapter, many local programs and the actions of various jurisdictions can have both positive and negative impacts on air quality. Open communication and agreement on the common goal of clean air must occur to maximize the community's efforts to meet clean air standards.