

## Fire in Peat Bog

In September, a fire known as the Harris Fire reached a natural peat bog in the Barka Slough on Vandenberg Air Force Base (VAFB), and winds blew large amounts of smoke into surrounding communities. Many citizens around Los Alamos, Casmalia, Orcutt, Buellton, Lompoc and Santa Maria (and even some in San Luis Obispo) were affected by sporadic smoke from the fire, and heavy fog and smoke led to some road closures.

APCD issued a Health Advisory September 18, urging people in areas with heavy smoke to avoid outdoor activity and stay indoors as much as possible. "We received many calls from residents concerned about breathing the smoke, particularly in Los Alamos," noted Bobbie Bratz, Public Information and Community Programs Supervisor. Smoke

contains particulate matter (PM), particles that irritate the eyes, nose, throat, and lungs, and that can lodge in the lungs and cause health problems. Smoke can cause particular difficulties for people with existing respiratory or heart problems. Bratz noted, "We advised schools not to hold activities outdoors during periods when the smoke was heavy. Because the location of the smoke varied depending on the wind patterns, we advised them to use their own judgement about following this advisory."

There was no PM monitoring equipment in place in Los Alamos at the time the fire broke out in the bog. California Air Resources Board responded quickly to help APCD set up around-the-clock PM monitoring equipment in Los Alamos. The Air Resources

Board also monitors PM levels around the clock at a station in Santa Maria and at another station at Cabrillo High School in Vandenberg Village. Other particulate sampling takes place every six days at a station in Lompoc, as well as at the station in Santa Maria. The APCD is able to access the data from the round-the-clock stations to evaluate if the increased particulate is higher than state and federal health standards. Hourly levels of PM have been elevated at times in Los Alamos. Federal and state standards are based on 24-hour averages, however, and initial data indicate that these standards have not been violated. Due to the elevated hourly levels, APCD's Health Advisory will remain in effect as long as smoke is present in the region.

Peat, partially decomposed plant matter (see related article,

page 2), burns readily, and peat fires can be difficult to put out, as the fire can keep burning underneath the surface for an extended period. Fortunately, four wells located around the Barka Slough can produce 6 million gallons of water per day. VAFB fire officials are using three water cannons to spray millions of gallons of water on the smoldering bog area, and a pipe laid around the bog will allow 30 oscillating water cannons to pump water across the entire area. Reports indicate that the amount of smoke has been significantly reduced. Officials from multiple local, state and federal agencies have combined their expertise to coordinate firefighting and air monitoring efforts.

*For more up to date information, and links to other information, see "Smoke Advisory" on APCD's website at [www.sbapcd.org](http://www.sbapcd.org).*



### APCD's Thirtieth Anniversary

*APCD Director Doug Allard (center) and APCD staff celebrated the agency's thirtieth anniversary in September with a picnic at Nojoqui Falls County Park. See page three.*

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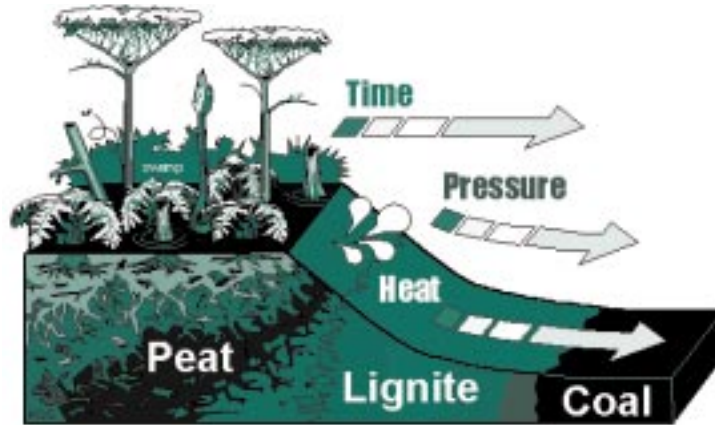
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# What is Peat?

Peat is a brownish-blackish soil made up of partially decomposed, loosely compacted plant matter with more than 50 percent carbon. Over thousands of years, and with the deposit of sediment, peat will change into lignite, and eventually, (with geological changes and high pressure) will form coal. Peat is used as a fuel in some parts of the world, and in Finland, Russia, and Ireland, peat is burned to generate electricity. Peat fires produce large amounts of smoke with a strong odor, and some kinds of Scotch whiskies are produced using peat fires.

Peat fires are very difficult to put out, and can smolder for extended periods, even after heavy rains, as the fire can continue deep under the surface. Peat fires also pose safety issues for firefighters, as the thin surface can break through to fire and extremely hot areas underneath that were not apparent from the outside. Peat fires produce more smoke

than wood fires, due to the high amounts of water vapor released. Smoke from peat fires contains high amounts of carbon monoxide and carbon dioxide at the fire location. However, the carbon monoxide



is dispersed in the air, and the carbon dioxide is of concern only when large fires are releasing large amounts of this greenhouse gas involved in climate change.

The air pollutant in wildfire smoke that is typically of most concern from a health standpoint is particulate matter

(PM). The US Environmental Protection Agency (EPA) has issued standards for PM less than 10 micrometers in diameter, referred to as PM 10, and for PM less than 2.5 micrometers in diameter,

known as PM 2.5. These sizes of particles tend to pose the greatest health concern because they can be inhaled into lungs, and can accumulate in the respiratory system. Motor vehicles, and all types of combustion also produce these particles. PM is also produced by crushing or grinding operations, construction or

demolition, and road dust. EPA has developed an Air Quality Index (AQI) that assigns index values to 24-hour average levels of PM 2.5 and PM 10, with corresponding health statements. Levels with an AQI value of 51-100 are considered "moderate," levels with an AQI of 101-150 are considered "unhealthy for sensitive groups," and levels with an AQI of 151-200 are considered "unhealthy." It is at the "unhealthy" level that the federal standards for PM 2.5 and PM 10 are violated. The monitoring equipment set up in Los Alamos in response to this fire has typically recorded 24-hour average levels of PM 2.5 in the "moderate" range, and on one day recorded a 24-hour average level in the "unhealthy for sensitive groups" range.

*For more up to date information, and links to other information, see "Smoke Advisory" on APCD's website at [www.sbcapcd.org](http://www.sbcapcd.org).*

**National Pollution Prevention Week** was celebrated September 18-24 in Santa Barbara County by [greendifference.org](http://greendifference.org), a coalition of county agencies and organizations.

This year, the coalition, led by APCD and the Community Environmental Council (CEC), launched a website, [www.greendifference.org](http://www.greendifference.org), and promoted it through radio and print ads that encouraged people to help their companies:

- ❖ Reward carpooling, biking, telecommuting, or taking the bus to work.
- ❖ Use less chemicals and hazardous materials, and dispose of these materials responsibly.
- ❖ Expand recycling programs and buy more goods with recycled content.
- ❖ Reduce electricity use, and use green building techniques for a new building or a remodel.
- ❖ Reduce water use, and avoid pouring or hosing chemicals and oil into the sewer or down storm drains.

In addition to APCD and CEC, the coalition includes: the City of Santa Barbara Public Works Department (Water and Hazardous Waste); the Santa Barbara County Water Agency; Santa Barbara County Solid Waste and Utilities; Traffic Solutions, a Division of Santa Barbara County Association of Governments; the City of Lompoc; The Sustainability Project; and the City of Carpinteria Public Works Division.

For more information, and tips on how to make a green difference at work and home every week, not just Pollution Prevention Week, check out [www.greendifference.org](http://www.greendifference.org).



# Thirty Years of Air Quality Improvements



## APCD Board Roundup

Following are the highlights of the May and June Board meetings.

### July

- ✓ Executed grant agreement with boat operator for the purchase of a low-emissions boat engine.
- ✓ Appointed Dr. Francis Lagatutta to the APCD Hearing Board as the medical representative replacing Dr. Deborah Drechsler-Parks.
- ✓ Approved agreement with Ogden Environmental and Energy Services to continue implementation of the Old Car Buyback program.

### August

- ✓ Approved a \$15,302 grant to Santa Barbara Metropolitan Transit District for purchase of bus bike racks.
- ✓ Received a briefing on a University of California at Santa Barbara study on oil and gas seeps offshore in the Coal Oil Point area.

### September

- ✓ Received a briefing on APCD actions concerning the smoke produced by the peat bog fire on Vandenberg Air Force Base, and the Health Advisory issued September 18 by APCD.
- ✓ Adopted a resolution marking Pollution Prevention Week (September 18-24), and received a briefing on 2000 Green Award winners.
- ✓ Adopted a resolution observing the 30th anniversary of the APCD.

*APCD celebrated its thirtieth anniversary in September. Here's a quick look at the progress in the past thirty years.*

**1970** APCD is established with a resolution issued September 14.

**1976** High levels of ozone (240 parts per billion) are recorded by APCD monitoring stations.

**1979** APCD prepares its first Clean Air Plan.

**1986-1989** APCD permits several major oil and gas projects.

**1988** APCD stations record 42 days exceeding state smog standards.

**1990** APCD staff are instrumental in developing language in the federal 1990 Clean Air Act Amendments, giving local air districts jurisdiction over offshore oil and gas platforms for the first time.

**1996** APCD receives the Presidential award for Sustainable Development and the Governor's Award for Environmental and Economic Excellence.

**1999** Santa Barbara County experiences its cleanest year on record (only three exceedances of the state smog standard), and we meet the federal smog standard. APCD also wins the Environmental Protection Agency Region IX Earth Day Award.

**2000** APCD's Clean Air Plan is approved by the US Environmental Protection Agency.



*Air Quality Engineer Rebecca Gaffney and son Christopher (above), Major Source Division Manager Terry Dressler (below, center), and former APCD Assistant Director Bill Master (below, left), celebrate the agency's thirtieth anniversary.*





## Air Pollution Control District Board

Supervisor Naomi Schwartz  
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Santa Barbara County

Supervisor Susan Rose  
Second District

Santa Barbara County

Supervisor Gail Marshall  
Third District

Santa Barbara County

Supervisor Joni Gray  
Fourth District

Santa Barbara County

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Santa Barbara County

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Councilmember Dick Weinberg  
City of Carpinteria

Mayor Sam Arca  
City of Guadalupe

Councilmember DeWayne Holmdahl  
City of Lompoc

Councilmember Gil Garcia  
City of Santa Barbara

Councilmember Larry Lavagnino  
City of Santa Maria

Mayor Ed Andrisek  
City of Solvang

## APCD Board Calendar

*All meetings start at 2 p.m.  
For final meeting agendas,  
call the APCD Board Clerk,  
961-8853.*

### November 16

Lompoc City Hall  
Council Chambers  
100 Civic Center Plaza  
Lompoc, California 93438

For status of the December Board meeting, and for 2001 Board Calendar dates, please check our website at [www.sbcapcd.org](http://www.sbcapcd.org).

APCD Board meetings are typically held the third Thursday of every month at 2:00 PM, at rotating locations.

## Community Advisory Council

The APCD Community Advisory Council meets the second Wednesday of every month at the Days Motor Inn in Buellton. The public is welcome. For more information, call Linda Beard, 961-8853.

## APCD Funds Bike Racks on Buses

In August, the APCD Board approved a project that will fund purchase of 35 bike racks for Santa Barbara Metropolitan Transit District (MTD) buses. The bike racks can each hold two bicycles, and will be used on MTD's new Nova buses. Because the Nova buses are close to the ground, it was initially difficult to fit them with bus bike racks, but a system was selected that would work on the Novas. "Being able to ride a bike to the bus, and take your bike with you to use it again on the other end, makes taking a bus more convenient for more people," said APCD Project Manager Eric Peterson. He added: "Cars are the primary source of air pollution in our county. The more people we can encourage to ride the bus and leave their cars at home, the better for our air. Every little bit helps." The APCD estimates the use of the bike racks will reduce about one ton of air pollution over the life of the bike racks.

"We're very pleased that the APCD and the MTD have worked together to provide much-needed bike-rack service on all Nova buses," said Ralph Fertig of the Santa Barbara Bicycle Coalition. "This will help expand bike and bus usage, so everybody will benefit. We're all winners."



Santa Barbara County  
Air Pollution Control District

### Main Office

26 Castilian Drive, B-23  
Goleta, CA 93117  
(805) 961-8800

Business Assistance  
(805) 961-8868

Daily Air Quality Report  
(805) 961-8802

Complaints/Public Information  
(805) 961-8800

World Wide Web  
[www.sbcapcd.org](http://www.sbcapcd.org)

E-Mail  
[apcd@sbcapcd.org](mailto:apcd@sbcapcd.org)

*On the Air is a bimonthly newsletter published by the Community Assistance Section of the Santa Barbara County Air Pollution Control District.*

*For further information on items in this newsletter, or to be added to our subscription list, please call Bobbie Bratz, 961-8890 or Email [bratzb@sbcapcd.org](mailto:bratzb@sbcapcd.org).*

Our Vision: Clean Air



## 2000 Green Award Winners

**W**inners of the seventh annual Green Awards were honored at a special luncheon during Pollution Prevention Week in September, hosted by the Green Awards Consortium. The Consortium is made up of APCD, Santa Barbara County Solid Waste Division, Traffic Solutions, Santa Barbara County Water Resources, and the Community Environmental Council. Common themes sounded by the winners (past and present) included the importance of cooperative efforts, and of sharing success with others.

### Lotusland

“This was truly a group effort if there ever was one—from our administration all the way to our grounds staff,” said John Lafleur, accepting a 2000 Green Award for Lotusland, a public garden in Montecito. Lotusland staff practice integrated pest management, using organic fertilizers and cultivating plants that will attract beneficial insects. The garden composts its own and community green waste, and makes a liquid “compost tea” for its irrigation system. Lotusland uses electric vehicles to transport visitors around the garden, and gives training workshops and classroom tours.

Jim Cox, of Marian Medical Center in Santa Maria, a 1999 Green Award winner, also mentioned the importance of the group effort. He noted: “The Green Award we received last year is not just for the



*Juniper Dwight (left) accepts a 2000 Green Award for Santa Barbara Montessori School from Kaylyn Scott (right) of Hatch and Parent, a 1999 winner, as Karen Feeney of the Community Environmental Council looks on.*

efforts of one or two people, or even the committee—or even the Medical Center. It’s really for the corporation that made reducing trash a goal.” The corporation initially sent Marian representatives to another one of its medical centers to learn about its successful trash reduction program. Now, he and other employees will be inspiring a medical center in Oxnard with the Marian success

story. As he prepared to present a 2000 Green Award to Kilovac, Cox noted, “Just as with Marian, what struck me about Kilovac is that this is not about just one person, or even one group of people. It’s about the entire company.”

### Kilovac

Kilovac, a Division of CII Technologies that is based in Carpinteria, is the first company

in Santa Barbara County to receive ISO 14000 certification. ISO (International Standards Organization) 14000 is a certification program for environmental management systems, similar to the ISO 9000 quality management program. Kilovac makes electrical relays and systems, including components used in electric vehicles, hybrid gas-electric vehicles, prototype fuel cell vehicles, and in a range of alternative energy power applications, including large-scale fuel cells, microturbines (natural gas fueled engines similar to jet engines), and solar and wind energy generation. Kilovac’s environmental management system has resulted in a 50% reduction in hazardous waste generated annually, a 15% reduction in water usage, and superior waste reduction and recycling programs.

Karen Feeney of the Community Environmental Council and the Green Awards Consortium noted that Green Award winner Kilovac is already sharing its ISO 14000 certification experience with other local companies. Remarked Feeney, “I got a call the other day from a business that is interested in pursuing ISO 14000 certification, and was so pleased to be able to tell them about Kilovac, so they could benefit from Kilovac’s experience.” Promoting sharing of successful environmental programs is a key element of the Green Awards program, she said. *(continued on back)*

## 2000 Green Award Winners (Cont'd)

### Bianchi Motor Company

Regulatory agencies can play a part in businesses' efforts to establish environmental programs, noted Jack Bianchi of Bianchi Motor Company Inc, a Santa Barbara autobodey repair shop. Accepting the 2000 Green Award for his company, Bianchi thanked APCD Inspector John Garnett, saying, "When the environmental regulations were coming down on our industry quick and hard, John worked with all the shop owners to help us understand the rules, and how they affected us, and helped us see that it was not a bad deal." Bianchi developed a recycling system that reduces waste by 86%.



Jack Bianchi

Paints and similar substances are distilled on site, with the byproduct used for cleaning. Bianchi also shares tips on recycling in presentations to local students.

### Allen Associates

The importance of cooperative efforts was also noted by Dennis Allen, accepting a 2000 Green Award for his company, Allen Associates, a general contractor in Santa Barbara, that uses sustainable building practices, and trains local contractors in these practices. Allen noted, "There are so many individuals involved in the building process—and any one person can sabotage efforts to

make the process environmentally friendly, at any stage." Allen Associates recycles approximately 75% of waste at new construction sites, and up to 90% of waste at deconstruction (demolition) sites. Recycled waste includes drywall, carpet, wood, metals, and concrete, which is crushed for reuse as road base. Allen Associates attends national and regional conferences and workshops to educate other businesses about sustainable building.

### Rick Spettel's Landscapes

Education was a key element in the success of other winners. Rick Spettel's Landscapes, a Santa Ynez landscape contractor, was recognized with a 2000 Environmental Education Award. Spettel uses native drought-tolerant plants, and does not use pesticides or fertilizers in his landscaping projects. He also helps schools create living classrooms that demonstrate sustainable gardening practices and the inter-relationships between the plants, soil, fungi, and insects.

### Santa Barbara Montessori School

Santa Barbara Montessori School was also recognized for educational efforts with a 2000 Green Award. The school's environmental program emphasizes recycling, reducing waste, reusing materials, and composting, and the school is 90% trash free. Students work in an organic garden, composting green waste, and the school promotes a traffic and pollution reduction plan. Said Juniper Dwight, accepting the award for the school, "We're excited about teaching these children to grow up with these values—so that one day,



Dennis Allen

perhaps one of them will be here at this luncheon to accept a Green Award."

Bill Palmisano, owner of Non-Toxic Landscaping, a 1999 Green Award Winner, noted: "It's important that we have a heartfelt and sincere attitude towards environmental protection, and towards our duties as businesspeople to keep that in the forefront of our minds. Many can use our experience and guidance."

*For more information on the Green Awards Program, contact Frances Gilliland at 961-8838 or via email at [gillilandf@sbcapcd.org](mailto:gillilandf@sbcapcd.org)*