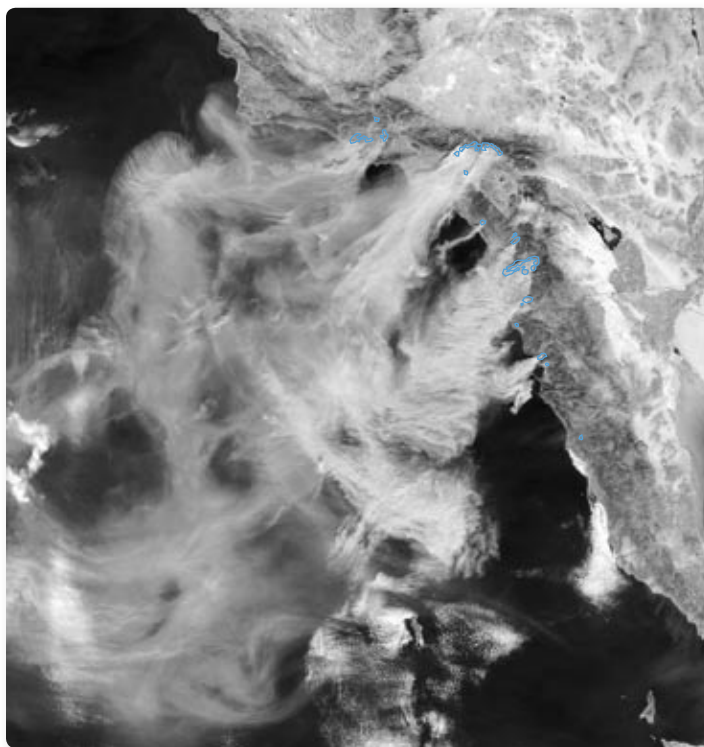


Our Air in 2003: The Good, the Smoggy — and the Smoky

2003 was another good year for our air, the third straight year without a single exceedance of the federal one-hour ozone standard. The last three years are the only time without an exceedance of that standard since 1971, when APCD began monitoring the air. Ozone is a principal component of smog.

However, APCD did record seven exceedances of the state ozone standard in 2003, and four of the federal eight-hour ozone standard. Some of these were on October 26 and 27, when smoke from Southern California fires contributed to higher levels of ozone and particulate matter in our air. APCD issued a health advisory on October 26, urging residents to avoid outdoor activities in areas affected by smoke, and asking schools in smoky areas to consider postponing outdoor athletics classes and activities.



October 26 shows a Santa Ana wind event blowing smoke offshore and into Santa Barbara County from fires to the south. Image courtesy of MODIS Rapid Response Project at NASA/GSFC.

"It's particularly important for coaches and parents to understand that it's not good for

kids to be exercising outdoors in smoky air," said Bobbie Bratz, APCD Public Information and

Community Programs Supervisor. She added, "Particles in smoke have been shown to cause serious heart and lung problems. When children and adults are exercising outside, they breathe more of these particles deep into their lungs."

In addition to fine particles, smoke also contains: cancer-causing substances including benzene, formaldehyde and other air toxics; carbon monoxide; and nitrogen oxides and hydrocarbons, both involved in the formation of ozone.

Smoke impacts can vary widely in a region due to wind patterns. At times, some areas closer to the October fires actually experienced less smoke than areas further away that were in the path of the winds. Notes APCD Planning and Technology Supervisor Tom Murphy, "You are your own best sensor when it comes to localized smoke

(continued on page two)

Kathy Patton Retires



Kathy Patton, APCD Technology and Environmental Assessment Division Manager, retired at the end of October. She will be remembered for multiple achievements in air quality from her more than twenty years with APCD, including some cited below.



- She initiated and managed several successful award-winning APCD programs, including air

quality planning, air monitoring, business assistance, public and community outreach, land use, and the Innovative Technologies Group program.

- She led key special projects, including the design and construction of the new "green" county building that currently houses the APCD's headquarters, and the marine shipping program.

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-  **Solar Power**
-  **Green Award Businesses**
-  **Board Roundup**
-  **Amtrak 2 Millionth Passenger**
-  **Kids Care for Clean Air Calendar**
-  **APCD's Santa Maria Office**

Our Air in 2003

impacts. So if you can smell the smoke, you need to take steps to reduce your exposure.”

APCD and the state Air Resources Board monitor levels of particulate matter less than 10 microns in diameter (PM10) and less than 2.5 microns in diameter (PM2.5) at monitoring stations throughout the county. The equipment currently in place collects 24-hour samples only on pre-selected days, so PM data are not available for the period most impacted by the fires. However, APCD has received a grant from the U.S. Environmental

Protection Agency to install additional equipment to continuously measure PM2.5 at stations in Santa Maria and Santa Barbara. PM2.5 data will be updated hourly on APCD’s website once the new equipment is installed, just as ozone data are now updated on the website.

The use of fireplaces and woodstoves in wintertime produces smoke and localized higher levels of particles.

To minimize smoke from your fireplace, see the article below.



Top Five Tips for Cleaner Fireplace Burning

Every year, starting in November, APCD receives complaints from people who are concerned about breathing smoke from their neighbors’ fires. APCD Supervisor Mike Broughton notes: “Many times, the people we contact are not even aware that they have been causing anyone discomfort. They’re usually willing to adjust their burn times or contact the neighbor before burning so they can close some windows—IF they know their smoke is affecting someone. It’s a classic case of ‘out of sight, out of mind.’”

He adds: “The next time you stoke up that ol’ fireplace, check out our tips to minimize your smoke. Then, take a walk outside. Look and see where your smoke is going.

If your smoke is headed towards a neighbor’s house, knock on their door. Ask if your smoke is bothering them and let them know they can call you if it does in the future. Usually two neighbors can work out a solution that works for both—but only if they are aware and talk. Be a good neighbor.”

Breathing wood smoke reduces lung function, aggravates heart and lung diseases, and can trigger asthma. Take some of the steps below for the sake of your health and safety—and that of your neighbors.

1. Clean your chimney. A dirty chimney full of creosote is a chimney fire waiting to happen. Schedule regular maintenance by a professional chimney sweep.

2. Don’t burn trash. Burning trash can cause toxic chemicals to go into the air, and into your lungs. Don’t burn any of these: plastics, chemicals, wrapping paper, magazines, or any coated papers (including newspaper inserts, junk mail, etc.).

3. Burn safely in your fireplace. Keep your fireplace screen closed to keep sparks from landing on carpeting, and use a spark arrester on your chimney to prevent a roof or attic fire. Burn dry, seasoned wood, and build small hot fires rather than large smoldering ones.

4. Save your fireplace or woodstove for special occasions. Fireplace fires are not an efficient way to produce heat. The safest way to heat your home, and the cleanest for the air, is through a central heating system.

5. Use a gas log if you can, and NEVER burn wood in a

fireplace that was designed for a gas log. Decorative fireplaces are not built to handle wood fires. Burning wood in one of these fireplaces is asking for trouble, and could create a dangerous situation.

For more information, see www.sbcapcd.org.

Kathy Patton Retires (cont’d)

• She wrote language for the 1990 federal Clean Air Act amendments that allow local agencies to control air pollution from offshore oil platforms for the first time ever, and worked in Washington for the passage of the amendments.

As noted in the October issue of the California Air Pollution Control Officers Association (CAPCOA) newsletter: “Kathy will be missed by not only the Santa Barbara community but throughout CAPCOA. We wish her well in her future endeavors.”

Said APCD Director Doug Allard: “Kathy has a phenomenal combination of people skills, a knack for problem-solving, and intelligence. She has used that combination to serve her community by improving the air we breathe. We will miss her greatly.”

APCD Director Doug Allard announced in October that he will retire in March. The next issue of On the Air will feature an interview with him.

The 2 Millionth Passenger

APCD Board Roundup

Following are the highlights of the October and December Board meetings.

October

- Received summaries of all emission-reduction grant agreements approved for August 7 through October 1.
- Approved 2004 Board schedule.
- Adopted a Resolution of Appreciation for Kathy Patton on the occasion of her retirement from the APCD.
- Amended Rule 102, Definitions, and Rule 1301, Part 70 Operating Permits.
- Received a report on the September workshop "Working with the APCD – Successfully Resolving Disagreement – The Avenue of Appeal."
- Approved APCD's participation in a Marine Shipping Retrofit Program using up to \$100,000 in Innovative Technologies Group funds.

December

- Authorized employee benefit contracts, and a 5% salary increase and conversion of vacation time for the APCD Director.
- Adopted a Resolution of Appreciation for Gregg Hart for his service on the APCD Board.
- Received a report on Senate Bill 700, which covers air pollution control requirements for some agricultural sources.
- Received announcement of recruitment for a new Air Pollution Control Officer.
- Executed Promissory Note and approved funds transfer in connection with the Casa Nueva building.
- Recognized winners of the "Kids Care for Clean Air" 2004 Calendar Contest.

The Amtrak Pacific Surfliner carried two million passengers in one year last year, for the first time ever. Amtrak marked this milestone on September 30, when the two millionth passenger, Robert Roy, Jr., greeted officials at events in San Diego, Los Angeles, and Santa Barbara, as he traveled north on the Surfliner.

Speaking at the Santa Barbara event, which was coordinated by Amtrak and the Santa Barbara County Association of Governments, APCD Director Doug Allard thanked Amtrak and Caltrans for their support of APCD's Santa Barbara Car Free project, and noted, "Every passenger that gets off this train represents a victory for clean air."

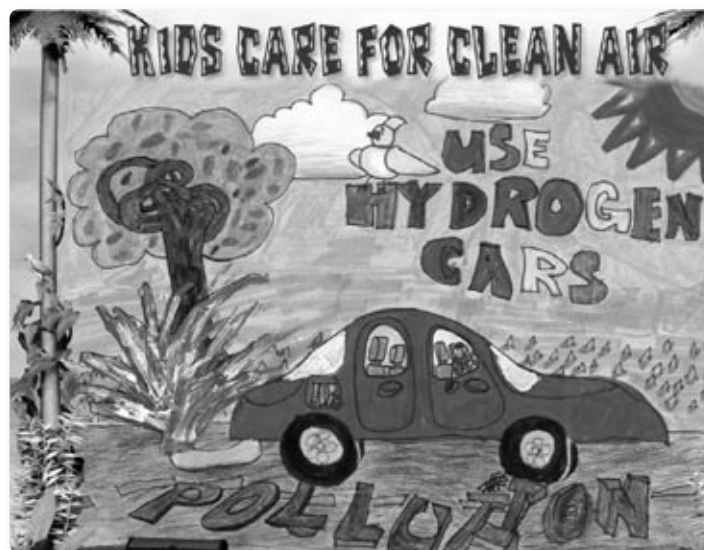
Amtrak reported that Pacific Surfliner ridership was up more than 25 percent in fiscal year 2003 over the previous year, making the corridor the second busiest corridor overall for Amtrak in the U.S.



Above: Robert Roy, Jr., the Amtrak Pacific Surfliner's two millionth passenger, with Amtrak representative Sarah Swain. Below: APCD Director Doug Allard



Kids Care for Clean Air



In December, APCD distributed Kids Care for Clean Air 2004 calendars featuring artwork by Santa Barbara County kids, as part of an annual joint effort with Traffic Solutions.

For more information, see www.sbcapcd.org.



APCD Board Calendar

Board of Directors

- Supervisor Naomi Schwartz
*First District
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*
- Supervisor Joe Centeno
*Fifth District
Santa Barbara County*
- Mayor Victoria Pointer
City of Buellton
- Mayor Dick Weinberg
City of Carpinteria
- Councilmember Cynthia Brock
City of Goleta
- Councilmember Carlos Aguilera
City of Guadalupe
- Councilmember DeWayne Holmdahl
City of Lompoc
- Councilmember Gregg Hart
City of Santa Barbara
- Councilmember Marty Mariscal
City of Santa Maria
- Councilmember David Smyser
City of Solvang

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

January 15
Board of Supervisors
Hearing Room
511 East Lakeside Parkway
Santa Maria, CA 93455

March 18
Board of Supervisors
Hearing Room
511 East Lakeside Parkway
Santa Maria, CA 93455

May 20
Board of Supervisors
Hearing Room
511 East Lakeside Parkway
Santa Maria, CA 93455

June 17
Board of Supervisors
Hearing Room
105 East Anapamu Street
Santa Barbara, CA 93101

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's Santa Maria Office

APCD opened an office in Santa Maria at 301 East Cook Street in December. Notes APCD Engineering Supervisor Craig Strommen (pictured): "We were pleased we were able to find a space that's in a central area, near other city and county government offices and offices."

The Santa Maria office will include several inspectors and engineers, and other APCD staff. Says Strommen, "We want to make it easier for businesses that are based in Santa Maria or nearby to work with us."

To meet with APCD staff in the Santa Maria office, contact your APCD representative, or call our main office at 805-961-8800.



Main Office
260 N. San Antonio Rd. Suite A
Santa Barbara, CA 93110-1315

Business Assistance
(805) 961-8868

Daily Air Quality Report
www.sbcapcd.org

Complaints/Public Information
(805) 961-8800

World Wide Web
www.sbcapcd.org

E-Mail
apcd@sbcapcd.org

On the Air is a bimonthly newsletter published by the Community Programs 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.



Printed on 100% recycled paper.

Our Vision  Clean Air

Solar Power: The Dollars and Sense

Is it possible for a manufacturing facility to meet more than 100 percent of its electric power demand with solar power? Yes, says Jim Spallino, President of Great White Dental Lab, located on McCoy Lane in Santa Maria. The company makes teeth that are fired in electric-powered porcelain furnaces. A 100kW solar array is being installed in the facility's parking lot, where the solar panels will also function as a carport, shading cars there. No additional land is being used.

Spallino deliberately sized the solar array to be able to meet the Lab's projected power demand in five years, accounting for growth. He believes the facility will be the first in Santa Barbara County to use solar power to meet more than 100 percent of its electric power needs.

Says Spallino, "It's a responsible thing to do from an environmental perspective, but long-term, it's also really important for business. You have to look down the road and have some foresight. I've fixed my costs. And I don't have to rely completely on an outside power supply."

The array will be connected to the grid, and will run the meter backwards when the facility is not using the power, giving Spallino credits towards times when he needs power when the sun isn't shining.

Solar Power Systems, Inc. (SPS), a Santa-Maria based company that is a channel partner with Shell Solar, is installing the equipment. Norm Teixeira, a partner in SPS, explains how the purchase works. The state's solar incentive brings down the cost of the solar power from \$9/watt to \$4.50/watt, and the customer's monthly electric bill payment becomes, instead, a payment on the solar equipment with no unforeseen annual power cost increases.

Says Teixeira, "I know what businesses need right now. They need a package that fits what they've already got in their budgets. We're saying: 'There's no money down. The monthly cost is already in your budget for your



Jim Spallino, President of Great White Dental Lab, in front of the 100kW solar array under construction in the facility's parking lot.

electric bill — and after a certain period, anywhere from five to twenty years depending on your power demand, you'll own the equipment."

SPS works out different arrangements with some customers, in which a specific savings in the monthly electric bill is guaranteed to the customer, and SPS continues to own the solar equipment. The Santa Maria Fairgrounds has approved such an arrangement with SPS to save 20 percent on monthly electricity costs in connection with a planned installation of a 300kW solar array. Teixeira notes, "We're talking to government agencies as well. They're looking at deep cuts in their budgets right now. We go in to them and say 'We can guarantee you a 20 percent cut in electricity costs. No money down, just savings.' How can they say no?"

Spallino hasn't always thought that solar power made good business sense. Up until about two and a half years ago he was convinced solar power was just too expensive. Then he had a conversation in an airport that got him thinking, and saw a television program with more information on solar power. He remarks, "I realized that things have changed. More and more, solar is becoming a viable option."

For more information on solar and other energy sources, and on energy conservation strategies, see www.sbcapcd.org/energycons.htm.

Reminder:

Annual Reports Due March 1

Annual reports for APCD permitted facilities are due March 1. Forms can be downloaded from the APCD website at www.sbcapcd.org (follow links from the home page). Please contact Joe Petrini at jep@sbcapcd.org or 961-8894 with any questions.

Changing Processes and Materials: the Challenges — and the Rewards

It's not easy to change a proven process or material in a manufacturing company, notes Teresa Alarcio, Facilities Manager at the Certance, formerly Seagate Removable Storage Solutions, office in Santa Maria. "People say 'Why change it? It's working — it's been working for years.'"

Certance is a leading manufacturer of computer tape drive and tape head products worldwide. Headquartered in Costa Mesa, CA, the company has offices in Penang, Malaysia and Irvine, Scotland, in addition to its Santa Maria office. Certance (as Seagate) won a Green Award in 2002 for making a large-scale move towards a greener manufacturing environment. In addition to other environmental achievements, the Company reduced the on-site usage and storage of hazardous chemicals at the Santa Maria facility by 67% from January 2001 to April 2002.

The Green Award recognizes voluntary activities by Santa

Barbara County companies or organizations that result in cleaner air or water, less waste, less traffic, conservation of energy and natural resources, or reduced use of hazardous materials. The award is given annually by the Green Award Consortium, which includes APCD, the Community Environmental Council, Santa Barbara County Solid Waste & Utilities, the Santa Barbara County Water Agency, and Traffic Solutions.

In September, Alarcio presented a 2003 Green Award to Intri-Plex Technologies, a Goleta-based precision metal stamping and post processing company, following the Green Award tradition in which past winners introduce new winners. In just one year, Intri-Plex successfully reduced its use of solvents and chemicals from 1350 pounds down to almost zero.

Alarcio remarks: "A lot of people don't realize that when a manufacturing company changes a material or a process, there is a

tremendous amount of time and effort involved. Once a process is approved, and has been working, it's hard to get it changed." She notes that one of the biggest challenges is getting the change into the design stage: "That's hard when you're looking at the materials and considering whether it's a positive or a negative—not just from an environmental standpoint, but looking at other issues as well, such as disposal cost, worker safety, or liability."

She adds, "It's no longer feasible to just shop price. I really believe that in a technology industry there will come a time when we own our product all the way through its lifecycle from a liability perspective. And that means we need to know what will happen to it when we're done using and reusing it."

Alarcio works with vendors to agree to accept returns of unused chemicals samples: "Our engineers are always experimenting, and vendors bring in chemicals and say, 'Try it, try it — it's free.' But it's not free if it costs \$300 to dispose of it."

Alarcio found APCD helpful in looking at ways to make changes: "I think sometimes people view regulatory agencies only negatively, as watchdogs. But really, these agencies can be resources. APCD inspectors have come up with really good ideas for us. Inspectors have a lot of knowledge about what's working out there, and they could say to us, 'Have you tried this?' or



Teresa Alarcio of Certance, formerly Seagate Removable Storage Solutions, a 2002 Green Award winner, speaking at the September Green Award luncheon.

"Have you thought about doing it this way?"

She points out, "In the long run being environmentally conscious is a win win. But you need everyone involved to understand that—vendors, designers, and customers."

Alarcio notes that the efforts to find new ways to improve processes and materials don't stop when one milestone is achieved, but continue on. Her latest challenge? "We're finding it very difficult to come up with alternatives to our soldering materials. We've tried a lot, and we're going to keep trying."

In classic Green Award winner fashion, she adds: "And we'll get there."

For more information on the Green Award, and past winners, see www.greendifference.org.



2003 Green Award winners (from left) Valorie Cole, Director, Discoveries Learning Center; Ellen Strickland, Owner, livinggreen; J. Michael Holliday and Steven Carter, DesignARC; Susie Cardone, IntriPlex Technologies