

Ash, Particle Pollution, and Our Health

In May, the Jesusita Fire burned 8,733 acres, destroyed 80 homes, and caused 30,000 people to be evacuated from their homes in Southern Santa Barbara County. The District and the Santa Barbara County Public Health Department issued several air quality advisories, warning residents to stay indoors when smoke and ash were affecting outdoor air quality.

Ash and smoke are considered particle pollution, also called

“particulate matter,” described as a mixture of liquid droplets and solids, including fine mineral, metal, soot, smoke, and dust, suspended in the air. Some particles are produced directly (by fires, engines, or other sources); some are formed in the atmosphere when other pollutants react.

For health reasons, we are most concerned with inhalable particulate matter less than 10 micrometers in diameter (PM10), and less than 2.5

micrometers in diameter (PM2.5). Particles of these sizes can lodge in the deepest and most sensitive areas of the lung, and aggravate many respiratory illnesses including asthma, bronchitis, and emphysema. High levels of particle pollution have also been associated with a higher incidence of heart problems, including heart attacks. People with heart or lung disease, children, and older people are considered most at risk for health effects from exposure to particle pollution.

Reducing Exposure

☉ If you sense high levels of particles in the air where you are, be cautious and use common sense to protect your family’s health.

☉ Limit time spent outdoors, and avoid outdoor exercise.

☉ Try to keep indoor air as clean as possible. Keep windows and doors closed unless it’s extremely hot. Don’t use fireplaces, gas logs, or candles; don’t vacuum, don’t smoke, and don’t fry or broil foods in ways that produce a lot of smoke inside.

☉ If you have an air conditioner, run it with the fresh air intake closed and keep the filter clean. If you have a “whole house fan” turn it off when air quality is poor; otherwise it will draw outside air into the house.

(continued on page two)

Car Free Winner at Earth Day

In April, the District and the Santa Barbara Car Free Project encouraged people to attend the South Coast Earth Day Festival car free, and enter to win prizes donated by Car Free partners. Mary Meredith (pictured) won the Grand Prize, a pair of roundtrip Amtrak Coast Starlight® tickets from Santa Barbara to Portland or Seattle, including roomette accommodations. Meredith remarked, “Everyone I’ve told about the prize has said, ‘I’ll go with you! But I can only take one. I’m so looking forward to it!’”



Meredith and a friend walked about three miles from her home

in the San Roque area of Santa Barbara to the Festival location in Alameda Park. She noted, “The good thing about Earth Day was, we knew if we got tired on the way back, we could take a free bus home.” The City of Santa Barbara, the Community Environmental Council, Santa Barbara Metropolitan Transit District, the Santa Barbara Car Free Project, and the District sponsored free MTD service on the date of the Earth Day celebration.

(continued on page two)

Inside...

-  **Old Car Buy Back**
-  **Climate Change Impacts**
-  **Commuter Challenge**
-  **Solvent Rule**
-  **Leadership**
-  **Vijaya Jammalamadaka Retires**
-  **Driving Cleaner**

Air Quality Advisories

An Air Quality Watch is issued when there is potential for poor air quality in some part of Santa Barbara County; an Air Quality Warning is issued when there is already poor air quality in some part of Santa Barbara County.

To receive advisories by fax, email, or text message to your cell phone, sign up on the District’s website on this page: www.OurAir.org/subscribe.htm.

Ash, Particle Pollution (cont'd)

☉ If you have symptoms that may be related to exposure to particles, including repeated coughing, shortness of breath or difficulty breathing, wheezing, chest tightness or pain, palpitations, nausea or unusual fatigue or lightheadedness, contact your health care provider.

☉ In some cases, if properly used, masks can reduce your exposure. However, their use can provide a false sense of security, and masks can be ineffective depending on the type and fit of the mask. The decision to use a mask should be made in consultation with your health care provider.

☉ If you are considering using an air cleaner inside your house, do not use one that generates ozone. For information on

air cleaners, including a list of California- certified devices, see <http://www.arb.ca.gov/research/indoor/aircleaners/aircleaners.htm>.

Suggestions for Ash Cleanup

☉ Do not do post-fire cleanup if you have heart or lung problems.

☉ Avoid stirring up ash particles, do not use leaf blowers, and ask landscaping services not to use leaf blowers for ash cleanup.

☉ Use a high-quality shop/ industrial vacuum with a high-efficiency particulate filter and disposable collection filter bag. Bag the ash and put it in the trash. Use attachments to clean ash from gutters. Vacuums and equipment are available from most hardware stores.

☉ Gentle sweeping of indoor and outdoor hard surfaces followed by wet mopping may be effective.

☉ It may be useful to spray areas lightly with water; however, it is best to conserve water, and also to divert the water to lawn or garden areas so that ash-filled water does not flow into streets, runoff systems and the creeks.

☉ Do not allow children to play in ash-filled areas, avoid skin contact with ash, wash pets, remove ash from outside toys and play equipment, and take cars to the car wash.

☉ If your home is near a burned area, consider having all heating, ventilation and air conditioning units and ducts professionally cleaned to remove smoke and ash residue.

Asbestos from Burned Material

When houses burn, asbestos fibers from building materials may become airborne, creating a potentially hazardous situation. Houses built or re-built more than 20 years ago have a higher likelihood of containing asbestos fibers. Cleanup and demolition activities can make conditions worse if not done properly. Handling materials that contain asbestos can be hazardous to your health.

For more information, see this page on our website: www.OurAir.org/airquality-tips.htm.

Car Free Winner (cont'd)

She and her friend were offered a ride home, but decided to walk back instead. "We spent the whole day downtown. Walking that day, we noticed all kinds of things we had never seen when driving downtown and back."

Meredith, a retired school nurse, finished treatment for breast cancer in November. "Since then, I've been walking more and more to stay healthy. Now I know that I can walk downtown, and I can walk back," she said. She added, "Walking is the only exercise I find I can sustain. I don't have to go anywhere, I don't have to bring anything with me—all I have to do is walk out the door. It's the only exercise I've been able to keep up."

Almost 15,000 people attended the Festival organized by the Community Environmental Council. 295 people entered the Come Car Free and Win promotion—41 percent walked, 31 percent rode the bus, and 21 percent rode bikes. Other Car Free winners received pairs of Amtrak Pacific Surfliner® tickets, MTD bus passes, Curb your Commute Axxess cards from Traffic Solutions, and pairs of free passes to the Santa Barbara Maritime Museum. The District also participated in the Vandenberg Air Force Base Earth Day celebration, held in April for Base staff and families.

The Santa Barbara Car Free Project primarily focuses on

visitors to the area. (Traffic Solutions focuses on county commuters—see article in Business Focus.) On the recommendation of the Community Advisory Counsel, the District began discussions to initiate the Project in 1998 to reduce air pollution from visitors' vehicles. Santa Barbara Car Free now involves more than 100 community partners—businesses, organizations, and individuals—all working together to encourage visitors to arrive in the area without a car or to leave a car parked and enjoy the area car free. The program provides resources and incentives, including discounts donated by Car Free hotel, activity and transportation partners.

Santa Barbara Car Free has received environmental and business awards and has been highlighted in publications and on websites. Most recently, the project was featured in an automobile publication—the Southern California AAA Club magazine *Westways* (June 2009).

For more information see www.SantaBarbaraCarFree.org.

Vijaya Jammalamadaka Retires

APCD Board Roundup

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

March

- Authorized counsel to sign onto a petition for rehearing of the case of South Coast Air Quality Management District versus the federal Environmental Protection Agency (EPA) with regard to EPA rule making on Category 3 marine vessels.
- Selected Janet Wolf, Lupe Alvarez, and Eric Onnen to serve on the APCD Executive Committee during 2009.
- Received a briefing on measures to control particulate matter from construction and demolition activities, and directed the Control Officer to develop a new rule.

May

- Adopted a resolution approving the use of emission reduction credits from Santa Barbara County to offset emissions increases in San Luis Obispo County.
- Received and filed Fiscal Year 2007-08 Financial Audit and held a hearing to consider the Fiscal Year 2009-10 Proposed Budget.

June

- Reappointed Dr. Francis Lagattuta to the APCD Hearing Board for a three-year term.
- Authorized increased funding for the Old Car Buy Back Program of \$150,000 with the option of an additional \$100,000 increase if community interest justifies it.
- Adopted and presented a Resolution of Appreciation to Vijaya Jammalamadaka on her retirement.
- Directed the Control Officer to include a Climate Protection Chapter in the 2010 Clean Air Plan.
- Held a public hearing and adopted the proposed budget for Fiscal Year 2009-2010.

In June, Vijaya Jammalamadaka retired after 17 years with the District specializing in land use and California Environmental Quality Act (CEQA) reviews, and development of air quality plans, permits, and rules. She has an M.S. in Environmental Sciences from Indiana University, and prior to joining the District worked for the Santa Barbara County Planning and Development Department and private consulting firms.

Vijaya wrote the District's Environmental Review Guidelines and has been the resident expert on the use of the urban emissions model (URBEMIS) to determine projected emissions from commercial and residential development projects, training dozens of local land use planners in its use over the years, and working to improve the model at the state level. She has played a critical role in shaping the District's approach to implementing CEQA for permits and rules and including land use and transportation in strategies to reduce air pollution.

She has represented the agency on many local and state committees, making lifelong friends. She has also been a leader in the community, serving on the boards of several nonprofit organizations, and demonstrating an exceptional ability to bring people together and make connections.

She noted, "Over the years it has been so satisfying for me to work towards our agency's mission to protect public health—that is so closely aligned with my personal mission. I will miss that—and my wonderful co-workers. I take with me fond memories of our walks, break room lunch



chats, driveway conversations, holiday get-togethers, birthday lunches, and science fairs." She could always be counted on to volunteer to help out at the District's table at school and community events.

Vijaya will be traveling with her husband, a mathematics/statistics

professor at the University of California at Santa Barbara as he takes a sabbatical at academic institutions in Australia, India, Malaysia, and Europe. She remarked, "I am embarking on this one-year sabbatical with a great sense of adventure and an open mind to educate

myself, ruminate and decide what I would like to do for the rest of my life when I come back to this community that I love so much."

Her warmth, intelligence, expert analytical and networking skills, and infectious sense of humor will be much missed.

Leadership Santa Barbara County

Air Quality Engineer Kaitlin Ergun (pictured below) recently graduated from the Leadership Santa Barbara County program, which helps community members develop skills to contribute locally as leaders in business, non-profit, and governmental positions. A number of District staff have gone through the program. Ergun noted, "I have had a great experience in the Leadership program over the last nine months. I learned a lot about the County, and about myself, and I made great friendships. I have already begun using new skills I gained for interacting with people during my work

here at the District." Ergun is the project manager for the District toxics program and also works on the internal permitting database, solvent permitting, mineral source permitting, and winery permitting.





APCD Board Calendar

Board of Directors

- Supervisor Salud Carbajal
First District
Santa Barbara County
- Supervisor Janet Wolf, Chair
Second District
Santa Barbara County
- Supervisor Doreen Farr
Third District
Santa Barbara County
- Supervisor Joni Gray
Fourth District
Santa Barbara County
- Supervisor Joe Centeno
Fifth District
Santa Barbara County
- Mayor Russ Hicks
City of Buellton
- Vice Mayor Al Clark
City of Carpinteria
- Mayor Lupe Alvarez
City of Guadalupe
- Councilmember Cecilia Martner
City of Lompoc
- Mayor Marty Blum
City of Santa Barbara
- Mayor Larry Lavagnino
City of Santa Maria
- Councilmember Ed Skytt
City of Solvang
- Mayor Pro Tem Eric Onnen, Vice Chair
City of Goleta

All meetings start at 1:30 p.m.
For final meeting agendas, call the
APCD Board Clerk, 961-8853.

August 20
Board of Supervisors'
Hearing Room
105 East Anapamu Street
Santa Barbara, California 93101

October 15
Board of Supervisors'
Hearing Room
105 East Anapamu Street
Santa Barbara, California 93101

December 17
Board of Supervisors'
Hearing Room
105 East Anapamu Street
Santa Barbara, California 93101

Community Advisory Council

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

Driving Cleaner

One of the best things to do for our air is to drive less, and carpool, bike, walk, or take the bus or train whenever you can. When you do drive, combine car trips, keep your car tuned up, and your tire pressures up, and don't top off your tank at the gas station—stop fueling when the pump shuts off.

If you are in the market to buy a vehicle, compare fuel efficiency and emissions ratings, and look for the best scores on the Environmental Performance label (displayed on California vehicles starting with the 2009 model year). Examine your assumptions—here are some common misconceptions.

I need a bigger vehicle, and they're pretty much all the same in fuel use and pollution. Not true. There are significant differences in all size categories.

I have to get a hybrid to get a fuel-efficient, cleaner vehicle. Not necessarily. Many gasoline-only vehicles are low-emission and get high gas mileage.

The bigger the vehicle, the safer it is. There are different ways to evaluate the safety of vehicles. Some smaller vehicles are much safer in "crash avoidance," the ability to avoid serious accidents, than larger vehicles.

With cleaner diesel fuel, newer diesel passenger vehicles are now relatively low emission. Cleaner fuel and stricter tailpipe emission standards have resulted in cleaner diesel vehicles, but diesel-powered cars are still higher polluting than many gasoline-powered cars.

Find out More

See this page on our website:
www.OurAir.org/edu/clean-air-cars.htm.

Environmental Protection Agency's Green Vehicle Guide:
www.epa.gov/greenvehicles.

Drive Clean California Site: www.driveclean.ca.gov.



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.OurAir.org

E-Mail
apcd@sbcapcd.org

On the Air is a quarterly newsletter written by Mary Byrd, 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.

Old Car Buy Back Program to Continue

In June the District Board approved an increase of \$250,000 in funding to ensure the continuation of the successful voluntary Old Car Buy Back Program, which reduces pollution by taking older, higher-polluting vehicles off the road permanently.

The Program pays \$800 for a vehicle of model year 1992 or older that meets certain requirements. Since May of 2006, the Program has retired 1,088 vehicles, resulting in the reduction of more than 40 tons of nitrogen oxides and reactive organic compounds, pollutants involved in the

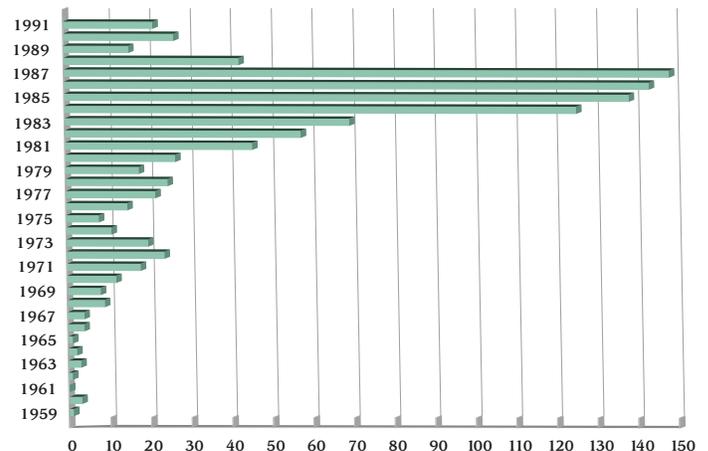
formation of ground-level ozone, a principal component of smog. Vehicles are crushed at dismantling stations in three locations: Goleta (responsible for 52 percent of the total); Santa Maria (responsible for 20 percent), and Lompoc (responsible for 28 percent).

The funding increase will allow the Program to continue without interruption; \$100,000 of the increase will only be used if community interest continues at its current level.

For more information, see www.OurAir.org/ocbb.htm.

Vehicles Retired by Model Year

Average Model Year = 1984



The Future is Now: Climate Change Impacts on California

In May, the California Energy Commission's Climate Change Center released a second biennial report titled "The Future is Now: An Update on Climate Change Science Impacts and Response Options for California," fulfilling a requirement for updates on this topic outlined in a 2005 Governor's Executive Order.

The report notes, "Climate change risks are no longer a matter of the future or of places far away. As a growing number of studies of changes already observed in California's climate and ecosystems make clear: climate change is already evident in the state, and it is happening now."

The study documents current impacts, projects future impacts under various emission-reduction

scenarios, and examines options for reducing emissions and adapting to impacts already occurring. Principal findings are summarized below.

- The western United States is warming faster than the rest of the country. Since 1920, California's annual nighttime temperatures have increased approximately 2.5° F, and annual daytime temperatures have increased close to 1° F.

- Warming and precipitation changes are not occurring uniformly throughout the state. Crop irrigation in the Central Valley has historically decreased the amount of warming in this region, while increased warming has been observed in urban areas. Changes in snowpack

and the timing of spring runoff have been observed in the Sierra Nevada Mountains over the past century.

- Agricultural productivity, forest composition, timing of ecological events (for example, migration), and wildfire frequency have all experienced measurable changes resulting from a changing climate.

- In recent years, wildfires have increased in frequency, duration and size. The forested area burned in the western United States from 1987 to 2003 is 6.7 times the area burned from 1970 to 1986. A century of fire suppression has led to increased forest densities and accumulation of fuel wood that can result in more severe fires.

Climate plays an important role: warmer temperatures and longer dry seasons are the main reasons for the increasing trend in forest wildfire risk. Reduced winter precipitation and early spring snowmelt are depleting the moisture in soils and vegetation, leading to longer growing seasons, drought, and conditions more favorable for wildfires. In addition, higher temperatures produce more evaporation of moisture from vegetation, increasing the risk of rapidly spreading and large fires. In the last three decades the wildfire season in the western United States has increased by 78 days.

- The scenario of a stabilization of atmospheric carbon dioxide levels by 2100 through a drastic

(continued on back)

Commuters Meet the Challenge

In May and June, four District teams joined more than 1500 county commuters in the Commuter Challenge coordinated by Traffic Solutions, and sponsored by the District and other organizations. Teams earn points for carpooling, telecommuting, walking, biking, or taking the bus instead of driving solo. Don Kendig, District Business Manager, and

Commuter Challenge participant, estimated that by the end of May the District teams had collectively prevented 398 solo commutes, saving 14,670 drive-alone miles and the air pollution associated with those miles.



Joel Cordes, Principal Monitoring Specialist and Captain of the District's "1-APCD" Commuter Challenge team, biked to work one day with such enthusiasm that he sheared off the right-hand side crank on his bike. Said Cordes, "I pushed my foot down on the pedal and the whole thing broke off." Cordes was uninjured, but as he was "clipped in" he went all the way to the ground with crank in tow. Cordes avoided driving solo to work for all of May, and replaced some weekend car trips with car free trips as well, earning many points for his team.

Accounts Specialist Janice Robinson, Captain of the District's "Clean Air 4 Us" team, takes the Clean Air Express bus to work from her home in Lompoc. Robinson earned points for her team for every day in May, including weekend days, except for one workday.

\$ District Grants for Local Businesses

Funds for Cleaner Engines

Equipment that may be eligible for grants to repair or retrofit includes:

On-Road and Off-Road Vehicles/ Equipment, Agricultural Water Pumps, School Buses, Marine Engines, and Other.

For applications & more info visit: www.sbcpd.org/itg/itg.htm.

Contact Information:

Al Ronyecz at 961-8877
or axr@sbcpd.org

Climate Change (cont'd)

reduction in emissions (more extreme than others previously modeled) was examined. Even under this scenario, detrimental warming and rising sea levels were projected.

Factors that could aggravate problems caused by climate change include population growth, the presence of poor or vulnerable social groups, and seismic risks in the San Joaquin Delta. In addition, some climate change impacts will overlap and combine in challenging ways.

The report emphasizes the importance of both reducing emissions and taking steps to

adapt to the climate change already occurring, and concludes, "A rapid two-pronged response to climate that encompasses both mitigation and adaptation has the potential to promote innovative investment by businesses and protect environmental quality while increasing community preparedness and capacity to cope with change. Conversely, a path of inaction exposes a community's vulnerability to climate variability and is ultimately costly."

For more information, see this page on the state's climate change portal website: www.climatechange.ca.gov/research/2008_assessment/index.html.

Revising Rules on the Use of Solvent Cleaning Machines and Performing Solvent Cleaning

The District is revising Rule 321 and related rules to reduce air pollution from the use of solvent cleaning machines and solvent cleaning performed outside of solvent cleaning machines. These rule changes are necessary to implement commitments made in Clean Air Plans. Proposed changes include requiring some cold solvent cleaning machines to use water-based cleaning agents.

Rule 321 proposed revisions are designed to reduce emissions of reactive organic compounds from these sources by more than 0.6 tons per day, or approximately 200 tons per year. Reactive organic compounds are involved in the formation of ground-level ozone, a principal component of smog.

For more information, see www.OurAir.org/rules/workshops.htm.