



Valley Air News

A publication of the San Joaquin Valley Air Pollution Control District

Fall | 2002

Please Don't Light Tonight Season Begins



Kelly Hogan Malay, an air quality educator at the Air District's Bakersfield office, explains to reporters the importance of reducing wood smoke emissions during the winter. The Air District hosted media events throughout the Valley to explain proposed changes to wood-burning restrictions and to demonstrate the difference between emissions from an EPA-certified stove (shown on the right) and an old wood-burning device (shown on the left).

The Valley Air District's annual campaign to reduce wintertime air pollution kicked off in November amid intense public and news media interest in proposed changes to wood-burning restrictions.

Through the Please Don't Light Tonight program, the Valley Air District asks residents to voluntarily refrain from burning wood when air quality is unhealthy. The program, now in its fifth year, is voluntary for residents this wood-burning season. The Air District is considering a mandatory no-light program in the future.

The Air District hosted news media events throughout the Valley to explain proposed changes to the program and to demonstrate the difference between emissions from clean-burning fireplace equipment and emissions from conventional, non-certified wood-burning equipment. Newer, certified wood-burning equipment is seven times cleaner than conventional fireplaces and stoves.

"We encourage residents, if they must burn, to burn as cleanly as possible," said Josette Merced Bello, the Air District's public education administrator.

"We encourage residents, if they must burn, to burn as cleanly as possible."

Josette Merced Bello –
Public Education
Administrator
SJVAPCD

Wood smoke is a significant contributor to the Valley's wintertime air pollution. The Valley air basin doesn't meet health-based standards for particulate matter ten microns and smaller (PM10), a pollutant that can trigger heart attacks, aggravate asthma and emphysema and trigger headaches and allergies. On a bad winter night, wood smoke can be responsible for one-third of the airborne PM10 in Valley neighborhoods. In order to reduce the threat to public health and to comply with mandates from the U.S. Environmental Protection Agency, the Air District is considering stricter wood-burning restrictions that would take effect in Winter 2003-04.

The Please Don't Light Tonight appeals don't apply to households in which wood burning is the sole source of heat; in homes higher than 3,000 feet elevation; and in homes that don't have access to

natural gas. To obtain daily air quality information and Please Don't Light Tonight status, call (800) SMOG-INFO or log onto the District's website at www.valleyair.org.

Frequently Asked Questions about Residential Wood Burning

The District is considering amendments to Rule 4901, Residential Wood Burning, that will strengthen the current regulations. To better acquaint you with the issues, we've prepared the following frequently asked questions. More details can be obtained by calling the District at (559) 230-5800 in the central valley, (209) 557-6400 in the northern valley, (661) 326-6900 in the south, or by visiting our website at www.valleyair.org.

Q: What is wrong with wood smoke?

A: Wood smoke contains hundreds of chemical compounds, including nitrogen oxides, carbon monoxide, organic gases, toxic pollutants, and dust/soot particles (also known as particulate matter or PM).

Q: Why is wood smoke a problem in the Valley?

A: Wood smoke contains unhealthy gasses and microscopic particles. During the winter months, the Valley frequently experiences weather conditions that trap fog and particulate matter close to the ground. This can create a health hazard for residents burning wood and their neighbors.

Q: What is the health impact of particulate matter?

A: Particulate matter is ten microns or less in diameter (PM10) or seven times smaller than the width of a single strand of hair. These tiny particles and toxics in wood smoke can evade the body's natural filtering system through the nose, mouth, and throat and become lodged deep in the lungs. This can cause or aggravate respiratory conditions and infections; increase the risk of heart attacks; irritate throats and sinuses; and trigger headaches and allergies.

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San Joaquin Valley
Air Pollution
Control District

Frequently Asked Questions

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Q: How bad is the problem?

A: The San Joaquin Valley Air Basin currently fails federal health-based standards for PM. In densely populated urban areas, studies indicate that up to 30 percent of PM₁₀ reaching air quality samplers during winter air quality episodes comes from wood burning. The percentage of finer particles (PM_{2.5}) from residential wood burning is estimated to be even higher.

Q: How much of the particulate matter comes from other areas?

A: Some smog, our primary summertime pollutant, blows into our Valley from other areas. The Valley's wintertime particulate problem occurs during stagnant weather conditions when locally generated pollution is trapped close to the ground. During these weather events the Valley is not impacted by pollution from other regions.

Q: I've heard most pollution comes from cars and trucks. Why restrict wood burning?

A: Cars and trucks are the primary cause of ozone, also known as smog. They also cause some of the larger airborne particles. During the heart of the winter, much of the fine – very unhealthy – particles come from residential wood burning. We need to control both sources to ensure healthy air.

Q: How will the rule be enforced?

A: Specific enforcement details are not expected to be determined until after the rule workshops have been completed.

Q: Are there any exemptions to Rule 4901?

A: Yes, as follows:

- Gas and propane devices would be exempt altogether.
- EPA-certified wood-burning devices (except on the most polluted nights).
- Homes that use wood burning as their sole source of heat.
- Devices used above 3000' elevation.
- Areas where natural gas and propane service is not available.

Q: If the restrictions will be required, what is Please Don't Light Tonight?

A: This year, wood burning restrictions are voluntary through the Please Don't Light

Tonight education program. On days when particulate matter is approaching unhealthy levels, the District will issue requests through the media for residents to voluntarily refrain from lighting their wood-burning stoves and fireplaces for 24 hours. Residents can verify whether a no light request has been issued by calling 1-800-Smog-Info. Next year, the restrictions will be mandatory.

Q: Will the District ban fireplace burning completely?

A: No. The Air District will only restrict burning on 5-20 of the most polluted nights each winter. Since restrictions will be issued only for specific areas where airborne particle levels are unhealthy, there is a strong likelihood that not all restricted days will affect everyone.

Q: If residents are facing restrictions, why should farmers be allowed to burn?

A: California state law permits agricultural burns. Therefore, local air districts can't ban burning altogether, but can manage the smoke impact. The District's agricultural burn program is mandatory and farmers face approximately 100 days of restrictions per year in contrast to the anticipated 5-20 restrictions on residential burning per year. On those days, agricultural burning will be prohibited as well.

Q: Why not tackle major polluters like big industries rather than small polluters such as fireplaces?

A: Over the past decade, the Valley Air District has reduced smog-forming emissions from businesses and industrial sources by fifty percent. Despite the fact that the District has been successful at controlling emissions from businesses, we still do not meet federal health-based standards. For that reason, the District cannot ignore a source that contributes as much as 30 percent of the winter particulate matter.

Q: Are compressed logs better than burning wood?

A: Yes. Independent tests have demonstrated that burning a manufactured compressed log is four to five times less than the burning of wood. However, manufactured logs still emit twice as much particulate matter as EPA-certified stoves and inserts. Natural gas and fireplace insert devices must be considered as the best practice in achieving low particulate matter emissions.

Q: How do I know if my fireplace insert or stove is EPA-certified?

A: Since 1992, the EPA has regulated woodstoves and fireplace inserts. A metal sticker on the back of the appliance bears the name of the United States Environmental Protection Agency with the year and month of manufacture. Anything manufactured after July 1, 1992 is EPA-certified.

Q: Is there a big difference between newer wood burning devices and older devices?

A: The most efficient "solid-fuel" device is a pellet stove that emits from 1.2 to 1.0 grams per hour of particulate matter. A gas stove or insert emits .07 grams per hour. An open fireplace burning wood emits 47 grams per hour of particulate matter as opposed to a fireplace with an EPA-certified insert that emits 6 grams per hour of particulate matter.

Q: Is wood burning an efficient way to heat my home?

A: It can be if an EPA-certified insert or wood stove is used. These devices are more efficient, heat better with less wood, and pollute less than an open fireplace. However, using wood instead of gas can increase your energy costs. The cost of creating useable heat with wood is about \$41 per million BTU (a measure of heat efficiency). The cost of creating heat with a gas furnace is about \$23 per million BTU.

Q: What type of appliance should I purchase?

A:

- Gas fireplaces/heater are the cleanest alternative.
- Of the solid fuel devices, pellet stoves are the most efficient and least polluting.
- EPA-certified woodstoves are more efficient. There are two basic EPA-certified designs: Catalytic stoves allow volatile gas to burn at lower temperatures and Noncatalytic stoves burn the gas more completely.

Q: If I do burn wood, what type is best?

A: Pound for pound, all woods have about the same heating value. However, Firewood should always be dry, or seasoned. Denser woods such as oak or orchard take longer to ignite, but burn slower and more evenly. Softwood used for kindling, such as pine or fir, are low in density, ignite easily, burn fast and hot and will heat the firebox and flue quickly. They produce more particulates, however, than denser woods.

For a Clearer Future 2003 Calendars Have Arrived

The Valley Air District's 2003 calendar, For a Clearer Future, is now available and free-of-charge to San Joaquin Valley businesses and households. The calendar features 14 full-color original drawings by school children throughout the valley.

"We received hundreds of entries, it was difficult narrowing to only 14. This year's winning entries are beautiful and creatively depict the importance of clean air," said Janis Parker, air quality educator with the Valley Air District.

This year's cover artist is Danielle Garcia, a 6th grader at Westside Union Intermediate School in Los Banos. Her artwork features rolling green mountains and a jolly sun proclaiming WE LOVE CLEAN AIR!



To order calendars
call (559) 230-5800.

Employee Partner Honored

The Valley Air District recently recognized the efforts of Patrice Page, employee transportation coordinator with the City of Stockton, for her contribution to the success of the Spare the Air program in Stockton.

Page received an Air District Award of Distinction for Outstanding Efforts for the work she did in 2002 to spread the word to Stockton residents when summertime air pollution was approaching unhealthy levels.

As the Spare the Air coordinator for the City of Stockton, Page successfully signed up 139 city employees who committed to sparing the air on June 6, the official kickoff date for the 2002 Spare the Air season. Over the course of the summer, Page attended three downtown farmers' markets to educate the public about air pollution, its effects on human health, and how residents can help reduce air pollution levels. Nearly 3,500 people attended the farmers' markets, sponsored by the Stockton Business Alliance. Page also coordinated the placement of an article in the City of Stockton's newsletter promoting the events and the Spare the Air program. The newsletter was distributed to more than 60,000 residents.



Patrice Page and Terry Parker, both from the City of Stockton, receive the Spare the Air 2002 award from Janis Parker, representing the Valley Air District.

The City of Stockton was a founding partner of the Spare the Air program. Under Page's direction, the city's Spare the Air program remains a strong advocate for clean air. The Valley Air District commends Patrice Page and the City of Stockton for being active and enthusiastic participants in the Spare the Air program.

Cash For Clean-Air Choices

To encourage investments in cleaner-burning technology, the San Joaquin Valley Air Pollution Control District provides financial incentives to residents interested in buying clean-air vehicles. If you live in the Valley and you are willing to sign a contract with the Valley Air District prior to buying a new clean-air vehicle, you may be eligible to receive incentive money. **Purchases already made are ineligible.**

IT'S EASY TO APPLY!

- ❶ Decide which new clean-air vehicle you want.
- ❷ Submit an application to the Air District.
- ❸ Receive an executed contract from the Air District.
- ❹ Purchase your vehicle.
- ❺ Cash your check!

Applications and a list of eligible vehicles are available online at www.valleyair.org or by calling (559) 230-5859.

The contract you sign with the Air District is designed to ensure that at least 75 percent of the miles driven in your clean-air vehicle are in the Valley. You'll be required to submit simple annual reports indicating how much fuel the vehicle consumed, how many miles it was driven and whether it had any major maintenance problems.

More information about the program is available online at www.valleyair.org or by calling (559) 230-5859. Although there is no deadline to apply, funds are limited. Applications will be considered on a first-come, first-served basis.

Spreading the Word



www.fresnocfcu.com

Thank you Fresno County Federal Credit Union (FCFCU) for offering your members daily air quality news via the Internet.

While banking online, members have access to daily air quality information, including if it's a *Spare the Air* day or a *Please Don't Light* night. Look under the News and Education section of their website.

Banking online is a great way to save money and by not driving it helps to spare the air!

You may be eligible for up to \$3,000 to help you purchase a clean-air vehicle!



Valley Air District Directory

San Joaquin Valley Air Pollution Control District

Smog Info Line (800) 766-4463
 Smoking Vehicle (800) 559-9247
 Job Line (559) 230-6019
 Web Site www.valleyair.org

Northern Region Office (209) 557-6400
 Complaint Line (800) 281-7003
 Small Business Assistance (209) 557-6446

Central Region Office (559) 230-6000
 Complaint Line (800) 870-1037
 Small Business Assistance (559) 230-5888

Southern Region Office (661) 326-6900
 Complaint Line (800) 926-5550
 Small Business Assistance (661) 326-6969

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