

CALENDAR

October 9 - Workshops for:

District Rule 2.3
Ringelmann Chart
Proposed Amendments

District Rule 2.11
Particulate Matter
Proposed Amendments

District Rule 2.12
Specific Contaminants
Proposed Amendments

October 14, 2009 Canceled
YSAQMD Board of Directors

October 24, 2009 12 Noon
International Climate Action Day
Central Park, Davis
www.350.org

November 11, 2009 Canceled
YSAQMD Board of Directors

November 14, 2009
American Lung Association
http://www.climbcalifornia.org/

December 9, 2009 9:00 AM
YSAQMD Board of Directors

Coming soon check our
website for updates:

District Rule 2.34
Stationary Gas Turbines
Proposed Amendments

District Rule 3.8 Date TBA
Federal Operating Permits
Proposed Amendments Workshop

PELLET POWER

Earlier this year, H.R. 1, the American Recovery and Reinvestment Act (ARRA) was signed into law. Included in this legislation is a tax credit for the purchase of a biomass-burning stove to help consumers fight rising home heating costs. The tax credit is a 30% tax credit of up to \$1500 total over a two year period (2009-2010) for the purchase of a 75% efficient biomass-burning appliance. The law defines "biomass fuel" as any plant-derived fuel available on a renewable or recurring basis, including agricultural crops and trees, wood and wood waste and residues (including wood pellets), plants (including aquatic plants), grasses, residues, and fibers.

The tax credit provisions are extended improvements on the legislation that passed in October 2008. The major changes are:

- 1) an extension of the credit to include 2010;
- 2) the increase on the credit from \$300 to 30% of the total cost; and
- 3) the lower heating value (LHV) will be used for the efficiency rating rather than the higher heating value (HHV)

In past years, the District has offered incentives for the changeout of non-EPA certified woodburning appliances. This year, while the District does not provide incentives, check with local retailers for possible savings and a list of qualified biomass stoves that qualify for the tax credit. To verify tax credit eligibility, ask your retailer to provide the Manufacturer's Certification Statement for the stove you plan to purchase.

GREEN MACHINE

Lisa Rivas of Winters was the winner of a Neuton rechargeable mower. Out of nearly 500 entries, Lisa's name was selected from a random drawing held at the Yolo County Fair. Visitors to the District's booth were provided information on air quality as well as the chance to win the mower. The mower was donated by Neuton (www.neutonpower.com).



Five Simple Steps to a Healthy School Environment

1. Switch to green cleaning products:
 - Green cleaning helps students stay healthy and learn
 - Green cleaning protects the health of custodial staff
 - Green cleaning can increase the lifespan of facilities
 - Green cleaning preserves the environment
2. Introduce green equipment and supplies.
3. Adopt green cleaning procedures.
4. Use green paper and plastic products.
5. Share the responsibility.

Air Aware

FALL 2009

A Publication of the
Yolo-Solano Air Quality
Management District

WINTER, WOOD, WARNING



“
The right wood stove, used correctly, keeps wood flaming until it is reduced to coals. A smoldering fire is not an efficient fire.
”

It is the time of year we think about lighting a woodburning fire in our homes - sometimes for heat and sometimes for ambiance. Everyone needs to know that woodburning can have an impact on yourself, your family and your neighborhood.

For some, smoke may smell good, but it's not good for you. If you are healthy, you are not usually at major risk from smoke. Still, it's a good idea to avoid breathing smoke if you can help it. Smoke is made up of a complex mixture of gases and fine particles produced when wood and other organic matter burn. The biggest health threat from smoke comes from fine particles (also called particulate matter or PM). These microscopic particles can get into your eyes and respiratory system, where they can cause health problems such as burning eyes, runny nose, and illnesses such as bronchitis. Fine particles can aggravate chronic heart and lung diseases—and are linked to premature deaths in people with these conditions. Some people are more susceptible than others:

- If you have heart or lung disease, you may experience health effects earlier and at lower smoke levels than healthy people.
- Older adults are more likely to be affected by smoke than younger people.
- Children also are more susceptible to smoke for several reasons: their respiratory systems are still developing; they breathe more air (and air pollution) per pound of body weight than adults; and they're more likely to be active outdoors.

Wood smoke is waste. Any smoke that escapes from your wood stove unburned is wasted fuel that will stick in your chimney as creosote or be released as air pollution. An old or poorly installed wood stove can result in

higher maintenance costs, greater risk of smoke in your home, and more environmental pollution. It could cause a house fire. You should never smell smoke in your home; smoke is unhealthy to breathe. The odor of smoke in your home indicates that your wood stove is not operating efficiently or safely. An EPA certified wood stove burns wood efficiently, releasing 60 to 80% less smoke up the chimney. Properly installed EPA certified wood stove and fireplace inserts offer many benefits. They burn wood efficiently, more safely, and heat your home effectively with much less smoke. With EPA certified stoves and inserts, you should see only a thin wisp of smoke coming from your chimney.

Tips for Building a Fire

Building an effective fire requires good firewood and good fire building practices. These steps will help you obtain the best efficiency from your wood stove.

- Season wood outdoors through the hot, dry summer for at least 6 months. Properly seasoned wood is darker, has cracks in the end grain, and sounds hollow when smacked against another piece of wood.
- Stack (off the ground) and store wood outdoors.
- Burn only dry, well-seasoned wood.
- Start fires with clean newspaper and dry kindling.
- Burn hot, bright fires.
- Let the fire burn down to coals, then rake the coals toward the air inlet (and wood stove door), creating a mound. Do not spread the coals flat.
- Reload your wood stove by adding at least three pieces of wood each time, on and behind the mound of hot coals. Avoid adding one at a time.
- Use smaller fires in milder weather.

This winter, consider your health and the health of your neighbors before you light that fire. Sign up to receive "Don't Light Tonight" advisories for the nights when weather conditions can increase the negative impacts of woodsmoke. Go to www.ysaqmd.org and click on **Enviroflash**.



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RETURN SERVICE REQUESTED

Inside this issue . . .

Saving Energy	2
West Sacramento	2
Rules Update	3
New DLT Threshold	3
Back To School	4
Tax Credit	4
Calendar of Events	4

SAVING ENERGY

LED (light-emitting diode) technology can change the way we illuminate our houses and office buildings and is a key component in energy conservation:

- A single kilowatt-hour of electricity will generate 1.34 pounds of carbon dioxide emissions. Assuming the average light bulb is on for 10 hours a day, a single 40-watt incandescent bulb will generate 196 pounds of carbon dioxide every year. The 13-watt LED equivalent will only be responsible for 63 pounds of carbon dioxide over the same time span.
- A building's carbon footprint from lighting can be reduced by 68% by exchanging all incandescent bulbs for new LEDs. Excessive carbon dioxide within the Earth's atmosphere is the bad-boy that scientists are saying is the root cause of global warming.
- LEDs are also non-toxic, unlike the more popular, energy efficient, curly bulb option: the compact florescent lamp, a.k.a. CFL, which contains traces of harmful mercury. While the amount of mercury in a CFL is small, introducing less into the environment is preferable.

As you begin to replace your standard light bulbs with LED lighting, you will be using about 70% less electricity than you did before. LED lighting has an average lifespan of more than twenty years, so you will be saving time and money when replacing burned out light bulbs.

Did you know?

Small businesses can typically save as much money and prevent as much pollution, per square foot, as large organizations.

Buildings use \$200 billion worth of electricity and natural gas each year. If the energy efficiency of U.S. Buildings improved by 10 percent, Americans would save about \$20 billion and reduce greenhouse gases equal to the emissions from about 30 million vehicles.

The energy used by commercial and industrial buildings in the U.S. is responsible for nearly 50 percent of our national emissions of greenhouse gases.

WEST SACRAMENTO GETS CLEANER

In August, elected officials and industry leaders gathered at the Harbor Point 76 station in West Sacramento to debut the newest electric charging station. DMC Green, Inc. installed a Coulomb Technologies Chargepoint Networked Charger at the station which also offers E-85 ethanol and biodiesel.

The electric recharging system being used by DMC is designed and manufactured by Coulomb Technologies and has a number of innovative features. Clients are issued a unique Radio Frequency (RF) key fob that unlocks and activates the recharging system. The system automatically sends a text message to their cell phone when the car is fully charged or if anyone attempts to disconnect the electrical connection. Clients also have access to 24/7 customer support. If a client has lost a key fob or has any other issues, they can call and receive assistance. Customer service specialists can also unlock and activate the recharging systems remotely.

The new charger is part of DMC's on-going program to green-retrofit existing stations throughout California. Once completed, these networked charging stations will connect major traffic arteries, cities and counties throughout the state. The end goal is to reduce dependency on fossil fuels and offer a variety of fuel choices including ethanol, biodiesel, electric charging and hydrogen. The station located off I 80 and Reed Ave in West Sacramento is open to the public.



L-R: Matthew Ivler, representative for Senator Lois Wolk, DMC Green CEO Dianna Morgan, Supervisor Jim Provenza, Assemblywoman Mariko Yamada, Coulomb Technologies CEO Richard Lowenthal and YSAQMD Executive Director Mat Ehrhardt.



members of the Chamber of Commerce and local elected officials as well as staff from both Devine Intermodal and Farmers' Rice.

The Clean Air Funds application period for fiscal year 2010/2011 will begin in January 2010. Applications are encouraged for projects in the following categories: Clean Technologies/Low Emission Vehicles, Alternative Transportation, Transit Services, and Public Education/Information. For more information on Clean Air Funds, please contact Jim Antone, associate planner, at (530) 757-3653, or jantone@ysaqmd.org or visit our website at www.ysaqmd.org.

STATS: July 1, 2009 - September 30, 2009

ATC Applications Received	36	Complaints Investigated	23
ATC Applications Processed	38	Inspections Performed	329
PTO Applications Received	59	Notices of Violation (NOVs)	7
PTO Applications Processed	71	Notices to Comply (NTCs)	2

Recently, Devine Intermodal introduced their new yard truck into service at the Farmers' Rice Cooperative facility in West Sacramento. The new "yard goat" replaces an older vehicle, and was partly funded through the use of the District's **Clean Air Funds** for the 2009/2010 fiscal year. Because the newer truck is much cleaner than the replaced vehicle, the District will realize emission reductions of approximately one ton annually. District staff participated in a ribbon-cutting ceremony for the new vehicle, along with

RULES UPDATE

The District is in the process of revising several existing rules to aid in improving air quality.

Rule 2.3, Ringlemann Chart lists the maximum opacity of smoke and dust emissions from a single source of emissions. The revision to the rule will restrict single source emissions to a level less than number 1 on the Ringlemann Chart (equivalent to 20% opacity) for a single period, or brief periods which, in total, do not exceed 3 minutes in any one hour. For some time now, the District has been requiring emissions from permitted sources to comply with the 20% opacity limitation under the authority of Rule 3.4, New Source Review. This rule revision will make the 20% opacity standard more generally applicable to emissions sources within the District. Emissions sources can comply with the revised standard with a wide variety of control strategies including replacing equipment, adding controls, or modifying methods of operation. In addition to the alteration of the rule standard, the exceptions to Rule 2.3 contained in current District Rule 2.4 will be added and Rule 2.4 will be rescinded.

Rule 2.11, Particulate Matter restricts emissions of particulate matter to no more than 0.3 grains per cubic foot of exhaust volume as calculated for standard atmospheric conditions. The proposed rule revision will lower the limitation to 0.1 grains per cubic foot. Recently, the EPA ruled that the majority of the District is not in compliance with the federal standard for particulate matter equal to or less than 2.5 micrometers in diameter (PM2.5). The steps taken to comply with the revised Rule 2.11 will help reduce amounts of PM10 and PM2.5 created within our jurisdiction. Most other districts in the state have already lowered their particulate matter emission concentration limits.

Rule 2.12, Specific Contaminants restricts the emissions of sulfur compounds from a source, and also restricts the particulate matter emission concentration from combustion sources. This rule will be revised so that the restriction on particulate matter emissions will be lowered to 0.1 grains per cubic foot of exhaust calculated to 12 percent of carbon dioxide at standard conditions. As with

VOLUNTARY DLT

At the September board of directors meeting, the board approved continuing the winter season "Don't Light Tonight" (DLT) program on a voluntary basis but issuing the DLT advisories at a lower threshold.



Since 2008, the District has issued a next day advisory to voluntarily not burn wood when PM 2.5 is forecasted to be at 35 micrograms per cubic meter of air or higher. For the 2009 season, the board approved 25 micrograms per cubic meter of air as the trigger. This lower threshold will be more protective of public health and while the frequency of the advisories will increase with an anticipated average of 19-20 per year, this will also help to increase awareness of the air pollution problem created by residential woodburning.

Residents who would like automatic notification of a DLT advisory can sign up through the District's webpage by clicking on the Enviroflash logo.

Rules Update continued

the revision of Rule 2.11 this reduction is following the similar reduction already made by many other air districts.

Rule 2.34, Stationary Gas Turbines restricts the emission of oxides of nitrogen (NOx) from all stationary gas turbines with a rating of 0.3 megawatts or higher. Among several revisions to the rule, a six-hour startup period exemption from the NOx emission limits for combined cycle power plants has been added in addition to the two-hour start-up period exemption for simple cycle power plants. The rule revision also proposes the introduction of an exemption from the rule limits for short-term excursions from compliant turbine operation. As a means of reducing the emissions of NOx some of the rule emission limits will be slightly reduced.

The District encourages anyone wishing to comment on or participate in the rule-making process to contact Kyle Rohlfing by mail or email at krohlfing@ysaqmd.org

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As a public health agency, the Yolo-Solano Air Quality Management District's role is to protect human health and property from the harmful effects of air pollution.

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Board meetings are held at 9 a.m. the 2nd Wednesday of each month at the YSAQMD office located at 1947 Galileo Court, Suite 103, Davis. The public is welcome to attend. For a current agenda go to www.ysaqmd.org or call (530) 757-3650 or (800) 287-3650.

Mat Ehrhardt, P.E.
Executive Director/
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