

VALLEY AIR NEWS

A monthly publication of the San Joaquin Valley Air Pollution Control District - June 2014

Ozone season in full swing

As the seasons change from the refreshing winds and occasional showers that help clean our air in the spring, longer, warmer and more stagnant days nurture the build-up of ground-level ozone.

Ozone, the main component of smog, is one of the San Joaquin Valley's most notorious forms of air pollution. This corrosive gas is formed when sunlight bakes the mixture of Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOCs).

These pollutants are plentiful in the Valley, and motor vehicles are the largest contributor. And, although we've seen significant improvement over the past 20 years, much more is necessary to achieve federal health-based air quality standards.

Valley residents play a large role in reaching this goal. Below are some tips that can really make a difference if everyone is willing to make one change.

- Drive less – carpool, walk, bicycle, take public transportation, bring your lunch to work.
- Avoid vehicle idling – turn off your engine.
- Retire your gas lawn mower and trade it for an electric mower. The Valley Air District's Clean Green Yard Machines program is a great way to accomplish this task.
- Use a gas barbecue instead of charcoal.
- When shopping for a new vehicle, check emission ratings. The Valley Air District's Drive Clean Program provides rebates to purchase electric and plug-in hybrid vehicles. Electric vehicles produce no emissions.
- Aerosol sprays contain VOCs. Use a pump spray instead.
- Reduce electricity usage. There are many ways to reduce energy

use at home with energy-saving appliances, unplugging when not in use, and keeping the AC set at 78 or higher.



When air quality *does* reach unhealthy levels, it's often best to reduce outdoor activity. The Real-time Air Advisory Network (RAAN) provides air quality readings online that come directly from monitoring stations all over the Valley and are updated hourly.

To view this information, go to: www.valleyair.org/Programs/RAAN/raan_monitoring_system.htm. The same information is available by using the District's iPhone app, Valley Air.

Are fireworks really safe and sane?

In addition to extreme fire danger during an especially dry year, fireworks also present Valley cities with a preventable health risk due to particulate matter pollution.

Smoke, soot, ash and metals emitted into the Valley's air from fireworks often result in serious health effects, including lung infections, bronchitis and cardiac illness. People with existing respiratory conditions, elderly people and small children are especially susceptible.

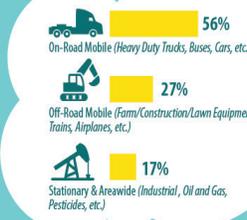
The Valley's air monitoring stations regularly capture high particulate matter readings on the Fourth of July, reaching into the 'Very Unhealthy' range.

The Valley Air District asks residents to consider the effects of fireworks before lighting them this Fourth of July and the option of attending public fireworks displays rather than lighting individual fireworks.

Impacts of GROUND LEVEL OZONE

$$\text{OZONE (O}_3\text{)} = \text{NO}_x + \text{VOC}^* + \text{Heat \& Sunlight}$$

Ground level ozone is not emitted directly into the air, it is created by chemical reactions between NOx and VOCs in the presence of heat and sunlight.



*The Valley has an overabundance of naturally emitted VOCs. NOx controls are most effective for reducing ozone in the Valley.

Harmful to OUR Health



- Chest Pain, Coughing, Throat Irritation, Congestion
- Triggers Asthma Attacks
- Worsens Bronchitis & Emphysema
- Reduces Lung Function

CHILDREN & TEENS are at GREATER RISK

- Their lungs are still developing
- Take more breaths per minute
- Spend more time outdoors

YOU can make ONE CHANGE

ON THE ROAD — and — AT HOME



Take advantage of Air District incentives at valleyair.org/grants
Tune Up your Vehicle • Exchange your Lawnmower • Purchase/Lease an Electric Vehicle

Check AIR QUALITY in YOUR AREA



- The Real Time Air Advisory Network offers:
- Online access to current, hourly air-quality data
 - Automated email or texts when air quality worsens
 - Specific health recommendations for outdoor exercise

TAKE ACTION during an AIR ALERT!

Alerts are issued when the Valley is experiencing conditions that may lead to exceeding a federal health-based ozone standard