Lawn care emissions impact valley air quality

Editor, Manteca Bulletin,

I think your column on lawn blower use in the San Joaquin Valley (Dennis Wyatt’s Oct. 25 column: “The answer, my friend, to better air quality is blowing in the wind”) described a pretty accurate pattern of use based on what I have observed in Fresno.

I ride a bike to and from work each day, often going home for lunch, for a total of 18 miles per day. I am in a position to observe a great deal of lawn blower use, and have gotten used to squinting and holding my breath.

The San Joaquin Valley Air Pollution Control District is hosting a conference on March 21 of 2012 on lawn care practices in the Valley and how the air pollution impacts can be reduced. As part of the preparation, we have funded UCSF-Fresno to measure ultrafine particles or UFP (less than PM 0.1 rather than the current fine particulate size category of PM2.5) in Fresno from lawn care operations and other urban sources such as household wood smoke.

We have found that lawn blowers and other two-stroke engines used in lawn care emit very high levels of UFP, which ultimately morph into PM2.5 sized particles over time and space. UFPs are of concern because a high fraction of the particles are deposited in deep in the lungs. They are small but have large surface areas and are capable of avoiding the defense mechanisms of the lung. And as hydrocarbon combustion products, they contain a high percentage of the organic carbon compounds, e.g. PAH, that are known to create pulmonary inflammation and sensitization of the immune system.

The Valley is highly unlikely to ever meet the new standards for PM2.5 (2006 standards plus 2012 is likely to see a tougher annual daily standard) that have been set by the EPA unless we can get a handle on PM emissions from lawn care.

David Lighthall
Health Science Advisor
San Joaquin Valley Air Pollution Control District

Valley reminded to think twice before throwing on a log

High temperatures may still be in the 70s, but air-quality officials on Tuesday will begin their annual fireplace burning-restriction program.

The program begins Nov. 1 each year, as the amount of harmful particulate pollution in the atmosphere typically begins to increase.

Many of those tiny particles of soot, ash and dust are a result of burning in residential fireplaces.

So the San Joaquin Valley Air Pollution Control District, which has authority to issue no-burn days, asks residents to check with the district before lighting a fire.

Changes in the wood-burning rule about three years ago resulted in an increase of no-burn days in San Joaquin County. In the past, the county experienced no more than one no-burn day each season. In the past three years, however, it had 24, 21 and seven no-burn days.

Those who violate the rule could be fined $50. Sixty-five citations were issued in San Joaquin County two years ago, and nine last year.

The decline in both no-burn days and citations last season was attributed to continual improvement in wintertime air quality.
"The understanding and efforts of the Valley's residents has made all the difference," district chief Seyed Sadredin said in a prepared statement.

When a no-burn day is declared, residents cannot burn solid fuels in a fireplace or wood-burning stove, unless they have no natural-gas service, or if burning wood is the only way to heat the home. When fires are permitted, the air district recommends burning manufactured logs.

To check on daily restrictions, call (800) 766-4463 or visit valleyair.org.

Valley burn regulations to start Tuesday
By Eric Woomer
Visalia Times-Delta and Tulare Advance-Register, Saturday, Oct. 29, 2011

It's no secret that the Valley has an air problem, but over the past few years, several programs have been instituted to improve air quality.

For the ninth winter, the San Joaquin Valley Air Control District will ask people to refrain from burning wood.

"It's been one of our most successful programs. We hope people will pay attention to the regulations," said Steve Worthley, a Tulare County supervisor and vice chairman of the air board. "We have a lid on the Valley that makes it hard to maintain good air quality. We need to do everything we can."

Beginning Tuesday, people who live within the multi-county air district will need to check first to see if burning wood is permitted that day. The campaign, which ends in February, was started to combat the rising levels of PM (particulate matter)-2.5 and PM-10 pollution.

Worthley acknowledges that the program was controversial when it first began, but people have become more receptive to it, he said. Last year, the air district received more than 2,000 complaints from people concerned about people burning on "no-burn" days.

An air district report shows that the campaign has worked. Since 2003, the district covering the San Joaquin Valley has reported no violations where the pollution level rose above the PM-10 standard. And, through last winter, there were more "good" air quality days than there were "unhealthy," the report stated.

PM-10 and PM-2.5 particulate pollution has been linked to strokes and heart attacks, said Janelle Schneider, an air district public information representative.

"Wood burning is a major contributor to particulate pollution. PM-2.5 can get in your bloodstream and has many side effects," she said. "We urge people who have a natural gas heater to use that instead of wood."

For many people living in rural parts of the Valley, wood burning is their primary source of warmth when the mercury drops. Those people who rely on wood burning can ask for an exemption, but thousands of people can't.

Last year, there were 30 reported violations in Tulare County and 2,945 violations districtwide. The district covers 23,000 square miles and has more than 30 air-monitoring locations, five in Tulare County.

The average fine for burning on a "no-burn" day is $50, but that number can go up or down, depending on the situation, Schneider said.

To aid the district in its fight against air pollution, the district relies on grants and state and federal funding. The San Joaquin Valley Air Pollution Control District operates on a $115,371,999 budget. The majority of that comes from grants.

Fireplace restrictions kick in on Tuesday
Central Valley Business News.com, Saturday, October 29, 2011

The annual restrictions on when Central Valley residents can use their fireplaces starts Tuesday, Nov. 1, the San Joaquin Valley Air Pollution Control District says.
The restrictions, which run from November through February each winter, determines when residential wood burning will add dangerous levels of particulate matter – tiny pieces of soot, ash, dust and other materials – to the Valley's air, and prohibits the use of residential wood-burning devices. Wood-burning forecasts are issued by county each day.

There are two forecast levels, depending on air quality: “Wood burning Prohibited” and “Please Burn Cleanly.” When a prohibition is declared, burning any solid fuel in a residential fireplace or wood-burning device is not permitted and violations may result in fines.

Backyard chimineas and fire pits are also subject to the prohibitions. There are two exemptions:

• If the residence does not have access to natural-gas service, even if propane is available; or

• If burning solid fuel is the sole source of heat for the residence.

“When burning is allowed, the Air District recommends using manufactured fire logs such as Duraflame,” the District says. The logs are made by privately held Duraflame Inc., based in Stockton.

Central Calif burn restrictions start Nov. 1
The Associated Press
Modesto Bee and Contra Costa Times and other papers, Saturday, October 29, 2011

FRESNO, Calif. -- Homeowners across the San Joaquin Valley will have to check with air quality officials before lighting their fireplaces beginning Nov. 1.

The San Joaquin Valley Air Pollution Control district is going into its ninth season regulating residential wood burning in an effort to reduce airborne particulate pollution.

Each day, the district uses weather forecasts to determine whether it is safe to burn. Daily forecasts will be available for each of the valley's eight counties at 4:30 p.m.

High levels of particulate pollution can cause bronchitis, lung disease and increase the risk of heart attacks and stroke.

The valley records some of the highest levels of air pollution in the country because pollution from San Francisco and Sacramento is sucked into the bowl, where it stagnates.

Restrictions will end in February.

Valley smog plagues Sequoia National Park
Ash Mountain most polluted spot in U.S.
By Mark Grossi, staff writer
The Fresno Bee, Friday, Oct. 28, 2011

Amid the pines and incense cedar in Sequoia National Park, the 5 o’clock rush hour often is limited to squirrels, mule deer and the occasional skunk crossing the road.

Visitors see spectacular 13,000-foot peaks, the largest trees on the planet and far fewer idling cars than at Yosemite National Park.

So the downside here seems unbelievable: Sequoia’s Ash Mountain entrance this year was the worst smog trap in the country.

Worse than Fresno, Bakersfield, Los Angeles, Houston, Atlanta or any other city. With 87 days above the federal eight-hour ozone standard, the foothill entrance was in a smog cloud all summer long.

“People looking for a clean-air vacation are safer going to Los Angeles than Sequoia National Park,” says Kevin Hall, executive director of the activist Central Valley Air Quality Coalition.
But there are no special measures being taken by federal, state or local air-quality officials to clear up Sequoia's problem. Officials say the bad air will subside as the San Joaquin Valley is cleaned up.

That's because Sequoia does not create much air pollution. Yet, giant sequoia seedlings and other trees are damaged, and chemicals from the bad air appear in pristine mountain streams, federal scientists say.

So, what's going on?

Sequoia gets plumes of ozone-making gases when some of the Valley's air pollution ascends and drifts for miles, mixing with the air at about the same elevation as the Ash Mountain entrance — 1,700 feet. The lung-corroding pollution ranges far from cities and freeways.

And there is another air-quality problem in Sequoia that almost defies logic. Ozone stubbornly hangs around overnight at isolated foothill sites. The reason: There is too little traffic.

Emissions from overnight traffic actually destroy ozone in darkness, scientists say. So city traffic wipes out a lot of ozone each night in summer.

But foothill and mountain traffic drops off steeply at night. Ozone gases sometimes remain for days.

The same thing happens at Crestline in the San Bernardino Mountains, downwind of the massive Los Angeles metropolitan area. The resort is notorious for having more violations than any other place in Southern California. Many years, it is the worst hot spot in the nation, but not this year.

Crestline had 85 violations of the eight-hour standard — a daylong measurement of ozone. With its 87 violations, Ash Mountain in Sequoia eclipsed Crestline for the first time since 2004.

Sequoia, which is part of the San Joaquin Valley Air Pollution Control District, also was affected this summer by the Lion fire, air officials said. The fire began with a lightning strike July 8 and burned 20,500 acres by mid-August in a neighboring section of the southern Sierra Nevada. Fires create ozone-making gases.

On 16 days this year, the only ozone violations in the Valley air district were at Sequoia, said Seyed Sadredin, executive director of the Valley air district. But those violations do not affect most of the Valley's nearly 4 million residents, he said.

Although state officials consider Sequoia's violations as part of the Valley's total, Sadredin says the district does not. He said the park's violations make the Valley's problems seem worse than they are.

With Sequoia's readings, the Valley this year had 109 days of violations, according to the California Air Resources Board. That's the highest in the nation.

But without the 16 days when Sequoia alone had a violation, the total would have been in the low 90s — below the South Coast Air Basin's 107 violation days in the greater Los Angeles area.

"Sequoia's numbers have value for the park's visitors and for helping the National Park Service protect vegetation and other resources," Sadredin said. "But those numbers don't mean a lot for people living down on the Valley floor. It is misleading."

That's not a good reason to view the violations separately, says activist Hall of the Central Valley Air Quality Coalition. He said district leaders and the governing board should not shrink from their job.

"The Valley air board doesn't get to pick and choose whose health matters and whose doesn't," Hall said.

Modesto Bee, Guest Commentary, Saturday, October 29, 2011

Visiting editors weigh in on pollution, air travel and elections
John Buckley

When I travel to area schools to present science programs, I often see prominently displayed colored flags that are raised to alert students and community members about each day's air quality. That information is vital to asthma sufferers.

The 2010 Stanislaus County Asthma Report Card explained that roughly 13 percent of county residents have experienced asthma. Children under 17 have the highest rate of emergency room visits due to severe asthma events. The more polluted the air, the greater the risk of triggering an asthma attack. Clean air matters.

The American Lung Association in 2009 ranked Stanislaus County as the 20th worst county for polluted air out of 3,141 counties. That means for every 100 counties in America, 99 counties had cleaner air than Stanislaus County. Despite fewer pollution violations than decades ago, the San Joaquin Valley Air Pollution Control District is still ranked the second worst in the nation behind Los Angeles.

This is not just an embarrassing statistic. Polluted air from agriculture, construction, residential uses, industry and vehicle emissions affects the young, the elderly and the ill. The Asthma Report documents that nearly 500 area residents need hospitalization for asthma each year. Poor minorities face especially high risk.

Yet recently, neighboring San Joaquin County supervisors unanimously endorsed legislation to weaken regulations on ozone levels in the San Joaquin Valley. In order to prevent vehicle owners from being charged $12 per year to pay for measures to reduce air pollution, the supervisors chose instead to push for lowering air quality standards.

Opposing strong clean air standards is not just misguided. It may result in direct health impacts for those most sensitive to pollution. Stanislaus County politicians should stand up and openly support strong air quality standards that will protect the air we all breathe.

Buckley is a Tuolumne County resident and executive director of the Central Sierra Environmental Resource Center.

Gary J. Gery

Recently, I had the extreme frustration of enduring my third Modesto air travel experience. And it truly was an experience! I encountered delayed flights, cancelled flights and 10-hour travel days just to get to Los Angeles, not to mention having to get routed to cities other than Modesto when returning home. Although I had heard similar stories from others, I was skeptical. I am now a believer.

I had to wonder what is really happening here. The very vague response from agents was either weather or air traffic space issues at SFO. What weather? It was August! Or was the real story that the flights were handling fewer than 10 people and they were trying to combine them to save money? Remember, this is the same carrier that cancelled direct service to LAX because it was not profitable, even though the several flights I had taken were nearly full. Do they really expect us to buy this weather story? Something tells me there is a lot more to this story.

As the saying goes, three strikes and you're out, and I am out of using the Modesto airport. This is unfortunate because I, along with many others, are all for the convenience of flying out of Modesto. A city of this size deserves something better than four flights to and from SFO in a 30-seat twin engine prop plane.

The bottom line is that Modesto air service is archaic. How do we expect businesses to relocate here or people to visit us if they cannot conveniently get here? We live in a county with some 500,000 people and the most reliable thing about our air service is that you will be inconvenienced and disappointed. Now is the time to implore our leaders to find something better.

Gery, a resident of Oakdale, is an architect.

Aaron Struck

This season is one of my favorite times of year. Not necessarily because of the cooler temperatures, the Farmers' Market or the World Series, but more so for the elections. I've always enjoyed observing
candidates and watching their different strategies toward overtaking the incumbent. From the Bush v. Dukakis race in 1988 to our local mayoral race, I tip my hat to the candidates for agreeing to step in to the meat grinder that is the election process.

I love this town. And like many college graduates, when I came back to Modesto after completing school I was eager to grow my family and my profession. I'll admit, the thought crossed my mind to run for an elected position for the sole purpose of giving back to the community that played a role in shaping who I am today. Looking at all the daunting challenges that an election poses, I feel there are other ways I can give to our community and still be effective.

With that in mind, just running for an elected position should be commended, and I'd like to thank those doing so now in our community. I may live in a utopia by thinking that each candidate is running for the greater good of our community and not for any personal gain, but I still give each of them credit for voluntarily agreeing to this grueling process.

For those of you who are in this position, my hat goes off to you; you're doing what I never had the courage to do and I'm thankful our country and community is made up of people like you.

Struck, a Modesto resident, is principal with Struck Employee Benefits.