Levels of soot in Valley air reach new low
By Mark Grossi, staff writer
Tuesday, March 1, 2011

The San Joaquin Valley has concluded its cleanest winter wood-burning season since monitoring began a little more than a decade ago.

The Valley recorded fewer than 50 violations of the federal health standard for dangerous soot -- half as many as its worst season nearly a decade ago.

But the region still had more violations for this particle pollution than any other place in California, state records show.

There were 44 violations from November through February, the months when the San Joaquin Valley Air Pollution Control District enforces wood-burning restrictions from Stockton to Bakersfield.

Local air officials say the record low number of violations is mostly the result of strict fireplace restrictions and the public's willingness to curb wood burning.

Air activists say the record low number of violations probably is related to stormy weather that cleared out pollution and to the poor economy, which resulted in diesel truckers hauling fewer goods over fewer miles. Diesel exhaust is one of the bigger sources of soot.

While this year's total is a dramatic reduction from 89 violations in the murky 2002-03 season, the goal should be zero, activists said.

"We expect to see improvement over time," said Elizabeth Jonasson, Valley representative for the nonprofit statewide Coalition for Clean Air. "But the air is still terrible here."

Soot, chemical specks and other tiny debris that make up particle pollution, known as PM-2.5, are considered more dangerous than summertime ozone. The microscopic specks easily pass into human lungs and into the blood stream, health studies show.

The pollution can trigger asthma and heart problems. Studies blame particle pollution for 800 premature deaths each year in the Valley.

Storms this year have helped clear the air and ease breathing problems, according to Dr. Praveen Buddiga, a Fresno allergist. He said he has not seen the usual wave of patients who require hospitalization.

"It has been much nicer," he said. "But wood burning can make conditions worse again. People suffer from man-made episodes of particulate matter."

Some of those problems appeared in January when the Valley had 15 violations. By comparison, South Coast Air Basin -- with four times the population across the Los Angeles region -- had only 12 violations from November through February, according to state records.

Fireplace soot is considered a major factor, contributing up to 30% of the problem in winter months, say officials from the district. The district passed wood-burning restrictions on fireplaces, wood stoves and fireplace inserts in 2003, getting mixed results. Violations spiked during drought years.

Officials tightened the restrictions in 2008, and a downward trend followed, said district executive director Seyed Sadredin.

"We know there are challenges ahead," he said. "But we need to make sure people know that their efforts are having results."

One challenge is diesel exhaust, which contributes about 10% of the problem in the Valley. Truckers have been hit hard by the economic downturn and say they cannot afford new vehicles and pollution-control devices.

The California Air Resources Board last year delayed diesel truck rules at least until 2012. Officials say the cleanup still will meet deadlines over the next decade.
Kern again posts fewer no-burn days
By Steven Mayer
Bakersfield Californian, Tuesday, March 1, 2011

The eighth annual "Check Before You Burn" wood-burning season ended Monday in Kern County with 40 no-burn days -- one fewer than last year and 14 fewer than the year before.

Officials from the San Joaquin Valley Air Pollution Control District credit the program for continued improvement in the valley's winter air quality.

"This rule is one of our most important tools to keep the valley's air during winter as clean as possible," Seyed Sadredin, the district's executive director, said in a release.

The numbers are encouraging, with each of the past three winters showing progressively cleaner air quality.

This season there was a 44 percent decrease in the number of unhealthy days valley wide -- based on the Air Quality Index -- compared to last year. The number of days that exceeded the federal health standard for fine-particulate pollution also declined by 9 percent over last season, the air district found.

And this season's progress came on the heels of the 2009-2010 season when the valley experienced what was up until then the cleanest winter on record -- and that year came on the heels of another record, according to the air district.

Air district officials praised valley residents for their willingness to take part in the effort. Violations for burning on restricted days were down as well, with 36 Kern residences cited, compared to 64 last season.

Records show the valley portion of Kern County saw 10 no-burn days in November, and the same number in December; 15 in January and five in February.

The Frazier Park area, which a few years ago was designated a separate zone from the valley, has never required a no-burn day.

With winds consistently pushing wood smoke out of the area, the mountain region's air quality is good, Sadredin said, too good to justify restrictions.

The only county with more no-burn days than Kern this season was Fresno, which recorded 44.

The annual winter program restricts residential wood-burning to prevent the build-up of fine-particulate matter known as PM 2.5, which has been linked to chronic lung disease, respiratory illness, heart attacks and premature death, according to the air district.

The American Lung Association recommends people avoid wood fires altogether.

From November through February, forecasts are issued daily by the district to determine whether open-hearth fireplaces, wood stoves or inserts, or pellet stoves may be used in the eight counties that comprise the district. The rule was adopted by the air district in 2003.

District officials believe the program is more effective at reducing wintertime pollution than all other regulations imposed on valley businesses.

Requiring stationary businesses to do more is "cost-prohibitive," Sadredin said.

Residential wood-burning is prohibited when fine-particulate pollution is forecasted to be above 30 micrograms per cubic meter. Following a rule change two years ago, agricultural burning has been restricted at a similar threshold.

Some have argued that higher rainfall levels over the past three years are responsible for the improvements in winter air quality.

But a report released by the air district in April found that controls limiting wood burning were largely responsible for last winter's lower concentrations of particulate pollution.
Stephen Sears, vice president of marketing and member services for the Brick Industry Association, noted in an e-mail that there are other sources of particulate emissions that are more significant than residential wood combustion.

He cited a report by the EPA that identified road dust, construction and crop tilling, industrial processes, wildfires and agricultural fires and other sources as worse offenders nationally than residential wood fires.

But Sadredin said commercial operations in the valley have already done their part -- at great expense -- to reduce emissions. And the air district has no jurisdiction over mobile sources such as cars and trucks.

Sadredin said the most cost-effective strategy is to address the problem "where you live." That's where residential wood smoke is breathed, he said. In your neighborhood.