

Air officials bemoan horrible winter conditions

By Steven Mayer, staff writer

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Air pollution control authorities are reeling from the worst wintertime particulate pollution ever seen in the valley, just months after celebrating the historic attainment of the summer ozone standard.

At Thursday's meeting of the San Joaquin Valley Air Pollution Control District in Fresno, the district's 14-member board listened as staff blamed this winter's historically dry weather for building a high-pressure ceiling over the valley that has trapped unhealthy — some say deadly — particles of soot and dust at ground level, despite significant reductions in emission rates.

Record lows for precipitation, extreme temperatures for this time of year and a strong inversion layer have resulted in impacts on air quality that appear to have no end in sight. And it's not just affecting the valley. Other areas in California, including San Francisco and San Luis Obispo, are recording unprecedented spikes in air pollution.

"San Luis Obispo could be in non-attainment for the first time in its history," said Samir Sheikh, the district's director of air quality analysis.

These "exceptional" and historically abnormal conditions have overwhelmed air pollution control measures already in place, Sheikh told the board. Had it not been for the drought-like conditions, the valley would have been on track for one of its cleanest winters on record.

Some board members, obviously frustrated by the setback, wondered aloud whether the district could take "emergency" action, such as banning wood burning for the duration of the season.

They concluded that they really couldn't, not without going through a lengthy process that includes taking public comment.

Sally Bomprezzi, a city councilmember from Madera, commented on the ubiquitous spread of drive-thru services to pharmacies and other businesses as examples of building codes and consumer behaviors moving in counterproductive directions where air quality is concerned.

"It makes me crazy," she said.

Dennis Brazil, mayor of the city of Gustine in Merced County, asked about what kinds of emissions come from locomotives and airplanes.

As it turns out, 10 percent of the valley's mono-nitrogen oxides, or NOx — which is a major contributor to both ozone and particulate pollution — comes from trains, while 1 percent of NOx emissions are attributable to air traffic during takeoff and landing, said air district Executive Director Seyed Sadredin.

But, as with cars and trucks, the air district collects the data but has no regulatory authority over those mobile sources of pollution.

Others on the board, like Tulare County Supervisor J. Steven Worthley, said the board needs to tread carefully and move deliberatively, even in these times of terrible air quality.

"We need to be cautious about changing policy based on extraordinary events," he said.

The message relayed to board members, and by extension, valley residents, was multi-layered:

- This is the driest year on record for the valley, which sets the stage for a dangerous — and polluting — wildfire season.
- There has been severe and prolonged stagnation of valley air this winter.
- Extreme weather conditions led to poor air quality throughout California, not just in the valley.
- Absent these extreme weather conditions, this winter would have been the valley's cleanest.
- The valley saw large increases in particulate concentrations despite significant reductions in emissions rates, underlining the limitations regulators have in cleaning the air when weather doesn't cooperate.

- These historic abnormal conditions are not considered “exceptional events” by the federal Environmental Protection Agency. Unless the EPA can be convinced otherwise, this winter’s exceedances of air standards means the district may not be able to show attainment by the 2015 deadline.

The repercussions of that were not spelled out.

Sadredin said there may be the hint of a silver lining to this winter’s particulate cloud.

With even coastal counties being out of attainment, he said “we might have more allies,” to help convince the EPA to respond in more commonsense ways.

Meanwhile, the National Weather Service in Hanford said Thursday it looks like the weather is going to remain dry, at least through the remainder of January — and there is a moderate probability of below normal precipitation persisting through the remainder of the valley’s (typically) wet season.

No surprise to anyone, Gov. Jerry Brown will declare a drought emergency Friday, a source told the Sacramento Bee, after weeks of intensifying pressure on him to take action.

That could increase public awareness of the problem and speed up governmental relief efforts, the paper said.

Air board member Dr. Alexander Sherriffs, a physician, said he has seen patients whose asthma was inflamed or whose heart conditions were flaring. And while he couldn’t directly attribute their problems with recent declines in air quality, it was clearly worrisome.

“This reminds us we need to be even more vigilant,” he said. “The health of our valley’s residents is at stake.”

Dry, stagnant winter unraveling Valley air-quality efforts

By Mark Grossi

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A stagnant, dry winter has created near-historic soot levels in the San Joaquin Valley and around California, perhaps unraveling years of work on federal air standards, Valley air authorities said Thursday.

The Valley was supposed to achieve a federal standard for such tiny particles, known as PM-2.5, by 2015. But the soot siege during the record-breaking drought probably ends any chance the Valley might have had, air officials said.

Though federal authorities do not grant exceptions based on extremely dry conditions, air officials hinted that it might make sense to make an exception this time.

“We’re not the only ones affected,” said Seyed Sadredin, executive director of the San Joaquin Valley Air Pollution Control District. “The Bay Area might go into PM-2.5 nonattainment for the first time.”

But the U.S. Clean Air Act says there are no exclusions for stagnant air as a result of inversion layers, which act as an atmospheric lid holding pollutants closer to the ground. Such inversions occur in many areas of the West.

Atmospheric layering in winter usually traps cold air beneath warm air. It is a common feature of Valley weather in colder months.

This winter, the lid has been extreme for the Valley and much of California. The last time it rained in Fresno was Dec. 7 when .15 of an inch fell. Dry-year records have fallen all over the state.

“This inversion layer (in the Valley) has lasted longer than any I’ve seen,” said Kerry Drake, an associate director in the EPA’s San Francisco office. “But inversion layers are typical in the West. They happen over and over. That’s the reason we have air cleanup plans.”

In their season update on Thursday, Valley air officials said pollution emissions here are at an all-time low for many reasons, including a wood-burning ban on most days. But the weather has overwhelmed their efforts, they say.

The air district board discussed emergency measures, such as completely banning wood burning in fireplaces and wood stoves during such intense events.

Board member Alex Sherriffs, who is a physician, suggested the district will have to develop new ideas.

"Maybe we need to have no (leaf) blower days, maybe we need no drive-through days," he said.

Such changes would require a public comment process, air leaders said.

This season's problems went out of control in December when the soot level in the Valley was recorded four times higher than the federal health threshold. The levels have backed down since then, but the air continues to exceed the threshold most days.

The microscopic PM-2.5 specks are a serious health problem. They can pass through the lungs into the blood stream and lodge in body organs, such as the heart. They are known to trigger asthma and heart problems. They also cause premature death, according to medical studies.

The specks can be directly emitted from fireplace burning and diesel exhaust, but they also form in the atmosphere when ammonia from dairies and oxides of nitrogen combine.

The Valley has long been one of the country's worst air basins for PM-2.5. But this winter San Francisco's air already has exceeded the threshold 12 times. The Bay Area had zero exceedances last year at this time.

Valley air district experts say the inversion layer is stronger than any since 1999. Sadredin said he thinks it is an exception to the normal in California.

He also said the weather-related air problems won't end after winter. Fire season -- which results in soot - - will start early because of the dry landscape.

"Fire hazard is going to be a big issue this year," he said.