Early showers help clear valley air

By Jim Guy The Fresno Bee, Thursday, January 4, 2018

Showers that may help clear the skies of several days of unhealthy air in the central San Joaquin Valley are expected to continue through Thursday morning, giving way to afternoon sunshine, the National Weather Service reports.

The weather service says the showers are part of a low-pressure front moving through the region and more wet weather is expected to arrive by Friday night.

Early Thursday, the San Joaquin Valley Air Pollution Control district forecast that air for the region would be unhealthy for sensitive groups, however that was an improvement over air quality in previous days.

By 4 a.m., Fresno received .04 inches of rain, Merced reported .12 and Madera .12.

Fresno's high today will be 69 degrees, with a low tonight off 43 and a high Friday of 65.

Valley gripped by terrible air pollution. Will storms bring relief this weekend? By Ken Carlson

The Modesto Bee, Wednesday, January 3, 2018

Air quality officials hope a change in the weather pattern later this week brings relief from the unhealthy air in the San Joaquin Valley.

Stanislaus and Merced counties had unhealthy air readings Wednesday due to high levels of tiny particles, according to the San Joaquin Valley Air Pollution Control District's real-time monitoring. Fresno, Kern and other counties in the valley's southern region have been socked in by some of the worst pollution in five years.

To emphasize a point, a Twitter post noted the haze in Fresno was three times worse than Beijing's pollution.

Jaime Holt, communications director for the air district, said not much improvement was expected from a light storm Wednesday in the northern counties. But a larger system Saturday and Sunday could break an inversion layer that has trapped pollutants in the valley air basin for weeks.

Air conditions considered unhealthy for sensitive groups are predicted Thursday in Modesto, Merced and south to Fresno. No residential wood-burning is allowed except for registered clean-burning devices.

"We need a change in the weather pattern – rain, wind and a low-pressure system coming in," Holt said. "That will allow particles to move higher in the atmosphere so they are pushed out of the valley."

Holt said a high-pressure system that's kept the valley mostly dry since November has put a lid on the region. Pollutants from tailpipes, firewood, New Year's fireworks and other sources have built up in the stagnant air, as the inversion layer has dropped as low as 1,500 feet above ground.

Most of California has remained relatively warm and dry, while below-freezing temperatures have dominated the rest of the nation.

People with health issues and respiratory problems are advised to take it easy until the San Joaquin Valley air improves. The valley district has daily postings on air quality conditions.

Holt questioned the fairness of comparing the valley conditions to the notorious smog in Beijing, which happened to have moderate air quality this week. "It might have rained in Beijing," Holt said. "Without a doubt, Beijing has worse air quality than we do."

Unhealthy air quality across the Valley

By Danielle A. Martin Visalia Times-Delta, Wednesday, Jan. 3, 2018

San Joaquin Air Pollution Control District is waving its red flag — air quality in counties across the Central Valley is "unhealthy."

According to the American Lung Association State of the Air report, the Visalia, Porterville, Handford areas ranked no. 1 as the city most polluted by year-round particle pollution.

Tulare County also ranked sixth among the most ozone-polluted counties.

The study found that of the 459,863 people living in Tulare County: 10,292 have pediatric asthma, 24,222 have adult asthma, 200 have lung cancer and 12,265 have a chronic obstructive pulmonary disease.

Thuong Nguyen, an allergist at Visalia Medical Clinic, said air pollution can impact the way a person breathes.

"Respiratory pollutants irritate our airways and cause them to be inflamed, then inflammation can lead to symptoms," Nguyen said. "The best way to treat the problem is to stay away from the trigger."

Nguyen suggests checking the air pollution daily. If there are high levels of pollutants in the air, avoid activities or exercises outdoors.

Since Tuesday, conditions in northern parts of the Valley improved by one category. Conditions went from "unhealthy" to "unhealthy for sensitive individuals" but are likely to stay the same over the next few days, weather officials said.

Current conditions

Unhealthy: Tulare, Kings, Kern and Fresno counties

Unhealthy for sensitive groups: Madera, Merced and Stanislaus counties

Moderate: San Joaquin County

Good: Sequoia National Park and Forest and Kern Greater Frazier Park area

Scott Borgioli, WeatherAg chief meteorologist, said the quality of air could slightly improve in parts of the Valley thanks to an incoming small storm with isolated to scattered showers.

"The storm coming into the Valley probably will not provide a good enough air exchange to have a big effect on the pollution, although there may be some improvement in air quality Thursday or Friday," Borgioli said.

Northern parts of the state will see the most impact coming from Wednesday's system. A second storm system could trickle into parts of the Valley this weekend and help improve the air.

"The storm systems passing through may help improve the air quality, especially for the northern sections," Borgioli said. "However, another system will pass through mainly the northern parts of the Valley Friday evening into Saturday morning. This is not expected to have a significant impact but may help improve the air quality."

Unhealthy air contributors

Territory

Borgioli said the air pollution tends to stick around in the Valley because "high pressure seals a lid over us." The lack of storm system doesn't make the situation any better, he added.

"This causes a stagnant air mass and, with calm to light winds, particulate matter in the Valley gets baked by the sun and becomes even more dangerous," Borgioli said. "It has nowhere to go and sort of stays in place, even though we have had some clouds. "

Carbon footprint

Smog is also a major contributor to the quality of air.

According to San Joaquin Air Pollution Control District, each year the average car releases about 500 pounds of pollution into the Valley's air. Vehicles produce approximately 60 percent of the Valley's pollution.

Burning

Burning any solid fuel including wood, pellets and manufactured wood can cause the quality of air to diminish. San Joaquin Air Pollution Control District sets burn days from November to February.

Currently, residents in Tulare, Kings, Kern and Fresno counties cannot burn any solids on an indoor or outdoor device.

Natural gas and propane devices are not subject to the Air District's wood-burning rule. Residents who live in an area where there is no natural gas service or if wood burning is the only source of heat are also exempt from the wood burn rules.

Hold your breath: Lingering smog, and spike in ER visits, should ease up soon

By Harold Pierce

Bakersfield Californian, Thursday, January 4, 2018

Driven by a lingering high-pressure system, a thick blanket of smog, smoke and pollution has been hanging over the valley for roughly three weeks, sending fine particulate matter to its unhealthiest monitored level and driving up emergency room visits.

Meteorologists from the National Weather Service in Hanford, however, said that the smog should start clearing up when the high-pressure system — which has trapped pollution in the valley since mid-December — begins to move out of the area.

"[The air quality] shouldn't get any worse than what it is today," meteorologist Kevin Lynott said Wednesday. "Today and yesterday were definitely the worst, and I think, come Saturday, it will be back at reasonable levels."

Even though current particulate matter levels have achieved the unhealthiest possible score designated by the San Joaquin Valley Air Pollution Control District — something the agency says requires local schools to bar kids from athletics, recess and outside physical education — air district officials said Wednesday that pollution isn't that bad, thanks to steps taken to reduce emissions.

"Ironically, the pollution put into the air is at a record low," Air District spokeswoman Cassandra Melching said. "Valley residents have done such a good job of updating devices and trying to be more cautious of what they're putting out, but because of this high pressure system, it just sits here at ground level."

And it's raising serious health concerns.

Particle pollution has been linked to cardiovascular problems, including heart attacks, respiratory issues like asthma attacks and bronchitis, and even premature death, according to the U.S. Environmental Protection Agency.

The fine particulate matter known at PM 2.5, which is about one-10th the diameter of a human hair, can get into the bloodstream and lungs and cause health issues later in life.

"The quality of the air in general in Bakersfield is not good, and with the recent fires, even worse," said Dr. Ralph Garcia-Pacheco, a pulmonary and critical care doctor at Kern Medical. "The pollution is the big problem. It can lead to exacerbation of chronic underlying respiratory disease and asthma."

He's urging people to stay inside as much as possible on days with poor air quality.

For the last three weeks, Kern Medical Center, Bakersfield Memorial Hospital and Adventist Health Bakersfield have all noted upticks in emergency room visits for respiratory-related ailments.

Emergency department visits at the Bakersfield Memorial Hospital adult ER doubled from about 100 patients a day to more than 200 complaining of respiratory issues, said hospital spokeswoman Jessica Neeley.

Pediatric intakes in the emergency department saw a respiratory ailment spike of about 150 to 175 patients a day, up from the average of about 100.

"It's a lot of children wheezing, a lot of runny noses, coughs, colds and high fevers," said Jenny Wilson, director of nursing operations at Bakersfield Memorial Hospital.

She described this as the worst flu season she's seen in seven years, an issue she attributes to the combination of a largely ineffective vaccine and recent air quality issues.

"It's a very social time of year and everybody's getting sick from everybody else," Wilson said. "The air quality is just one more cherry on top."