

# California power shutdowns raise air pollution worries

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In this Tuesday, Oct. 8, 2019 file photo, Joe Wilson pulls his generator out in the garage of his home, which is in an area that is expected to lose power in the East Foothills area of San Jose, Calif. Power shutdowns intended to prevent more devastating California wildfires are raising concerns about another environmental threat: air pollution. As utilities temporarily halted service to more than 2 million people this week, many fired up standby generators that spew toxic emissions. (Randy Vazquez/San Jose Mercury News via AP, File)

Power shutdowns intended to prevent more devastating California wildfires are raising new concerns about another longstanding environmental threat: air pollution.

As utilities halted service to more than 2 million people this week, lines formed at hardware stores selling portable generators, while many hospitals and businesses fired up their own. The prospect of emissions belching from untold numbers of the machines, some powered by diesel and gasoline as well as propane and [natural gas](#), was troubling in a state already burdened with some of the nation's worst air quality.

"It is a major concern," said Dr. Laki Tisopulos, executive officer of the Ventura County Air Pollution Control District. "Imagine if you are in a large metropolitan area like Los Angeles or the (San Francisco) Bay Area and you have hundreds or thousands of these engines kicking in. All of a sudden you have many localized sources of pollution that are spewing carcinogens right where we breathe. It can be next door to a school, a hospital."

Questions also arose over how the blackouts might affect traffic patterns, potentially causing even more tie-ups and discharges than usual from vehicles. They are a leading factor in California air pollution, along with a warm, sunny climate that helps produce ozone and topographical features such as the Central Valley where polluted air often stagnates.

"It's on people's minds in the air quality world," said Kristine Roselius, spokeswoman for the Bay Area Air Quality Management District, which tracks [air pollution](#) and sets regulations in a nine-county region that includes San Francisco.

"The wildfires that are driven by climate change and all the consequences of that are certainly a new normal and it's constantly emerging," Roselius said.

The district had not detected any uptick in contamination levels at its more than 30 air quality monitoring gauges, although the [high winds](#) that prompted the power shutdowns could be dispersing them, she said Friday.

Staffers will be watching for spikes in pollutants including nitrogen oxides and small, sooty particles, which generators tend to produce, she said. But it could be difficult to pinpoint the cause, since air quality is influenced by many factors, she added.

Government officials and experts said pollution from emergency power during intentional blackouts is one more wrinkle for policymakers and planners dealing with a constant threat of catastrophic infernos and more extreme weather.

Significant rises in diesel exhaust could worsen asthma symptoms and pose risks for people with heart and lung diseases, said Dr. John Balmes, a spokesman for the American Lung Association and a Bay Area resident among those temporarily without electricity.

"There would have to be a lot used at the same time to have much of an impact outside the immediate area of the generator," he said.

Pacific Gas & Electric Co., the state's largest electricity provider, announced its shutdowns as forecasts called for gusts that could knock trees and limbs into power lines and spark flames.



In this Wednesday, Oct. 9, 2019 file photo, Cliff Dunn, owner of Pawsarotti's pet store, runs a generator in order to keep a freezer full of raw pet food cold during a power outage in Santa Rosa, Calif. Power shutdowns intended to prevent more devastating California wildfires are raising concerns about another environmental threat: air pollution. As utilities temporarily halted service to more than 2 million people this week, many fired up standby generators that spew toxic emissions. (Christopher Chung/The Press Democrat via AP, File)

The California Air Resources Board, the state's clean-air agency, described the power interruptions as necessary to protect people and property but acknowledged they would lead to widespread reliance on standby generators.

"The use of these engines will generate additional emissions," board

spokeswoman Melanie Turner said. "We will be assessing the impact as these public safety power shutoffs evolve."

People using generators should check with their local air districts about rules and permit requirements, Turner said. But the board considers operation of stationary and portable diesel engines during a shutdown to be an emergency that meets state regulations.

The Bay Area district already was offering incentives to encourage bigger customers such as wastewater treatment plants, municipal buildings and schools to switch from diesel generators to those powered with cleaner fuels such as natural gas or solar energy, Roselius said. Those efforts could be broadened to include small businesses and individuals, she said.

The U.S. Environmental Protection Agency also regulates air contamination from the kinds of engines used in most emergency generators.

"EPA is concerned about any emissions that have the potential to effect human health and the environment," a spokeswoman said.

Southern California Edison said it had cut power to more than 20,000 customers in five counties, including Los Angeles, and was considering the same action for about 110,000 more.

In Ventura County, air quality specialist Phil Moyal said there was no sign of contamination from generators. But the area was experiencing a blast of Santa Ana winds that originate inland and blow pollutants offshore. Once winds subside, generator emissions could contribute to a rise in ozone if power blackouts continue, he said.

It could be hard to quantify the effects of power shutdowns on air

quality because of the many factors to consider, including how to weigh the pollution they cause against the pollution avoided by preventing wildfires, said Joe Goffman, a former assistant administrator with EPA's Office of Air and Radiation during the Obama administration.

"The kinds of fires California has seen in recent years have been major, catastrophic polluters in and of themselves," said Goffman, now director of the Harvard Law School Environment and Energy Law Program.

"These shutdowns are being done precisely to prevent that from happening."

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