

# California Regulates Third ‘Forever Chemical’ in Drinking Water

By Emily C. Dooley

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- Perfluorobutane sulfonic acid (PFBS) can harm the thyroid
  - PFBS detections over 5 parts per billion will trigger action
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California water regulators are requiring water suppliers to shift wells offline, blend sources, or notify customers when they detect a third “forever chemical” at certain thresholds.

The State Water Resources Control Board issued an order Friday setting a response level of 5 parts per billion for perfluorobutane sulfonic acid (PFBS). Water suppliers will also be required to notify customers, the state, and others when samples of PFBS exceed 0.5 parts per billion.

PFBS are part of a family of thousands of chemicals known as per- and polyfluoroalkyl substances (PFAS), which are widely used in consumer products because they are grease-, water-, and stain-resistant. The compounds, which are also used in firefighting foam, don’t break down easily in water.

The chemicals have become ubiquitous in the nation’s water supply and contaminated air, food, soil, and groundwater. They can accumulate in the human body.

Exposure to PFBS can cause thyroid issues, and the state levels are based on those toxicity findings, said Elaine Khan, a senior toxicologist with California's Office of Environmental Health Hazard Assessment.

"The concern is what is the real safety level because they are around for so long," said SL Environmental Law Group attorney Ashley Campbell. She represents clients suing over PFAS contamination and tracks regulatory changes related to the chemicals.

### **Spelling Out Steps**

The order doesn't require water districts to sample for PFBS but rather spells out steps to take if a district tests and results are above the notification or response levels.

Nearly 7,000 PFBS detections have been reported to the state by water suppliers, the highest of which was 0.13 parts per billion. Additional testing could find concentrations above the new state thresholds, said Darrin Polhemus, deputy director for drinking water programs at the State Water Resources Control Board.

The Association of California Water Agencies, which represents suppliers delivering water to 90% of the state, declined to comment on the order.

Samples collected in the Orange County Water District, which has taken wells offline previously because of PFAS levels, have not detected concentrations of PFBS that would require any action, said Jason Dadakis, the district's executive director of water quality and technical resources.

Most water suppliers will work to remove the contaminants rather than opt to undertake a rigorous notification process telling customers there could be contaminants that pose health issues in their water. "Water utilities will do a lot to avoid that," Dadakis said. "No water supplier likes to go through that process."

Water suppliers typically have to act after the average of four quarterly tests exceeds the state threshold. But because PFBS can affect fetuses and young children after a short exposure time, the state rules are triggered after just one confirmed test exceeds 5 parts per billion, Polhemus said.

## Other States

Massachusetts, Michigan, and Washington state have also set screening, monitoring or other levels for PFBS ranging from 0.42 parts per billion to 2 parts per billion, Polhemus said.

Two other PFAS—perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS)— also have state response levels of 10 and 40 parts per trillion, respectively.

PFBS is widely used as a replacement for PFOS, which major manufacturers including 3M and DuPont stopped making more than a decade ago.

PFAS aren't regulated nationally in drinking water, but that may change. The Environmental Protection Agency announced in February it had decided to regulate PFOA and PFOS after years of delay and after calls from states that had set their own levels in the absence of federal action.

EPA also said that interference from the Trump administration compromised a scientific analysis of PFBS and removed related online documents while a review is underway.

Residents, water suppliers, and governments have filed hundreds of lawsuits against manufacturers, the military, and other polluters over PFAS contamination. The addition of PFBS means another compound can be added to those cases, particularly when they advance to more complicated stages of litigation, Campbell said.

"Ultimately it matters what a jury believes is a health-appropriate level," she said.

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