State and Federal Efforts to Address PFAS Contamination

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Per- and Poly-fluoroalkyls, known more commonly as PFAS, are a group of human-made chemicals not found naturally in the environment that are linked to a variety of diseases and health conditions, and are of increasing concern to state legislatures and the federal government. The PFAS group includes chemicals such as perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), GenX and over 7,800 others.

Since their introduction in the 1940s, the chemicals have been used in a variety of industries and consumer goods, such as carpeting, paper packaging, nonstick and weather-resistant coatings, rubber and plastics. PFAS chemicals are extremely stable, making them easy to work with, but also persistent in the environment and human body. They do not break down and can accumulate over time—thus giving them the moniker of “forever chemicals.” These chemicals are often found in soil and water near sites where they are manufactured, used or discarded, and can travel long distances—seeping into groundwater and even carried through the air, making them especially difficult to contain. As such, even though PFOA and PFOS are no longer manufactured in the United States, most Americans have been exposed to these chemicals.

Studies have linked the chemicals to causing adverse health effects such as low infant birth weights, asthma, cancer and thyroid hormone disruptions. Notably, the Agency for Toxic Substances and Disease Registry’s 2018 toxicological profile of PFAS also indicates that high levels of the chemicals in the blood may decrease how well the body responds to vaccines.

Did You Know?

- The U.S. military began using “firefighting foam” after a fire onboard a U.S. Navy aircraft carrier, the USS Forrestal, killed 134 sailors in 1967.
- There are nearly 5,000 different PFAS synthetic chemical compounds.
- CDC is investigating whether exposure to PFAS could potentially lower the effectiveness of the COVID-19 vaccine.
Given the breadth of the chemicals’ negative impacts, state legislatures and the federal government are taking action to mitigate the harm to public health and the environment caused by the production and use of these chemicals.

**Federal Action**

In 2016, EPA published a health advisory—but not a regulatory standard—on PFOA and PFOS, establishing safe levels of the chemicals in drinking water of no more than 70 parts per trillion. Subsequently, and as a result of meetings held with federal, state and local government stakeholders, EPA unveiled a formal PFAS Action Plan in 2019.

The plan outlines both short and long-term actions the agency aspires to take surrounding the chemicals, including but not limited to: developing a maximum containment level for states and local water utilities via the Safe Drinking Water Act; listing PFOA and PFOS as hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act; listing the chemicals in the Toxic Release Inventory; and developing new and better methods to detect the chemicals in drinking water, soil and groundwater.

To date, EPA:

- Has Issued groundwater cleanup guidance.
- Is moving forward to develop a national drinking water regulation under the Safe Drinking Water Act for PFOs and PFOA.
- Has issued a proposal ensuring that new uses of certain chemicals within the class cannot be manufactured or imported without notification and review under the Toxic Substances Control Act.
- Has begun the regulatory process for listing PFOA and PFOS as CERCLA (Superfund) hazardous substances.
- Has announced a new testing method for 11 additional PFAS chemicals in drinking water.

While the federal administration continues to work toward regulating the chemicals, Congress is also working to develop legislation to address them—with more than 80 pieces of legislation introduced within the 116th Congress alone. Notably, the Fiscal Year 2021 omnibus appropriations bill included nearly $300 million to address the review of the impact of firefighting foam. In recent years those actions have risen exponentially. In 2019, state legislatures considered over 100 bills related to PFAS and in 2020, state legislatures considered more than 180. Many of these bills focus on efforts such as restricting PFAS in firefighting foam and consumer products, regulating PFAS in drinking water, and appropriating funds for remediation activities.

With the absence of a national maximum containment level (MCL), states have also led with way through both rulemaking and legislation to establish or propose their own limits for PFAS in drinking water. Notably, in 2018, New Jersey became the first state to adopt an MCL for PFAS, setting a limit of 13 ppt for PFNA—another chemical in the PFAS family. Massachusetts, Michigan, New Hampshire, New York and Vermont also have established safe levels for PFAS in drinking water. Other states, such as California, Connecticut and Minnesota have adopted health guidance or notification requirements for PFAS in water.

Many states have been forced to deal with the aftermath of the chemicals, which for decades, were used to extinguish flammable liquid fires in the form of aqueous film forming foam solutions. Mostly used by military installations and airports, the foam has been linked to the contamination of water in communities where it was used. In 2018, Washington banned the manufacture, sale and distribution of the firefighting foam, with some exemptions. Beyond outright bans, some states including Georgia and Indiana, have prohibited the use of the foam in training and testing scenarios.

State legislatures are also considering not only how to remediate the chemicals, but also questioning who should pay for the cleanup. Remediation actions passed by legislatures include the monitoring and cleaning up of drinking water and groundwater, and administering programs to collect and dispose of class B firefighting foam, among others. Alaska recently appropriated funds directing its Department of Environmental Conservation to collect data regarding the quantity of PFAS present in its soil and water; and Colorado established the PFAS Cash Fund to administer both a PFAS take-back and a PFAS grant program in the state.

Further, states have taken steps to address PFAS through legal action. For example, Michigan, Minnesota, New Hampshire, New Jersey, New York, Ohio and Vermont have sued the manufacturers of PFAS chemicals, arguing they have threatened public health and the environment. New Mexico has filed a lawsuit against the federal government for water contamination at U.S. Air Force bases.

**State Action**

In the historical absence of federal action up until recently, states led the way in addressing the chemicals in drinking water, cleanup strategies, and the review of the impact of firefighting foam. In recent years those actions have risen exponentially. In 2019, state legislatures considered over 100 bills related to PFAS and in 2020, state legislatures considered more than 180. Many of these bills focus on efforts such as restricting PFAS in firefighting foam and consumer products, regulating PFAS in drinking water, and appropriating funds for remediation activities.

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