Group A Public Water Supplies • Chapter 246-290 WAC

PFAS Overview and State Action Levels

November 2019

Rulemaking Underway

The Washington State Board of Health (the board) is currently drafting rule updates to include Poly- and Perfluoroalkyl Substances (PFAS) requirements for Group A public water suppliers in chapter 246-290 WAC.

Background

PFAS are a family of chemicals used since the 1950s to manufacture stain-resistant, water-resistant, and non-stick products. PFAS are widely used in common consumer products such as coatings on food packaging, outdoor clothing, carpets, leather goods, ski and snowboard waxes, and more. Certain types of firefighting foam—historically used by the U.S. military, local fire departments, and airports—may contain PFAS.

This extensive use of PFAS has led to inadvertent human exposure through inhalation and consumption. PFAS has been found to cause liver toxicity and tumors, altered hormones and timing of sexual maturation, suppressed immune response, and negative reproductive and developmental effects in laboratory animals. Evidence from some, but not all, epidemiological studies in people suggest that exposure to PFAS increases cholesterol levels, reduces birth weight, reduces immune antibody response to childhood vaccines, and may increase rates of some types of cancers such as kidney and testicular cancer.

An emerging exposure for humans is through contaminated drinking water. Groundwater near sites where PFAS has been used is often found with contamination. In Washington state, 132 water systems were sampled as part of EPA's Third Unregulated Contaminant Monitoring Rule, which represents 94 percent of people served by water systems in Washington. Three water systems had detectable levels of PFAS (Issaquah, DuPont, and Joint Base Lewis McChord), which together serve about 100,000 people. Additionally, many private wells serving individual homes near military bases were tested by the Department of Defense (DoD) and were found to have high levels of PFAS. The Department of Health (department) is working with local health jurisdictions and other agencies to address concerns in these communities. In August 2019, DoD assembled a PFAS Task Force to begin addressing PFAS contamination at military installations and surrounding communities.

Federal and State Actions

In 2016, EPA established a non-regulatory lifetime health advisory level (HAL) of 70 parts per trillion for PFAS. EPA has not yet adopted a maximum contaminant level (MCL) for PFAS. However, in December 2019, EPA plans to announce whether or not they will begin the process to propose a federal drinking water standard for PFAS as part of their PFAS Action Plan. If EPA begins rulemaking, it may take several years before the rule establishing a regulatory limit for PFAS in drinking water is final.

To address local concerns and contamination sites, the board filed a CR-101 on December 15, 2017, to begin the rulemaking process to set a drinking water standard for PFAS in our state. The current draft of the rule includes:

- Criteria for setting state action levels (SAL) for contaminants that do not have an EPA established MCL.
- Requirements for monitoring and reporting, follow-up actions, and public notice.

It is important to note that when an MCL is exceeded, the water system is required to treat the water. When a SAL is exceeded, it shows the need for further monitoring to determine if the substance is an actual or potential threat to human health. Since EPA has not adopted MCLs for PFAS, the board determined that taking action now is the best course to protect public health. The board plans to complete the rulemaking process by August 2020.

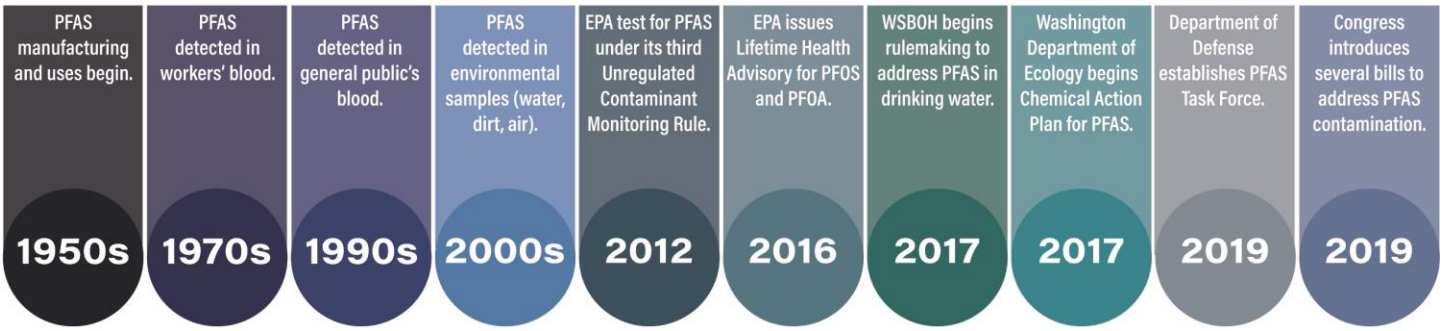
The department is working with the Department of Ecology (Ecology) and stakeholders on a PFAS chemical action plan (CAP). Ecology's CAP advisory committee is looking broadly at all uses and exposures of PFAS to make recommendations that will protect human health and the environment. The CAP advisory committee includes stakeholders representing businesses, local government, water systems, environmental groups, and human health groups. The department informed Ecology's CAP advisory committee that the board is considering setting a drinking water standard. The goal is to align the large stakeholder group involved with the CAP with the board process. The board's rulemaking process will be completed after a final CAP report is published, which is planned for early 2020. However, during rulemaking, the board can incorporate new information and stakeholder feedback learned through the CAP process.

Interested Stakeholders

Stakeholders interested in the rulemaking include, but are not limited to: water systems, environmental laboratories that analyze drinking water samples, local health jurisdictions, environmental and human health advocacy groups, military entities, individuals and communities with known PFAS contamination in their drinking water, and manufacturers and users of PFAS.

Key Messages

- PFAS have become a serious public health concern across our state and country.
- Over time, some PFAS released from manufacturing sites, landfills, firefighting foam, and other products seep into the soil. From there, PFAS leaches into groundwater and can contaminate drinking water. PFAS have been found in rivers, lakes, fish, and wildlife.
- PFAS do not break down easily and can persist in the environment for long periods of time. As a result, PFAS are widely detected in air, soil, water, and food.
- Exposure can occur when someone uses certain products that contain PFAS, eats PFAS-contaminated food, or drinks PFAS-contaminated water. When ingested, some PFAS chemicals can build up in the body and, over time, they may increase to a level where health effects could occur.



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- Visit our PFAS Webpage and Rulemaking Timeline