



Poly- and Perfluoroalkyl Substances (PFAS) Overview and Current Activities

PFAS

PFAS are a group of over 3,000 man-made chemicals that have been manufactured and used in home consumer products such as carpets, clothing, food packaging, and cookware since the 1940s. Two of these compounds—Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic acid (PFOS)—have been the most extensively produced and studied, and there is evidence that exposure to elevated levels of PFAS can lead to [adverse health outcomes](#) in humans.

FAIRFAX WATER PFAS SAMPLING

Fairfax Water conducted sampling at its two main water treatment plants, the Griffith Treatment Plant (Occoquan Reservoir) and the Corbalis Treatment Plant (Potomac River), as part of the U.S. Environmental Protection Agency's (EPA) Unregulated Contaminant Monitoring Rule 3 (UCMR3) from 2013-2015. No PFAS were detected during this testing.

Fairfax Water commissioned additional voluntary sampling in April 2021 with an independent lab using current methods that can detect PFAS at much lower concentrations than the method used in UCMR3. The sampling method used in April 2021 was the same EPA-approved method that will be used by the Virginia Department of Health (VDH) for a PFAS occurrence study this year, with samples taken from the Griffith Plant and the Corbalis Plant. The results of Fairfax Water's April 2021 samples are shown in the table below.

The EPA has developed health advisories to identify the concentration of PFOA and PFOS in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure. The EPA health advisory level (HAL) is 70 parts per trillion (ppt) for PFOA and PFOS combined.

Results for PFOA and PFOS, the two compounds under review for pending regulation by EPA, were well below the EPA HAL.

<i>In parts per trillion (ppt)</i>	PFOA	PFOS	PFOA + PFOS
Corbalis Plant	Not detected (<2)	Not detected (<2)	Not detected (<2)
Griffith Plant	4.3 ppt	3.7 ppt	8 ppt
EPA HAL			70 ppt



VIRGINIA DEPARTMENT OF HEALTH (VDH) OCCURRENCE STUDY AND FUTURE SAMPLING

Two bills passed in Virginia in 2020 (HB 586 and HB 1257) direct the VDH Office of Drinking Water (ODW) to study the occurrence, health effects, and treatability of PFAS compounds in public drinking water, and to adopt Maximum Contaminant Levels (MCLs) for several of those compounds.

ODW plans to collect samples in source water and finished water at the 17 largest waterworks (including Fairfax Water) across the state. ODW plans to report its findings before the end of the year, and results will be made public on the VDH website.

We await further guidance and will take actions if necessary to meet future state and federal regulations, when they are established.

ADVISORIES AND REGULATIONS FOR PFAS

The Environmental Protection Agency (EPA) is responsible for setting regulatory limits under the federal Safe Drinking Water Act. Currently, there are no established federal water quality regulations for PFAS, but the EPA health advisory level is 70 ppt for a combined concentration of PFOA and PFOS. The EPA has also taken some recent steps toward possible future regulation of PFAS:



In [February 2021](#), the EPA issued a final determination to regulate PFOA and PFAS in drinking water. The agency also proposed to require water utilities monitor for 29 PFAS compounds in drinking water. This monitoring will occur between 2023 and 2025.



In [April 2021](#), the EPA announced it would form an EPA Council on PFAS to develop a national strategy to protect public health and make recommendations regarding PFAS.



**For more information on PFAS,
as well as upcoming testing and regulations, please visit:
<https://www.fairfaxwater.org/water-quality/facts-about-pfas>**