Frequently Asked Questions about the PFAS Screening and Assessment Project

October 2021

What is the PFAS Screening and Assessment Project and what is its purpose?

OHA-DWS is conducting a PFAS drinking water monitoring project in 2021 at public water systems in Oregon identified as at risk due to their proximity to a known or suspected PFAS use or contamination site. The purpose of this sampling project is to make sure customers are not being exposed to potentially harmful PFAS chemicals in their drinking water. The analysis is being paid for through an EPA grant and will be done at no cost to the water system. The Oregon Department of Environmental Quality lab will be analyzing drinking water samples from select public water systems for 25 PFAS compounds using EPA method 533. A list of the compounds can be found here under the "Method 533" column: https://www.epa.gov/sites/default/files/2019-12/documents/table_of_pfas_methods_533_and_537.1.pdf.

Why was my public water system selected to sample for PFAS as part of the project?

Your system has an active groundwater or surface water source with one or more known or suspected PFAS use or contamination sites within the area that drinking water is drawn from.

What are Per- and polyfluoroalkyl substances (PFAS)?

PFAS are a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. PFAS have been used for decades in products like food packaging, carpets, non-stick products, other household items, medical supplies, and firefighting foam due to their ability to resist heat, oil, stains, grease, and water. PFOS and PFOA have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body – meaning they don't break down and they can accumulate over time. Research is ongoing on how this class of chemicals affects peoples' health.

What are the health effects from exposure to PFAS?

There is evidence that exposure to PFAS can lead to adverse human health effects. According to the Agency for Toxic Substances and Disease Registry (ATSDR), there is evidence from human and animal studies that suggest high levels of certain PFAS may lead to increased cholesterol levels, changes in liver enzymes, small decreases in infant birth weights, decreased vaccine response in children, increased risk of high blood pressure or pre-eclampsia in pregnant women, and increased risk of kidney or testicular cancer. More information about health effects can be found at https://www.atsdr.cdc.gov/pfas/health-effects/index.html.

Are PFAS regulated in drinking water?
PFAS are currently not regulated in drinking water at the federal level, however the Environmental Protection Agency (EPA) has begun the process to regulate PFOS and PFOA in drinking water and it is very likely that maximum contaminant levels (MCLs) will be established for at least these two PFAS contaminants in the future. In lieu of a federal drinking water regulation, several states have or are in the process of developing their own MCLs or health advisory levels.

What are Oregon's health advisory levels for PFAS in drinking water?
Oregon Health Authority – Drinking Water Services (OHA-DWS) has established drinking water health advisory levels (HALs) for four PFAS compounds most commonly found in humans. These health advisory levels for PFOS, PFOA, PFNA, and PFHxS are based on adverse liver, developmental, immune, and thyroid effects and are set at levels meant to protect all persons, including sensitive populations, from both short and long-term exposures in drinking water.

PFAS Compound	**Oregon Drinking Water Health Advisory Levels (HALs)*** parts per trillion (ppt) or nanograms per liter (ng/L)
PFOS	30 ppt
PFOA	30 ppt
PFNA	30 ppt
PFHxS	30 ppt

*Because these chemicals may have cumulative health effects, OHA will also calculate the sum of detections of the four PFAS chemicals with HALs in the table above. The HAL is exceeded when any of these four PFAS chemicals with results showing detections exceeds 30 ppt, or when the sum of these four PFAS chemicals with results showing detections exceeds 30 ppt. PFAS chemicals with a HAL that are not detected and other PFAS chemicals that do not have a HAL would not be included in the calculation.

Oregon's drinking water PFAS HALs are non-regulatory and do not mandate a required action; rather they provide information on health risks of certain PFAS compounds so that drinking water system operators and health officials can take the appropriate steps to protect drinking water consumers.

Have PFAS been detected in Oregon?
Six PFAS compounds (PFOS, PFOA, PFNA, PFHxS, PFHpA, and PFBS) were among the list of contaminants that public water systems were required to monitor for under the third Unregulated Contaminant Monitoring Rule (UCMR3) from January 2013 through December 2015. In Oregon, 65 public water systems monitored for these PFAS compounds under UCMR3 and there were no detections. Extensive monitoring of drinking water sources for PFAS has not yet occurred in Oregon. Of the voluntary PFAS sampling that has been done, only small amounts have been found, none exceeding a Health Advisory Level. However, PFAS is a growing public concern, with high concentrations found around the United States. Monitoring is the only way to know for sure

whether at-risk sources are affected. A targeted sampling effort will determine whether customers are being exposed to potentially harmful PFAS chemicals in their drinking water.

What will happen based on the results of sampling done for the PFAS Screening and Assessment Project?

OHA-DWS will recommend collecting a confirmation sample if test results show PFAS over a health advisory level. If the confirmation sample is also over the health advisory level, OHA-DWS will recommend notifying water users so they can be informed and take appropriate steps to protect their health. A public notice template has been created to share with water users if a health advisory level is exceeded.

If PFAS results are over a health advisory level, water systems may consider taking actions such as installing treatment, changing water sources, or blending high PFAS sources with low PFAS sources. OHA-DWS would also recommend periodically conducting finished water PFAS sampling on an on-going basis and providing water users with a public notice as long as PFAS levels remain above a health advisory level. Community Water Systems should report any PFAS detections in the annual Consumer Confidence Report (CCR).

The Drinking Water State Revolving Fund (DWSRF) is available for eligible public water systems with infrastructure needs related to addressing PFAS. See this EPA fact sheet for more information: https://www.epa.gov/sites/default/files/2019-03/documents/pfas_fact_sheet_and_case_studies_final.pdf.

What if other PFAS compounds without a health advisory are detected?

If PFAS other than PFOS, PFOA, PFNA, or PFHxS are detected in the finished water, OHA-DWS may provide the water system with information about any currently available state/international drinking water standards/guidance levels for those compounds in an effort to help the water system determine the risk to public health and communicate that risk to its water users. If necessary, OHA-DWS may consult with OHA toxicologists on health risks, or request assistance from EPA in interpreting the results.

For more information:

- Environmental Protection Agency (EPA) PFAS website: https://www.epa.gov/pfas
- Association of State Drinking Water Administrators (ASDWA) PFAS website: https://www.asdwa.org/pfas/
- Agency for Toxic Substances and Disease Registry (ATSDR) PFAS website: https://www.atsdr.cdc.gov/pfas/
- Interstate Technology and Regulatory Council (ITRC) PFAS website: https://itrcweb.org/teams/active/pfas