PER- and POLY-FLUOROALKYL SUBSTANCES - FREQUENTLY ASKED QUESTIONS

WHAT IS PFAS?

Per- and Poly-Fluoroalkyl Substances (PFAS) are a family of man-made chemicals that are not found naturally in the environment. Since the 1950's, PFAS are found in many common consumer products such as food packaging, non-stick cookware, stain resistant carpet treatments, water resistant clothing, cleaning products, paints, and some cosmetics. In Washington State, PFAS have been used in certain types of firefighting foams utilized by the U.S. military, local fire departments, and airports.

WHAT IS THE CONCERN WITH PFAS?

PFAS chemicals are a public health concern because they do not break down in the environment, can travel large distances in groundwater, build up in animals and humans over time, and may lead to harmful health effects.

PFAS have been discovered above recommended federal and state levels in the drinking water supplies of millions of Americans, including in Washington State. In humans, it can take many years for PFAS to leave our bodies. As a result, exposure to levels above recommended limits over time may lead to harmful health effects.

IS PFAS REGULATED AND WHAT IS A STATE ACTION LEVEL (SAL)?

PFAS are not yet regulated under the Safe Drinking Water Act or other major U.S. environmental laws such as the Clean Air Act and the Clean Water Act. In January 2022, the Washington State Department of Health (DOH) took the proactive step to implement new standards for public drinking water systems to begin testing for selected PFAS.

The new regulation establishes a State Action Level (SAL) for five (5) PFAS chemicals. SALs are levels of chemicals that DOH has set for long-term daily drinking water to protect people's health. The PFAS SALs are set below levels that caused health effects in animal studies. Health effect levels in humans are not yet established. Consuming water with PFAS above a SAL does not mean a person will get sick or have health problems.

Exceeding the SAL triggers purveyors to perform follow-up actions, including notifying affected customers of an SAL exceedance, increase monitoring and testing, identify potential sources of the substance, and to develop strategies to reduce the contaminant.

WHAT IS THE TYEE WELL AND WHERE IS IT LOCATED?

The Tyee Well and Treatment Plant was commissioned in 2004 and used to augment water purchases from Seattle Public Utilities (SPU). The well is located at 2152 S 200th St, near the former Tyee Golf Course on Port of Seattle property. The Tyee Well is the District's least producing source, with a capacity of 500 gallons per minute (GPM) and operated approximately 11 hours a day, six days a week. The Tyee well is insufficient to meet overall water demand and blends with water purchases from SPU and other District operated wells and treatment plants. Tyee contributes approximately 4.5% of the District's annual water production.

WHAT TYPE OF PFAS EXCEEDS THE SAL IN THE TYEE WELL?

The District participated in the DOH sample collection program and the Tyee Well results found the presence of the PFAS substance Perfluorononanoic Acid (PFNA) ranging between 11.9 and 13.1 parts per trillion (ppt). DOH has established a SAL of nine (9) ppt for PFNA. No other District source was found to exceed a SAL for PFAS. The cause of the contamination has yet to be determined.

WHY DID I RECEIVE A LETTER FROM THE DISTRICT?

If you have received a letter from the District, it was determined that water to your residence or business may be primarily sourced from the Tyee Well during certain operating conditions when other sources are off (approximately 2-3 hours per day). Because Tyee Well water exceeds the SAL for PFNA, by rule, the District is required to provide notice to these customers. A map of areas receiving water in a concentration exceeding the SAL may be found **here**.

WHAT IF I DID NOT RECEIVE A LETTER?

If you did not receive a letter from the District, you are not located in an area receiving water that would exceed the SAL. Your residence or business may be in a different pressure zone that does not receive water from the Tyee Well, or water is sufficiently blended with other sources to reduce concentrations significantly below the SAL prior to your tap.

HOW DID YOU DETERMINE WHO RECEIVES TYEE WELL WATER?

The District performed investigative testing at locations in the distribution system near Tyee Well prior to the first customer's water tap. The testing occurred during a period of low water consumption with the well running at full capacity and other primary sources offline, thereby maximizing the influence of the Tyee Well. We then used the testing data, real-time system information, and hydraulic modeling to simulate water operations to determine the concentration of Tyee Well water in the system. The modeling results identified the locations where the highest percentage of Tyee Well water would cause an SAL exceedance. Customers in those areas were subsequently notified.

WHAT IS THE DISTRICT DOING TO ADDRESS PFAS?

Though not required by regulatory agencies, the District has **VOLUNTARILY SUSPENDED TYEE WELL OPERATIONS.** There is no longer any exposure to the PFAS from the Tyee Well. The District has sufficient alternative sources to meet customer water demand.

The District will complete an extensive investigation to determine the source of PFAS and if the Tyee well water can be feasibly treated before being returned to service. We will retain the services of consultants to assist in the investigation.

WHAT IS THE SOURCE OF THE PFAS AT TYEE?

We do not yet know the source of the PFNA. We are in the preliminary stages of an investigation.

WHY ARE YOU FINDING OUT ABOUT PFAS AT TYEE WELL ONLY NOW?

The new regulation by the Department of Health became effective January 1, 2022. Purveyors were not required to begin testing until 2023. The District took a proactive approach and participated with the DOH sampling program to test for PFAS in our groundwater sources earlier this year. Testing began in March 2022 and took several months to complete. Upon confirmation of an SAL exceedance in late June, we immediately suspended Tyee Well operations. Notices to affected customers were sent within 30 days of confirmation of an SAL exceedance.

In 2014, the District tested our wells for PFAS under the Unregulated Contaminant Monitoring Rule (UCMR3) which is a testing program to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act (SDWA). Those tests did not detect any PFAS; however, testing precision has improved since UCMR3 expanding the ability to detect smaller concentrations of these contaminants.

WHERE CAN IF FIND OUT MORE ABOUT PFAS AND THE DISTRICT'S EFFORTS TO ADDRESS IT?

The District will provide updates on our website as the situation develops. We are committed to keeping you informed about decisions affecting the public water system. More information on PFAS can be found on the DOH Website: https://doh.wa.gov/community-and-environment/contaminants/pfas. Questions may also be directed to Phil Hite, Highline Water District Operations Manager at 206-592-8910 or via email at **waterquality@highlinewater.org.**