

Sandwich Water District:

PFAS Update

Committed to Safe Drinking Water

- We are closely monitoring a family of chemicals called per- and polyfluoroalkyl substances (PFAS) that have been detected in some public water supplies in Massachusetts and across the nation. PFAS were widely used in manufacturing, many consumer products and firefighting foam. When discarded, PFAS has leached from these products and into water sources. The presence of PFAS is the result of pollution and not any action taken by Sandwich Water District.
- The new MassDEP PFAS regulations set Maximum Contaminant Level (MCL) at 20 parts per trillion (ppt) and require quarterly sampling of all sources of drinking water. The Sandwich Water District conducted the required PFAS sampling of all the District's public water supply wells starting in April 2021 and again in July 2021. All results from April and received in May were below the reporting limit. The results from July and received in August, were also below the reporting limit with the exception of Well 9 which indicated PFAS was detected at a level of 5 ppt . This detection required a confirmation sample be taken within 14 days and was completed in August. The confirmation sample results, received in September indicated PFAS was detected at 33.6 ppt -. MassDEP Regulations require the original and confirmation sample results be averaged and is 19.3 ppt which is below the Maximum Contaminate Level.
- Although not a violation, as a precautionary measure Sandwich Water District has removed Well 9 from service in August. Well 9 will remain offline as we investigate the source of the PFAS and develop a mitigation plan. We are reporting the test results to the public, after the results were received and subsequently accepted by MassDEP.
- There are thousands of PFAS compounds. The U.S. Environmental Protection Agency (EPA) recommends PFAS concentrations in drinking water not exceed 70 ppt for two PFAS compounds: PFOA and PFOS. However, many states are adopting stricter standards. The Massachusetts Department of Environmental Protection (MassDEP) has set a MCL of 20 ng/L (equals 20 ppt) for the sum of six PFAS compounds, which are referred to as the PFAS6.
- Relatively recent advances in laboratory testing now enable us to test for PFAS compounds at extremely low levels. Water systems that tested negative for PFAS at parts per billion (ppb) may now test positive at parts per trillion (ppt).

However, these tests do not tell us when the PFAS entered the water source or from where they originated.

- This is a new issue for water regulators and water suppliers. There is still much we do not know about PFAS and its impact on human health. No one has all the information and we are going to try to provide all the latest information available.
- As of now, the MassDEP recommends: "Consumers in a sensitive subgroup (pregnant or nursing women, infants and people diagnosed by their health care provider to have a compromised immune system), are advised not to consume, drink, or cook with water when the level of PFAS6 is above 20 ppt (ng/L)." For those affected, alternate sources of water may include in-home filtration systems or bottled water tested for PFAS. MassDEP has a list of bottled water companies that have voluntarily submitted results of PFAS testing:
<https://www.mass.gov/doc/bottled-water-tested-for-pfas>
- We wish we had definitive answers on the health impacts, but more research is needed. MassDEP states consuming water with PFAS6 above the drinking water standard does not mean that adverse effects will occur, and that the degree of risk depends on the level of chemicals and the duration of exposure.

There are scientific studies that suggest potential links between exposure to certain PFAS in the environment and health effects. The studies have looked at the effects on the development of fetuses and infants, the thyroid, the liver, kidneys, hormone levels and the immune system, as well as if a cancer risk exists for people exposed to levels well above the drinking water standard.

MassDEP and Centers for Disease Control and Prevention (CDC) both note more research is needed and ongoing, and it is important to remember consuming water with high PFAS6 levels does not mean adverse effects will occur. As we await further scientific study, MassDEP has acted to set a drinking water standard, and we are working in the best interest of our consumers to keep PFAS6 levels below 20 ppt.

- We are committed to delivering safe and reliable drinking water to our consumers. We are acting in the public's best interest and taking the necessary steps to address PFAS in our drinking water.
- The cost of lowering PFAS6 levels in drinking water will be determined by the solution that best fits the need of the utility. As with all water treatment, filtration and other operating expenses, the price for safe and reliable water will be paid for by consumers. While this may result in an increase in water rates, the cost per gallon of public drinking water delivered to homes is pennies per gallon compared to bottled water.

- We are committed to keeping our consumers and the community informed.