City of
Portsmouth
Department of Public Works

PORTSMOUTH WATER SYSTEM PFAS UPDATE
June 15, 2022

COMPLIANCE WITH NEW HAMPSHIRE REGULATORY REQUIREMENTS FOR PFAS

We are currently in compliance with the New Hampshire Drinking Water standards for per- and polyfluoroalkyl substances (PFAS) in both the Portsmouth Regional and Pease International Tradeport Drinking Water Systems. The two systems service the following areas on the Seacoast:

Portsmouth Regional Drinking Water System:

- Portsmouth
- Newington
- Greenland
- New Castle (and wholesale water to the New Castle Water District)
- Some of Rye (and wholesale water to the Rye Water District), Durham, Madbury and Dover

Pease International Tradeport Drinking Water System:

- Pease International Tradeport
- The village area of Newington

Annual Water Quality Reports for all these systems are sent to all water customers and posted **here**.

The City of Portsmouth's water system tests for Poly- and Per- Fluoro Alkyl Substances (PFAS) in all of our sources of supply quarterly. Four PFAS chemicals are regulated by the NH Code of Administrative Rules, Chapter Env-Dw 700. These rules establish Maximum Contaminant Levels (MCLs), and compliance requirements for: PFOA, PFOS, PFHxS and PFNA. **Currently all of Portsmouth Water's sources are in compliance with the New Hampshire MCLs.**

The following table provides a summary of the four quarter rolling average results for Portsmouth water system testing results through March 2022. Additional results from samples collected are accessible on the City's Water website:
https://www.cityofportsmouth.com/publicworks/water

- On Mount Everest: The journal Science of The Total Environment published a study that found perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA), and perfluorohexanoic acid (PFHxA) in Mt. Everest snow and meltwater. The highest concentrations found were 26.14 and 10.34 ppt of PFOS at Base Camp and Camp 2, respectively

With regard to drinking water in particular:

- An analysis of one-third of the nationwide water systems found that 28 percent of them contained PFAS chemicals at concentrations at or above 5 ppt (Environmental Working Group Article, May 2018, reporting on work of Eurofins Eaton Analytical); and
- Many water systems that originally had samples with "non detections" are now detecting low levels of these compounds with improved/lowered laboratory detection capabilities. Seacoast communities with detections include Hampton and North Hampton (served by Aquarion), Dover, Rochester, Rye, Seabrook and Stratham.

SUMMARY

The City of Portsmouth's water operations staff will continue to monitor and address this evolving issue through our ongoing efforts, research, monitoring and system upgrades as necessary. Because we were one of the first to address this issue has allowed us the opportunity to explore, pilot and implement treatment technologies and continually allow drinking water to be delivered to our customers that meets the regulatory requirements. We are also fortunate that we have great support from our local and congressional delegations and that the Air Force has been a willing partner in responding to the contamination.

Technologies and regulatory requirements are likely to continue to evolve. We will continue to do our best to implement necessary and feasible actions to respond and comply with regulatory standards. We will also continue to update the City Council and public through our water system's website updates and other information presented during the quarterly Safe Water Advisory Group and Pease Restoration Advisory Board meetings and at various water conferences.

The following is a summary of our continued focus on PFAS response:

- Sampling of all Portsmouth drinking water sources quarterly for PFAS compounds to assess the 12-month rolling averages for the four New Hampshire regulated compounds.
- Evaluate the need for and type of treatment that may be necessary at any other drinking water sources of supply serving the City's drinking water system.
- Work with the Air Force to monitor PFAS compounds in the water sources in the Pease southern wellfield aquifer.
- Work with regulators and other waterworks professionals to track and respond to the evolving water quality information, regulations and treatment technologies related to PFAS compounds.
- Provide public information on this and all other water quality parameters in our water systems. For information for both the City of Portsmouth and Pease water systems: https://www.cityofportsmouth.com/publicworks/water