Orange Water and Sewer Authority
Our community's trusted partner for clean water and environmental protection

Clear Waters: Navigating your PFAS Questions and Concerns

December 11, 2024

Thank you for your interest in how OWASA is addressing PFAS in our community's water. Our goal is to connect with our community and become partners with you in understanding and addressing PFAS in our drinking water, wastewater, and biosolids. With this quarterly newsletter, we hope to keep you well-informed of our research and design of new treatment facilities, as well as regulations that affect how we manage your drinking water and wastewater treatment.

Eagle Eye on PFAS: Fourth Quarter Monitoring Results

Our drinking water monitoring results for the fourth quarter of 2024 (collected in November) are now available on our online information hub, PFAS & Your Water. Our most recent monitoring data, from samples collected during the fourth quarter of 2024, detected PFOA at 3.4 parts per trillion (ppt) and PFOS at 3.2 ppt in our finished drinking water. PFHxS and PFBS were not detected during fourth quarter sampling but have been detected in the past. HFPO-DA (Gen-X) and PFNA have never been detected in our treated drinking water. The EPA's Maximum Contaminant Level (MCL) for both PFOA and PFOS is 4 ppt, which was established in April of this year with compliance required by 2029.

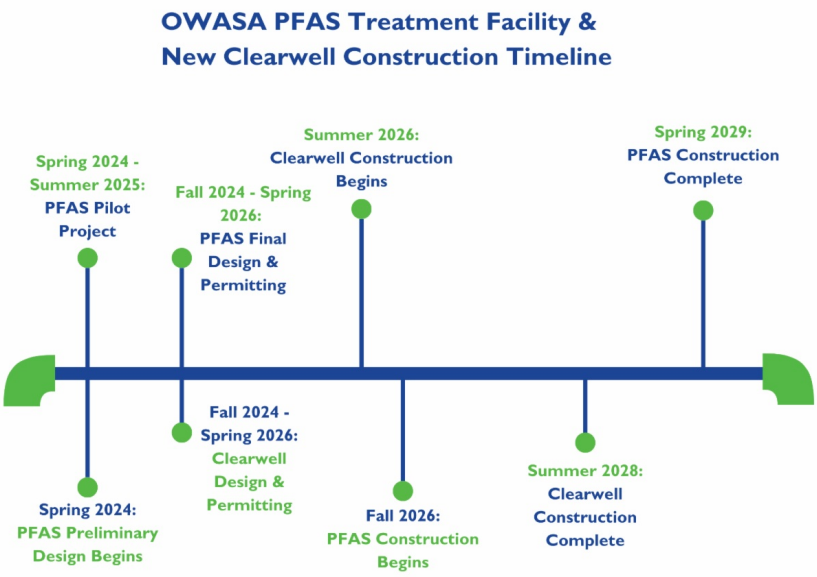
PFAS Compound	Quarter 4 2024	Maximum Value Detected 2018-2024	Average Values Detected 2018-2024	EPA Maximum Contaminant Levels (MCL)
PFOA	3.4	24.0 ppt	11.4 ppt	4 ppt
PFOS	3.2	15.0 ppt	5.8 ppt	4 ppt
PFHxS	Non-detect	6.0 ppt	2.4 ppt	10 ppt and as part of hazard index (1)
PFNA	Non-detect	Non-detect	Non-detect	10 ppt and as part of hazard index (1)
PFBS	Non-detect	5.9 ppt	3.3 ppt	As part of hazard index (1)
HFPO-DA (Gen-X)	Non-detect	Non-detect	Non-detect	10 ppt and as part of hazard index (1)

Quarter 4 2024 PFAS Monitoring Data- Finished Drinking Water

In addition to our quarterly monitoring, OWASA launched weekly PFAS sampling in both raw water and finished drinking water in early October to take a closer look at whether Powdered Activated Carbon (PAC) can consistently reduce PFAS enough to meet drinking water goals for our community and comply with the MCLs that will be required by 2029. While the PAC has reduced PFAS in OWASA's finished drinking water to below the MCLs on some days, some compounds reach 5 to 6 ppt on other days,

depending on the water quality of the reservoirs—values exceeding the MCLs that we must meet by the end of 2029. Therefore, we do not expect to be able to meet our water quality goals and the MCLs consistently with PAC alone.

New Drinking Water Treatment Facility for PFAS



This quarter, our pilot study showed that both technologies we are testing for PFAS drinking water treatment (Granular Activated Carbon and Ion Exchange) are very effective at removing PFAS from OWASA's raw water. Other factors closely monitored to determine the best technology include:

- How long the media (substance/material) works before it needs to be replaced;
- Capital (construction) and operational costs;
- Ease of operation;
- PFAS disposal;
- How the treatment technology impacts other aspects of OWASA's drinking water quality; and
- The technology's long-term adaptability to future advances.

OWASA will announce plans to finalize selection of the technology for PFAS drinking water treatment in January 2025. The pilot project will continue evaluating the effectiveness of technologies as well as maintenance and operational costs through summer of 2025. In the meantime, the new drinking water treatment facility is in the design phase, which is expected to last through April 2026. Construction will begin in Fall 2026.

Paying for PFAS

A project of this scale and scope will not be inexpensive. And while we do not anticipate that we will be able to get outside funding to cover the entire project, OWASA is turning over every rock we know to identify funding assistance to help our community manage the costs of removing PFAS from our drinking water. A few of those "rocks" are described below:

- OWASA is a party to a multi-jurisdiction litigation against manufacturers of PFAS compounds, including DuPont and 3M, which is in the process of settlement.

- OWASA was awarded a $500,000 grant from the N.C. Division of Water Infrastructure (DWI) to support our pilot project to test drinking water treatment technologies that reduce PFAS, and we applied for another $500,000 in the most recent opportunity to apply for funding. We will continue to apply to DWI to help fund as much as possible through grants and low-to-no interest loans.

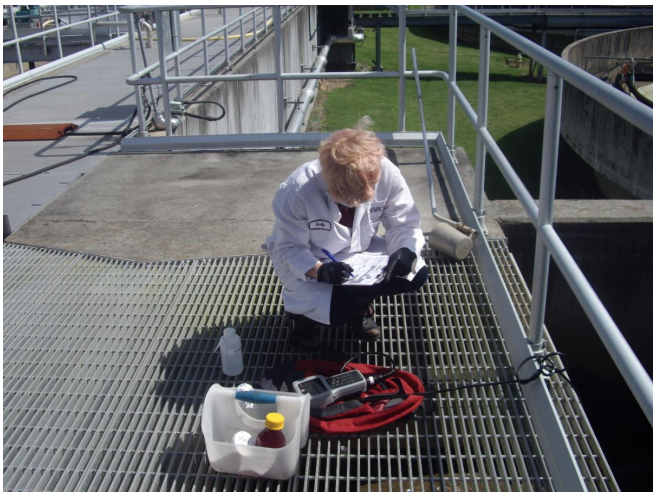
OWASA is looking into engaging legislators in Washington D.C. and in Raleigh to allocate funding directly to the project. Although these funds, if awarded, are likely to only cover a small portion of the project, we appreciate that every dollar helps to avoid costly rate increases for our community.

Our Community's New Clearwell (Drinking Water Storage)

The clearwell at the Jones Ferry Road Water Treatment Plant, a 1.5-million-gallon storage tank that holds treated drinking water before it is distributed to the community, is nearing the end of its useful life. Concurrent with the construction of OWASA's new drinking water treatment facility for PFAS, a new clearwell will be constructed. This means two of OWASA's largest capital improvement projects in decades will occur simultaneously—and both on the Jones Ferry Road campus.

Construction on the new clearwell will begin in summer 2026 and is expected to be complete in summer of 2028. The clearwell is critical to maintaining the delivery of drinking water to our community. Therefore, the old clearwell will remain in service while the new clearwell is constructed on the other side of the Jones Ferry Road campus.

Identifying Sources of PFAS in the Wastewater Stream



OWASA is optimistic that by reducing PFAS in drinking water, we will also reduce PFAS levels in the wastewater stream. However, we will soon launch a program to analyze the wastewater in various locations throughout the collection system to better assess other potential sources of PFAS. We have been monitoring our wastewater for PFAS since 2019. Results are posted on our website hub at owasa.org/pfas-and-your-water.

Image: Lab analyst Emily Currier collecting samples

Safeguarding Our Water: PFAS Q&A Community Chat Updates

OWASA's third PFAS community chat was held on October 2 at the Chapel Hill Public Library. A panel of experts in public health, PFAS pathways in the environment, and human exposure to PFAS discussed their experiences in PFAS and public health research and outreach with members of the community. You can watch the full event as well as our other PFAS community chats on our YouTube channel.

Our fourth PFAS community chat was an Intro to PFAS for UNC-Chapel Hill students. Featuring experts on PFAS in air, environment, and drinking water resources and treatment, the discussion offered an overview of PFAS and an opportunity for students to get their questions answered by experts. This event was held Thursday, November

21 at the Campus Y Faculty Lounge on UNC's campus. A video of the full event will soon be available on OWASA's YouTube channel.

Thank you for keeping in touch with us on this important issue. Please reach out to us with questions related to this newsletter at info@owasa.org. If you received this message from a friend and would like to receive future PFAS updates from OWASA, sign up here.

www.owasa.org