

Identifying and preventing PFAS exposures to public and private water system users is among Ohio EPA's highest priorities. We have been proactive in identifying and addressing areas of known contamination:

- **Chemours/DuPont:** While the U.S. EPA has taken the regulatory lead for the PFOA contamination, we continue to review the quarterly sampling reports and have recommended additional wells for sampling. Granulated activated carbon treatment is effectively implemented at four public ground water systems and about 60 private water systems over a 440 square mile area. Alternative supplies have been provided for many other residences. Chemours has recently agreed to sample a subset of public and private wells for Gen-X.
- **WPAFB:** PFOS and PFOA ground water contamination threatens a neighboring Dayton wellfield, which the City has shut down to avoid drawing the contaminants. Ohio EPA is encouraging the U.S. Air Force to act to protect the wellfield from becoming contaminated.
- **Newport Wellfield:** Ohio EPA sampling here found that the current production wells are non-detect for PFOS/PFOA, but a recovery well was above the 70 ppt HAL for PFOS. The contamination is due to the activities of a nearby volunteer fire dept.
- **Air Bases:** Due to a history of use of fire-fighting foams at Ohio air bases and the scheduling of detailed site investigations well into the future, we sampled near five bases during late 2016 and early 2017. We found one private well near the Toledo OANG Base with PFOA above the 70 ppt HAL. The OANG provided bottled water and is in the process of hooking the residence to a PWS.

We are planning to sample more wells proactively around industries where PFAS chemicals have been used or manufactured. We are benchmarking with other states to identify the industry types.

Ohio EPA continues to closely track the development of standards and guidelines for levels of perfluorochemicals in drinking water, including Gen-X. We are working with U.S. EPA and other states through participation on the ASDWA PFAS Workgroup and discussion on risk communication through ECOS.

Ohio EPA's Laboratory has developed the capability to analyze and quantify the six perfluorinated compounds included in the third Unregulated Contaminant Monitoring Rule (UCMR3), including PFOA and PFOS. The lab also is currently participating in a USEPA external validation study with other EOCS member labs. The validation study focuses on developing a direct injection method for perfluorinated compounds which, if successful, will significantly decrease the time between sample submission to the lab and the time when results will be available.

In addition to addressing PFAS drinking water exposures, it is important that the sources be identified and remediated. However, there are several complicating issues, and Ohio EPA recommends that the following be developed:

- U.S.EPA-approved methods for testing environmental media.
- U.S. EPA preliminary remediation goals for media that are protective for drinking water sources.
- Water quality criteria for PFAS to ensure discharges from sources such as industry, WWTPs, and operating landfills won't contaminate drinking water systems

- Methods to treat contaminated drinking water to avoid causing smaller-chained PFAS to form PFOS and PFOA (e.g., when production wells are oxidized), improve on GAC's capability to capture smaller-chained PFAS, and avoid the added expense of GAC media incineration due to the potential for airborne PFAS deposition.
- Toxicity information for PFOA/PFAS replacement compounds such as Gen X should be determined.