

Ohio PFAS Drinking Water Sampling Project
Public Water System Coordination and Response Summary

Project Overview

- Under the State of Ohio's Action Plan for per- and polyfluoroalkyl substances (PFAS) in drinking water, Ohio EPA is conducting a statewide sampling initiative for PFAS during 2020. The purpose of the sampling is to understand the statewide occurrence of PFAS in Ohio drinking water.
- Ohio EPA is hosting/held a webinar on February 21 and the recorded webinar is available on the State's PFAS webpage and the Division of Drinking and Ground Waters' (DDAGW) website. This webinar provides an overview of the project and walks through the public water system (PWS) role and expectations.
- The PFAS Action Plan is available at pfas.ohio.gov and identifies Action Levels for 6 PFAS compounds: PFOA, PFOS, GenX, PFNA, PFBS, and PFHxS. For PFOS/PFOA, Ohio is using U.S. EPA's lifetime Health Advisory Level (HAL) of 70 parts per trillion (ppt).
- Approximately 1,500 PWS will be sampled for the 6 PFAS compounds in finished and raw water. All community public water systems and non-transient, non-community (NTNC) water systems will be sampled. Sampling is expected to be complete by the end of 2020. Sampling will be coordinated by Ohio EPA using qualified contractors and analyzed at contract laboratories. Purchased water and consecutive systems will not be sampled as part of this effort.
- Sampling will occur across the state and has been separated into 2 Phases. Phase 1 includes approximately 250 schools and daycares that have their own PWS (not served by a community PWS). Phase 2 will include all community PWS and the remaining NTNC systems.
- Ohio EPA sampling crews and laboratory will conduct confirmation sampling to any finished water detections \geq 50% of the Action Level.
- PFAS compounds are ubiquitous in the environment and proper sampling requires additional measures to prevent cross contamination. Contractors and Ohio EPA's own sampling crews have received specialized training and are strictly following the project sampling SOP and Quality Assurance Project Plan (QAPP), both available on the state web page.
- Consistent and clear public messaging on emerging contaminants is critical and Ohio EPA is closely coordinating with the Ohio Department of Health to ensure consistent information is being provided to Ohioans. ODH is also working with the Local Health Departments and developing fact sheets to communicate potential health effects, relative risk from drinking water and other sources, and has developed a toolkit for private well owners.
- Now is a good time for PWS to review and ensure their contingency plans are up to date and adequately addresses contamination of source in accordance with OAC Rule 3745-85-01 and review SWAP inventory for any potential issues.

Prior to sampling

- Ohio EPA DDAGW District Offices have compiled operator/owner contacts and other system-specific information, which has been provided to the contractor.
- DDAGW-District Office staff will be contacting PWS prior to sampling to notify the PWS they have been identified as one of the systems in the project and a contractor will be contacting them shortly thereafter to schedule sample collection.
- Ohio EPA has developed a PWS Toolkit for PFAS and resources are available on pfas.ohio.gov. Toolkit includes:
 - Template letters for PWS to communicate to customers (pre-sampling notification; and communicating results)
 - Q&A for PWS to assist in response to customer questions
 - Other Toolkit resources: *(insert link to approved labs when available)*
- Due to the nature and special sampling requirements, we have developed a list of pre-sampling steps/considerations for the PWS (see attached)

How/when will results be shared

- The contractor will be shipping samples to a contract lab.
- The lab will provide results to the contractor as soon as they are available, estimated to be approximately 3-4 weeks after collection. Following sample validation and review by Ohio EPA, results will be provided to the PWS.
- Following notification to the PWS and final approval by Ohio EPA, Ohio EPA will load the sample results into the Safe Drinking Water Information System (SDWIS) via Electronic Drinking Water Reports (eDWR) and then post on the state's PFAS public website.
- In total, Ohio EPA anticipates it will take approximately 3-5 weeks from collection to posting data.
- PWS are highly encouraged to plan communication to customers in advance of receiving results from Ohio EPA (the template letters should be helpful).

Response to detections

- Before official results are received, Ohio EPA will receive notification from the analytical labs if preliminary results indicate a finished water sample is likely to be $\geq 50\%$ of an Action Level.
 - In this case, OHIO EPA will notify the PWS (via phone) that an elevated result is likely and Ohio EPA will mobilize a sampling crew to collect confirmation samples.
 - PWS should review their contingency plan and consider response option as well and prepare messaging and outreach.
 - Ohio EPA will contact the PWS to schedule follow up sampling. During the visit we will also evaluate treatment and source water options to assist with PWS with addressing PFAS.
- PWS with no PFAS detected in finished water will not trigger any additional monitoring.
- Finished water detections BELOW the action level will trigger the PWS into one year of quarterly finished water monitoring.
- Finished water detection ABOVE the Action level will trigger the PWS into at least one year of monthly finished water monitoring.

- If PFAS are detected and confirmed in finished water ABOVE the Action Level, there will be immediate actions beyond follow up monitoring including:
 - OHIO EPA/PWS will develop a short- and long-term Action Plan to reduce PFAS levels
 - OHIO EPA/ODH/PWS/Local Health Department will meet and develop a communication/outreach plan
- PWS will be responsible for costs of any required quarterly or monthly follow up monitoring.
- PWS implements contingency plan actions as appropriate.

Additional Information

- The best source of information regarding the sampling effort is pfas.ohio.gov.
- Questions about PFAS treatment options contact: Judy Stottsberry or Ashley Voskuhl
- Questions about sampling schedule/contractors contact: Mike Proffitt

Additional Reference:

Ohio PFAS Action Levels

PFAS Compound	PFOA	PFOS	GenX	PFBS	PFHxS	PFNA
Action Level in parts per trillion (ppt)	>70 single or combined with PFOS	>70 single or combined with PFOA	> 700	>140,000	> 140	> 21

PWS Pre-sampling Preparation

- 1) Clearly identify appropriate Entry Point and Raw Water sample taps.
- 2) Make sure that the taps are in working order and have at least 9 inches of clearance. Notify Ohio EPA if taps cannot currently be used.
- 3) Remove any supplies or equipment that contain Teflon or polytetrafluoroethylene (PTFE) or anything with “fluoro” in its name and ensure these and other known sources of PFAS are not within 30 feet of the sample taps. If the materials cannot be removed, they should be identified to the sample team. Operator/PWS should inventory materials moved from sample area and provide list to contractor. These materials can cause false contaminant detections even after removal. Notify Ohio EPA prior to sampling if a tap is likely contaminated or poorly located. It’s MUCH better to address this prior to sampling than after.
- 4) Identify effective ways to purge the system. If appropriate, run the well/source for at least 20 minutes within 1 hour of the expected sample time. PWS should note time the purge began, time it ended, and which well/source was purged. If this isn’t possible, expect the sample team to run the system for 20 minutes. PWS needs to have a way to handle the discharge from this purge. PWS should similarly prepare for a 2 minute purge at each sample tap.
- 5) Review Contingency Plan and ensure responses are appropriate for contamination of source in accordance with OAC Rule 3745-85-01.
- 6) PWS review SWAP inventory for any contamination issues in source area.