FACT SHEET

EPA's Final PFAS National Primary Drinking Water Regulation: Monitoring and Reporting

April 2024

The U.S. Environmental Protection Agency (EPA) is fulfilling a foundational commitment in the agency's PFAS Strategic Roadmap. Through this National Primary Drinking Water Regulation (NPDWR), the EPA is following the process outlined in the Safe Drinking Water Act for regulating drinking water contaminants, leveraging the best available and most recent science, and building on existing state efforts to limit PFAS and provide a nationwide, health-protective standard for these specific PFAS in drinking water.

Some states have established drinking water regulations or guidance values for some PFAS, leading the way in monitoring for and limiting PFAS. The EPA's PFAS National Primary Drinking Water Regulation (NPDWR) sets nationwide limits for five individual PFAS: PFOA, PFOS, PFNA, PFHxS, and HFPO-DA (known as "GenX chemicals"). And the rule sets a limit for four PFAS contaminants as a mixture: PFHxS, PFNA, HFPO-DA, and PFBS.

Who is required to comply with the final PFAS drinking water regulation?

Community Water Systems (CWSs) and Non-Transient Non-Community Water Systems (NTNCWSs) must comply with the final PFAS drinking water regulation. Additionally, state, territorial, and Tribal Agencies will be affected when they assume primary responsibility for implementing and enforcing the regulation.

What about consecutive systems?

Consecutive CWS and NTNCWS must comply with this regulation, however their requirements may be less extensive. For example, finished water that is provided through a system interconnection is only required to be monitored for by the wholesale system. Please refer to the final rule for more details.

When are affected public water systems (CWSs and NTNCWSs) required to comply with the final PFAS NPDWR?

WITHIN 3 YEARS (By 2027)

- CWSs and NTNCWSs must conduct initial monitoring or obtain approval to use previously collected monitoring data

AT 3 YEARS (Starting 2027)

- CWSs and NTNCWSs must start their ongoing compliance monitoring
- CWSs and NTNCWSs must include results of their monitoring for the regulated PFAS in their Consumer Confidence Reports (CCRs)
- CWSs and NTNCWSs must start issuing public notification for any monitoring and testing procedure violations

AT 5 YEARS (Starting 2029)

- CWSs and NTNCWSs must comply with all regulated PFAS Maximum Contaminant Levels (MCLs)
- CWSs and NTNCWSs must provide public notification for violations of the PFAS MCLs

What are the rule's monitoring requirements?

The final rule requires the regulated water systems to conduct initial monitoring and ongoing compliance monitoring. These monitoring requirements are based on the EPA's Standardized Monitoring Framework. An explanation of each step of monitoring is described in detail below. A summary diagram of the requirements is on page 4 of this fact sheet.

Initial Monitoring

Within the first three years after the date of final rule promulgation, CWSs and NCWCWSs must complete initial monitoring at all entry points to the distribution system. Based on system size and source water at an entry point, systems must conduct initial monitoring either twice or quarterly during a 12-month period as follows:

Surface Water Systems
serving all population sizes

- Quarterly within 12-month period
- Samples collected 2 to 4 months apart.

Groundwater Systems
serving > 10,000 customers

- Quarterly within 12-month period
- Samples collected 2 to 4 months apart.

Groundwater Systems
serving ≤ 10,000 customers

- Twice within 12-month period
- Samples collected 5 to 7 months apart.

To reduce costs for systems, primacy agencies can allow systems to use previously collected monitoring data to satisfy some or all the initial monitoring requirements, if the sampling was conducted using EPA Methods 533 or 537.1 as part of UCMR 5, state-level, or other appropriate monitoring campaigns. The EPA is aware of many state and federal monitoring programs whose data would potentially satisfy some or all the initial monitoring requirements.

Ongoing Compliance Monitoring

Three years following the date of rule promulgation, PWSs are required to begin ongoing compliance monitoring at all entry points to the distribution system. Monitoring frequency is the same for all regulated PFAS and is determined by monitoring results taken during initial monitoring and comparing them to the rule trigger levels for reduced monitoring (described further on page 6 of this fact sheet). Systems with multiple entry points may establish different compliance monitoring schedules for each entry point depending on their monitoring results.

Based on initial monitoring, systems that have any samples greater than or equal to the trigger levels for any of the regulated MCLs are required to conduct default quarterly monitoring (one sample taken every quarter) at that entry point. Based on initial monitoring, systems that have all sample results below the trigger levels for all regulated PFAS can reduce to triennial monitoring at those entry points (described further below).

- Compliance is determined by calculating the running annual average of sample results. For compliance determination purposes only, a sample result less than the Practical Quantitation Level (PQL) for the monitored PFAS will use zero to calculate the running annual average. If the average is greater than the MCL for any regulated PFAS, the system is in *violation* of that MCL and *must continue quarterly monitoring* for all regulated PFAS. With a few exceptions, MCL violations are only assessed for water systems conducting quarterly monitoring.

- A system is in compliance if their running annual average is less than or equal to the MCLs for all regulated PFAS.
- If a system has four consecutive quarterly sample results below the MCLs, primacy agencies can determine an entry point is reliably and consistently below the MCLs and allow the water system to reduce to annual monitoring at the sample location.

Annual monitoring requires one sample taken every year.

- Any system that monitors annually and finds sample results for any regulated PFAS greater than or equal to the MCLs for any regulated PFAS *must revert to quarterly monitoring*.

- A system will continue annual monitoring at a sampling location as long as samples are below the MCL for any regulated PFAS.
- If the water system can demonstrate three consecutive annual samples are below the rule trigger levels for all regulated PFAS, the water system can further reduce to monitoring every three years at the entry point.

Based on initial monitoring, primacy agencies have the authority to reduce compliance monitoring frequency at a systems' applicable entry points if the sampling results are less than the trigger levels for all regulated PFAS. These systems would be eligible for reduced triennial monitoring (one sample taken every three years). Systems can also be eligible for reduced triennial monitoring at an entry point following three consecutive annual samples below the rule trigger levels.

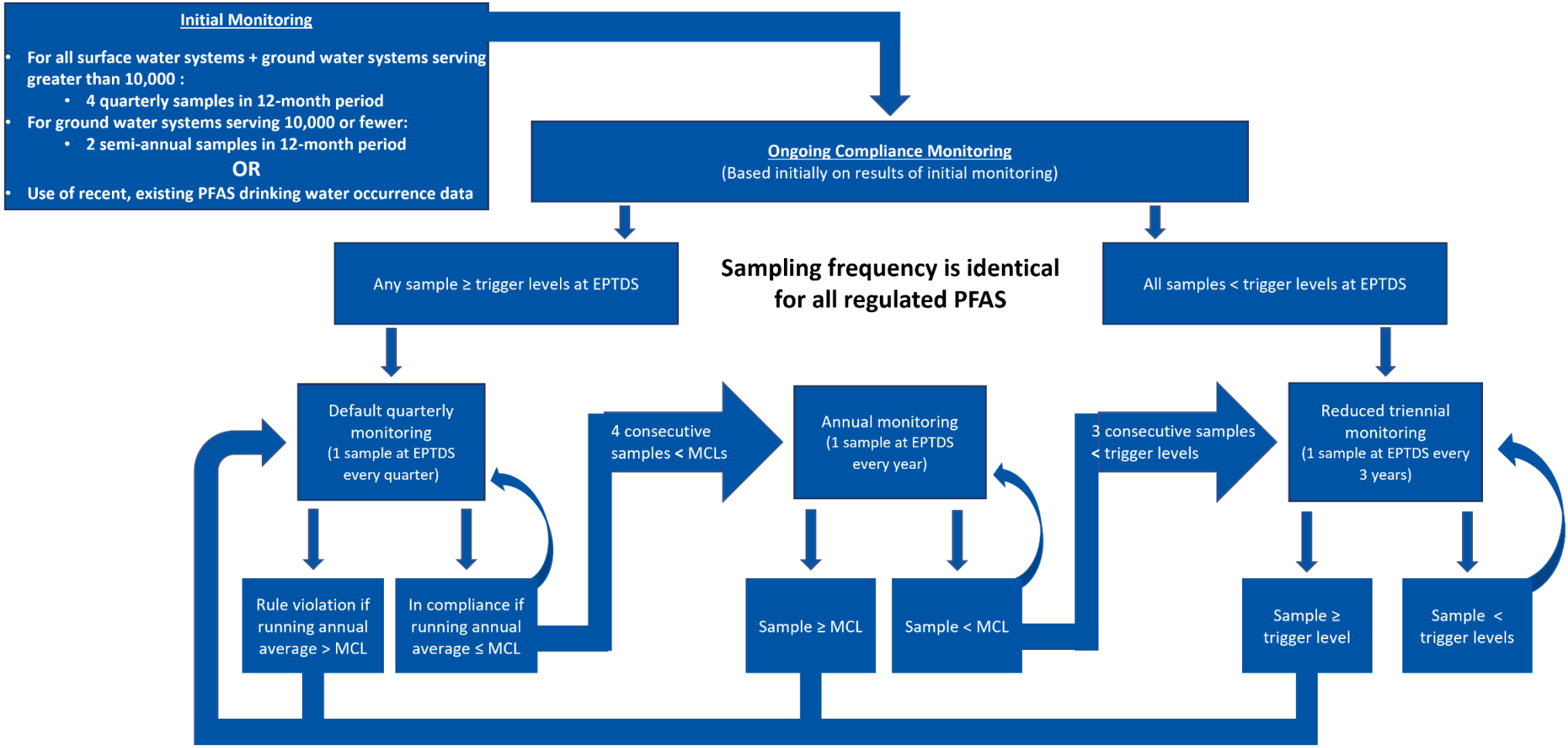
- Any system that monitors triennially and finds sample results for any regulated PFAS at or above the rule trigger levels *must revert to quarterly monitoring*.

- A system can continue reduced triennial monitoring at a sampling location if all sample results are below all trigger levels for the regulated MCLs.

Reduced monitoring will reduce burden on water systems that demonstrate through sampling that they are at lower risk of PFAS contamination.

Monitoring Requirements Summary

A summary diagram of the requirements is below. An explanation of each step of monitoring is described above on pages 2-3.



EPTDS: entry point to the distribution system

What is the Practical Quantitation Level (PQL)?

The PQL is defined as the lowest concentration of a contaminant that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. These levels are set at specific concentrations and provide the precision and accuracy that the EPA estimates can be achieved across laboratories nationwide and are the most appropriate levels for use in the determining the lowest feasible level that can be implemented. The PQLs are used for the MCL compliance determination.

What are trigger levels?

The trigger levels are used for establishing appropriate monitoring frequency and are set at one-half of the MCLs for regulated PFAS and one-half of the Hazard Index MCL for mixtures of PFHxS, GenX chemicals, PFNA, and/or PFBS. The reduced-monitoring trigger levels for PFOA and PFOS are below the PQL and are set at a defined threshold that shows if PFOA or PFOS are present or absent in a sample and used for establishing appropriate monitoring frequency.

What are the PQLs and the trigger levels for the PFAS?

The EPA has finalized the following PQLs and trigger levels for the six PFAS in this regulation.

Compound	Trigger Levels (1/2 MCLs)	Practical Quantitation Levels
	Levels (in parts per trillion, ppt)	
PFOA	2.0	4.0
PFOS	2.0	4.0
PFHxS	5	3.0
HFPO-DA	5	5.0
PFNA	5	4.0
PFBS	N/A	3.0
Hazard Index	0.5 (unitless)	N/A

How can a system comply with the PFOA and PFOS MCLs when they are set at their Practical Quantitation Levels? Would any monitoring result above these PQLs result in non-compliance?

Not necessarily. Compliance is determined based on analytical results at each sampling point. For systems monitoring quarterly, compliance is determined by running annual averages at the sampling point and, for compliance determination purposes only, a sample result less than the PQL for the monitored PFAS will use zero to calculate the running annual average. If a system is required to take more than one compliance sample during each quarter at a particular location, the system must average all samples taken at that location during that quarter. A system would not be considered in violation of an MCL unless or until it has completed one year of quarterly sampling (except, for example, where a sample would be high enough to cause the annual average to exceed an MCL).

For example, if the results of sampling for PFOA at a compliance location for the most recent four quarters are 2.0, 3.0, 5.0, and 2.0 ppt, the values used to calculate the running annual average would be 0.0, 0.0, 5.0, and 0.0. In this case the PFOA running annual average would be 1.3 ppt and in compliance.

Can primacy agencies grant monitoring waivers and can systems utilize composite samples?

No, the EPA is not allowing the use of monitoring waivers or composite samples in the final rule. The EPA believes that the ubiquity and environmental persistence of PFAS makes granting waivers challenging and does not allow them in the final rule. Additionally, because PFAS are in the environment in low concentrations and precision is critical, incidental contamination from combining results required to composite samples could result in false positives during PFAS analysis.

What is the process for finding a qualified PFAS laboratory?

The EPA recommends that you contact your state laboratory certification program, seeking state primacy program guidance on selecting a qualified lab. The EPA understands that while some states have established PFAS drinking water laboratory certification programs, many others need to expand their state programs to include PFAS now that the rule is final. The EPA is working with states to train laboratory certification officers to audit laboratories for conformance with rule and approved PFAS analytical method requirements. If your state has not yet certified laboratories for the approved PFAS methods, they may still have guidance on selecting a qualified lab. During the initial monitoring period, your state may provide direction on laboratory selection, such as directing you to contact a laboratory that the EPA approved to monitor for PFAS nationally under the UCMR 5 Program. (See https://www.epa.gov/dwucmr/list-laboratories-approved-epa-fifth-unregulated-contaminant-monitoring-rule-ucmr-5). The EPA encourages public water systems to coordinate with their primacy agency before they use a laboratory that has not been certified by the state.

To learn more about the final rule visit:
www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas