



PFAS Rule Update

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New PFAS Rule

- Due to the concerns about public health impacts related to PFAS, the U.S. Environmental Protection Agency (EPA) proposed and requested comment on a National Primary Drinking Water Regulation (NPDWR) for six PFAS contaminants in March of 2023.
- After receiving and incorporating comments on the proposed rule, the EPA published the final PFAS NPDWR to Federal Register on April 26, 2024.
- The final rule is listed in the Federal Register as 40 C.F.R. 141 Subpart Z – Control of Per- and Polyfluoroalkyl Substances (PFAS)

15A NCAC 18C .1540 is proposed for adoption as follows:

15A NCAC 18C .1540 CONTROL OF PER- AND POLYFLUOROALKYL SUBSTANCES

The provisions of 40 C.F.R. 141, Subpart Z – Control of Per- and Polyfluoroalkyl Substances (PFAS) are hereby incorporated by reference including any subsequent amendments and editions. Copies are available for public inspection as set forth in Rule .0102(a) and (b) of this Subchapter.

History Note: Authority G.S. 130A-315; 130A-320(c); P.L. 93-523; 40 C.F.R. 141.8 Eff. [Month Day, Year. TBD]

NC Public Drinking Water Systems Impacted by the PFAS Rule

All NC Community Water Systems (CWSs) and Non-Transient Non-Community Water Systems (NTNCWSs) with their own source will be affected by the new PFAS rule (published April 2024).

Category	Number of Systems
Total Number of Water Systems Affected	1,958
CWSs	1,648
NTNCWSs	310
Groundwater (GW) Systems	1,789
Surface Water (SW) Systems*	169

*Includes surface water purchase systems with their own source and Groundwater Under the Direct Influence of Surface Water (GWUDI) systems.

Final Rule MCLs and HI

Five new Maximum Contaminants Levels (MCLs) for five individual PFAS as well as a Hazard Index (HI) were introduced.

Chemical	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)
PFOA	0	4.0 ppt
PFOS	0	4.0 ppt
PFHxS	10 ppt	10 ppt
HFPO-DA (GenX chemicals)	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
Mixture of two or more: PFHxS, PFNA, HFPO-DA, and PFBS	Hazard Index of 1	Hazard Index of 1

Compliance is determined by Running Annual Averages (RAA) at each entry point.

Under the final PFAS Rule requirements, a public water system must:

- Conduct initial and ongoing compliance monitoring for the regulated PFAS compounds:
 - Take samples at all entry points to the distribution system, and
 - Sample “during periods of representative operating conditions.”
- Implement solutions to reduce regulated PFAS in their drinking water if levels exceed the MCLs, and
- Inform the public of the levels of regulated PFAS measured in their drinking water and if one or more MCLs are exceeded.

Key PFAS Rule Effective Dates

Requirement	Effective Date
Meet the analytical requirements. (Samples must be analyzed using methods approved by EPA.)	June 25, 2024
Report the results of initial monitoring to the State.	April 26, 2027
Begin compliance monitoring.	April 26, 2027
Submit Consumer Confidence Report (CCR) and meet public notification requirements.	April 26, 2027
Meet the MCL compliance requirements.	April 26, 2029*

***EPA plans to propose extending the compliance date to 2031.**

EPA's Recent Announcements

The EPA has recently stated its intention to revise the published PFAS regulations. Some possible changes that could occur include:

- Reevaluation and possible rescinding of regulations for PFHxS, PFNA, HFPO-DA (GenX chemicals), and the Hazard Index
- Extending the compliance deadline from 2029 to 2031
- Establishment of a federal exemption framework
- Enhanced outreach for small/rural communities (PFAS OUT)
- Establishment of Effluent Limitations Guidelines (ELGs) for PFAS

A proposed rule revision is expected in Fall 2025 and the finalized rule is expected to be published in Spring 2026. Until said finalized rule revision is implemented, the currently published rule will be upheld without exception.



Thank You!

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PFAS Initial Sampling Requirements

- Public water systems must initially monitor quarterly or bi-annually prior to April 26, 2027.
- Public water systems must conduct initial monitoring at each entry point to determine their compliance monitoring schedule.

Quarterly Samples

- Groundwater CWS and NTNCWS > 10,000 persons and all surface water CWS and NTNCWS.
- Must take four consecutive samples two to four months apart within a 12-month period (quarterly samples).

Bi-Annual Samples

- Groundwater CWS and NTNCWS $\leq$ 10,000 persons.
- Two samples five to seven months apart within a 12-month period.

PFAS Initial Sampling Results

Compound	Trigger Level (ppt) – ½ MCLs
PFOA	2.0
PFOS	2.0
PFHxS	5
HFPO-DA (GenX)	5
PFNA	5
PFBS	N/A
HI	0.5 (unitless)

Quarterly Monitoring – If ANY initial sampling result at the Entry Point > trigger level

Triennial Monitoring - If ALL initial sampling results at an Entry Point < trigger levels

Each Entry Point can be on its' own schedule.

Department of Environmental Quality
Division of Water Resources



MCL Calculation and Return to Compliance

- MCLs are based on an annual average calculated on a rolling basis (running annual average)

$$\text{RAA} = \frac{\text{Q3}_{2027} + \text{Q4}_{2027} + \text{Q1}_{2028} + \text{Q2}_{2028}}{4}$$

- With each new quarterly sample result, if the newly calculated RAA falls back below the MCL and/or HI then the system will return to compliance.

NC Public Water System PFAS Sampling Results

Results

- Exceeds one or more MCLs
- Detect < MCL and HI < 1
- Non-Detect
- Not Sampled

- Results are predominantly but not exclusively from treated water samples at one point in time.
- Most are single samples from a system.
- Some systems may have since installed treatment or changed their source to be below the MCL.

0 25 50 100 150 200 Miles



North Carolina Compliance Projections

- Based on sampling efforts thus far, it is currently projected that approximately 355 (21.7%) of systems sampled could exceed one or more of the PFAS MCLs or the HI.
- All systems that were sampled by the PWS Section have been notified of their PFAS results and if any PFAS was found above an MCL, those notifications included language about the availability of funding for studies and treatment through the Division of Water Infrastructure.

Compound	Approx. % Exceedances
PFOA	15%
PFOS	13%
PFHxS	1%
HFPO-DA (GenX)	0-0.5%
PFNA	0%
PFBS	N/A
HI	1%

NC Drinking Water Sampling

Sampling Event	Number of Samples	Complete?	Notes
The NC Collaboratory	376	Yes	Raw water. 47 analytes. Municipal systems.
Public Water Supply Section 2022	50	Yes	Raw and treated water. One sample/month for three months. 57 analytes.
Public Water Supply Section 2023	534	Yes	Treated water. One sample at one entry point per system. 57 analytes.
Public Water Supply Section 2024	255	Yes	Treated water. One sample at one entry point per system. 57 analytes.
UCMR5	298	No	Treated water. Multiple samples per system/per entry point. 29 analytes. 177 systems sampled as of May 31, 2024.
Aqua North Carolina, Inc.	707	No	Treated water samples only. Data available for six analytes. Received results in April 2024.
Carolina Water Service, Inc. of NC	96	TBD	18 analytes. Received results in April 2024.