

PFAS

Per-and polyfluoroalkyl substances

- A large class of synthetic chemicals that have been in use since the 1940's.
- Readily dissolve in water & are highly persistent in the environment.
- Products that may contain PFAS include:
 - Nonstick cookware,
 - fire-fighting foam,
 - stain-resistant & water-resistant clothing,
 - stain-resistant coatings for carpets/upholstery,
 - fast-food wrappers,
 - personal care products

PA PFAS Rule

Passed in 2023

- Maximum Contaminant Level (MCL): The regulatory limit allowed in drinking water
- 2 individual PFAS compounds regulated by the PA Rule:
 - Peflurooctanesulfonic acid (PFOS): MCL of 18 ng/L
 - Perfluorooctanoic acid (PFOA): MCL of 14 ng/L
- Monitoring to begin in 2024 and 2025 based on population of the system
 - Systems with population greater than 350 began in 2024
 - Systems with population less than 350 began in 2025
- Initial monitoring is 4 consecutive calendar quarters
- Future monitoring based on results of initial quarterly monitoring

Compliance with the MCL is
based on a Running Annual
Average of Quarterly Results.

Example 1: PFOA (MCL of 14 ng/L)

Quarter 1: 10 ng/L

Quarter 2: 5 ng/L

Quarter 3: 20 ng/L

Quarter 4: 8 ng/L

RAA = 10.75 ng/L

Compliant with MCL

Example 2: PFOA

Quarter 1: 13 ng/L

Quarter 2: 12 ng/L

Quarter 3: 23 ng/L

Quarter 4: 13 ng/L

RAA = 15.25 ng/L

NOT Compliant with MCL

Federal PFAS Rule

subject to change

- 5 individual PFAS compounds regulated by the Federal Rule:

PFOS: MCL of 4 ng/L

PFOA: MCL of 4 ng/L

PFNA: MCL of 10 ng/L

PFHxS: MCL of 10 ng/L

GenX: MCL of 10 ng/L

- Currently, water systems will be required to meet the Federal Rule by 2031.
- Monitoring done under the PA Rule can be used to satisfy the Federal Rule

BASD Schools

Earl Elementary

Quarterly samples taken in 2025

No Detects of PFOS or PFOA

RAA Non-detect for both

Next sampling due in 2027

In Compliance with PADEP

New Hanover Elementary

Quarterly samples taken in 2024

No Detects of PFOS or PFOA

RAA Non-detect for both

Next sampling due in 2026

In Compliance with PADEP

PFOS MCL = 18 ng/L Running Annual Average

PFOA MCL = 14 ng/L Running Annual Average

Gilbertsville Elementary

Quarterly samples began in 2024

PFOS: 1 Detect of PFOS below the MCL

7 Non-detects for PFOS

RAA = Non-detect

PFOA: 7 Detects of PFOA below the MCL

1 Detect of PFOA above the MCL (14.59 ng/L)

RAA = 8.4 ng/L

Quarterly sampling continues

In Compliance with PADEP



Treatment Options

- Carbon Filtration
 - Requires longer contact time. Therefore, more carbon is needed and takes up a larger footprint.
 - Less Expensive per cubic foot
 - Additional testing required initially, specifically for arsenic.
- Anion Resin
 - Requires less contact time. Therefore, smaller less media is needed. Smaller footprint.
 - More expensive per cubic foot but requires less media.
 - No additional testing initially.
 - No backwashing required
 - Water hardness less than 8 gpg, required.

PFAS Treatment System



Cost and Timeline

- PaDEP construction permit – Signed by a Professional Engineer - 3-4 weeks to complete.
- PaDEP construction approval – Up to 180 days
- Treatment Installation - 4-6 weeks after receiving construction permit
- Operations Permit from PaDEP – 2-3 weeks after treatment installation
- Cost: The cost for the engineering, permit and treatment system to treat 20 Gallons per minute is approximately \$30,000