

# PFAS and SDWA Regulatory Update

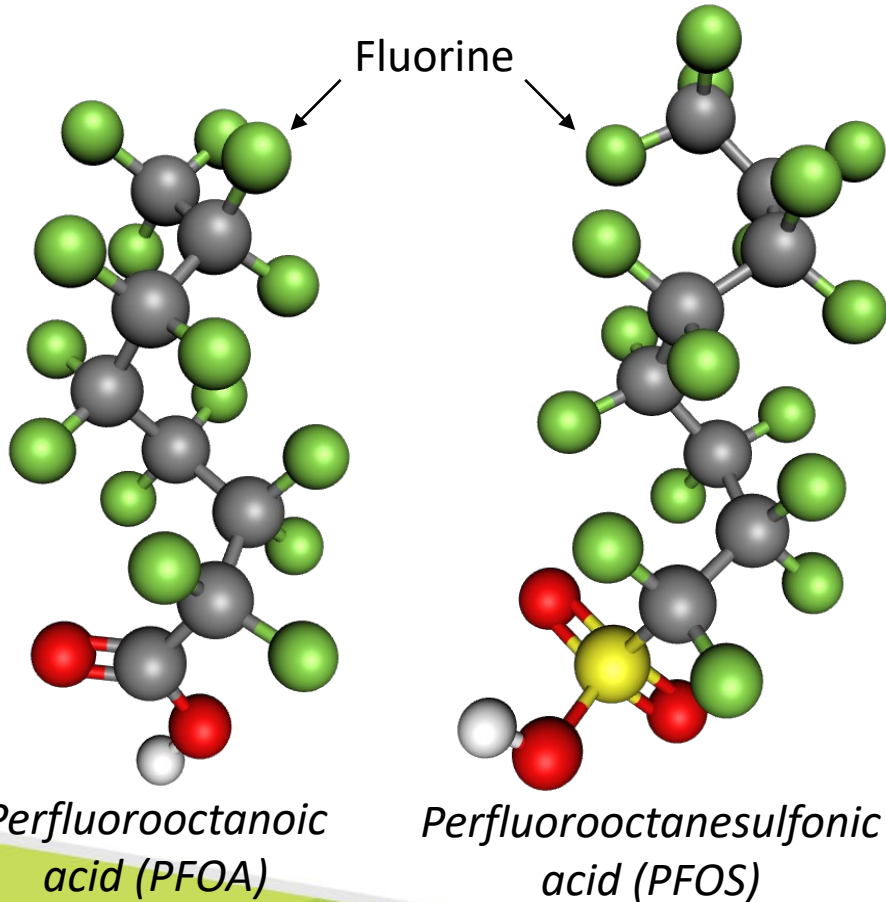
PA Citizens Advisory Council

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# What Are Per- and Polyfluoroalkyl Substances (PFAS) and Why are We Concerned?



**PFAS captures a large class of synthetic chemicals.**

- Chains of carbon atoms surrounded by fluorine atoms.
- Wide variety of chemical structures.

**Used in homes, businesses, and industry since the 1940s.**

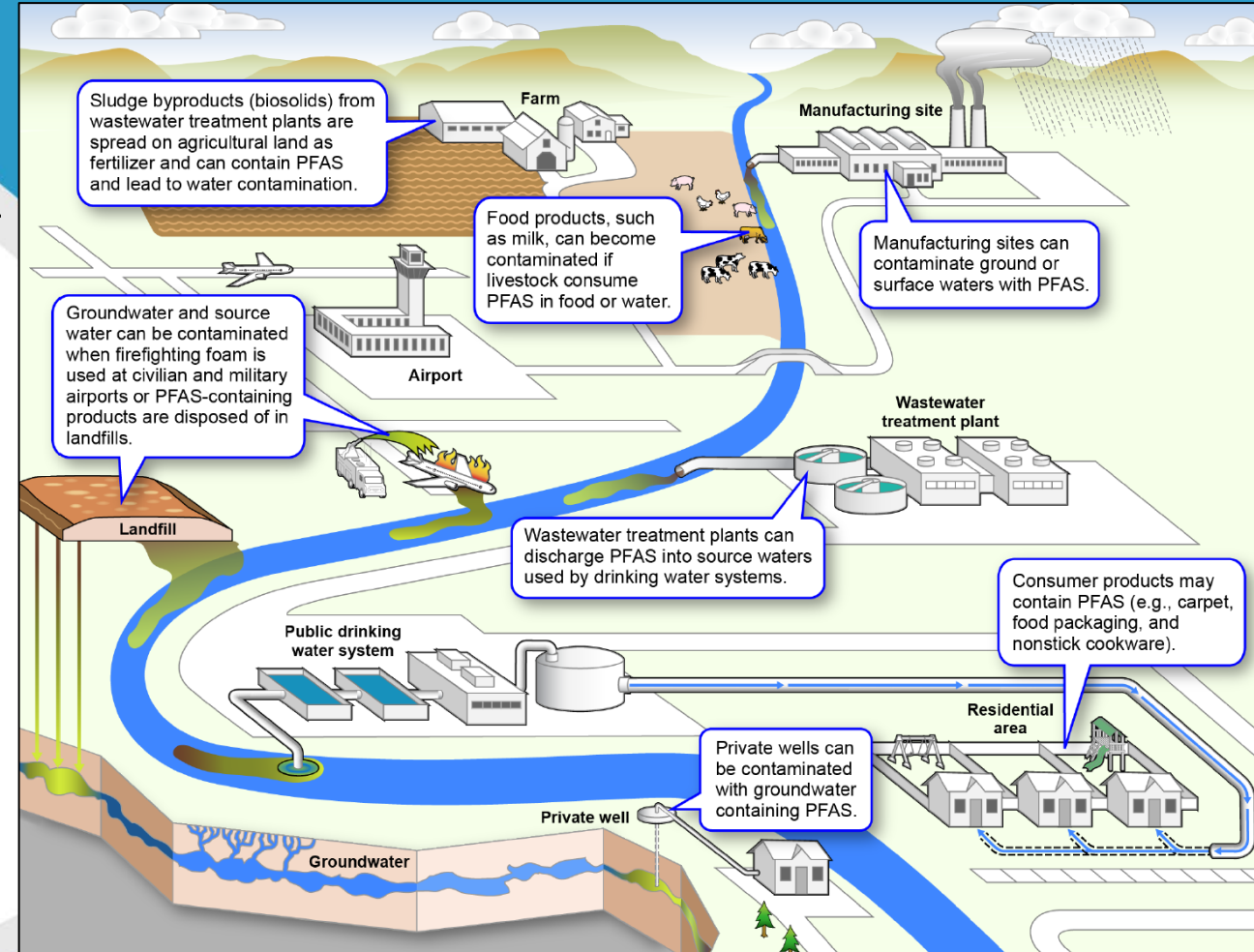
- Used by a number of industries and found in many consumer products.
- Detected in soil, water, and air samples.
- Most people have been exposed to PFAS.

**Known or suspected toxicity.**

- Potential developmental, liver, immune, and thyroid effects.
- Some are relatively well understood; many others are not.
- Resist decomposition in the environment and in the human body.

# EPA PFAS Roadmap

- EPA Administrator Michael Regan established the EPA Council on PFAS in April 2021.
- The Council developed the PFAS Strategic Roadmap, released in October 2021 – a bold, strategic, whole-of-EPA strategy to protect public health and the environment from PFAS.
- The PFAS Strategic Roadmap:
  - Lays out EPA’s whole-of-agency approach to tackling PFAS;
  - Sets timelines for concrete actions from 2021 to 2024;
  - Fills a critical gap in federal leadership;
  - Supports states’ ongoing efforts; and
  - Builds on the Biden-Harris Administration’s commitment to restore scientific integrity.



# Protecting our Water

**Set enforceable limits for PFAS in drinking water**

**Improve PFAS drinking-water data through monitoring, toxicity assessments, and health advisories**

**Develop technology-based PFAS limits for industrial dischargers**

**Address PFAS in Clean Water Act permitting, analytical methods, water quality criteria, and fish advisories**

**Evaluate risks of PFAS in biosolids**

# EPA's Final Action for the PFAS NPDWR



- EPA has finalized the first-ever national drinking water standard for per- and polyfluoroalkyl substances (PFAS).
- EPA is issuing this rule after reviewing extensive research and science on how PFAS affects public health, while engaging with the water sector and state regulators to ensure effective implementation.
- EPA also considered 120,000 comments on the proposed rule from a wide variety of stakeholders
- The final rule will reduce PFAS exposure for approximately 100 million people, prevent thousands of deaths, and reduce tens of thousands of serious illnesses.

# EPA's Final Action for the PFAS National Primary Drinking Water Regulation (NPDWR)



Compound	MCLG	MCL* (enforceable levels)
PFOA	0 ppt	4.0 ppt
PFOS	0 ppt	4.0 ppt
PFNA	10 ppt	10 ppt
PFHxS	10 ppt	10 ppt
HFPO-DA (commonly referred to as GenX Chemicals)	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 at the sampling point

- The Hazard Index is a tool to evaluate potential health risks from exposure to chemical mixtures.
- <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>



# Implementation Basics

Under the rule requirements, public water systems must:

- Conduct initial and ongoing compliance monitoring for the regulated PFAS;
- 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 an MCL is exceeded.



# Timeframes for Water Systems

Within **three years** of rule promulgation (2024 – 2027):

- Initial monitoring must be complete

Starting **three years** following rule promulgation (2027 – 2029):

- Results of initial monitoring must be included in Consumer Confidence Reports (i.e., Annual Water Quality Report)
- Regular monitoring for compliance must begin, and results of compliance monitoring must be included in Consumer Confidence Reports
- Public notification for monitoring and testing violations

Starting **five years** following rule promulgation (starting 2029)

- Comply with all MCLs
- Public notification for MCL violations




# Flexibilities

EPA's final rule protects public health while allowing for maximum flexibility, cost savings, and burden reduction for public water systems.

Flexibilities include:

- Reductions in required initial monitoring for most small water systems
- Using previously collected drinking water data to satisfy the rule's initial monitoring requirements (e.g., UCMR)
- Reduced compliance monitoring based on sampling results
- Additional time to comply with the PFAS MCLs, allowing systems time to plan, design, and find the best solutions for their communities

# Flexibilities Continued

- EPA's final rule does not dictate how water systems remove these contaminants. The rule is flexible, allowing systems to determine the best solutions for their community.
  - Drinking water utilities can choose from multiple proven treatment options.
  - Water treatment technologies exist to remove PFAS chemicals from drinking water, including granular activated carbon, reverse osmosis, and ion exchange systems.
  - In some cases, systems can close contaminated wells or obtain new uncontaminated source of drinking water.
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# Resources/Webinars

## Materials

- Presentation
- General Q&A
- Fact Sheet: Public
- Fact Sheet: Water Filters
  - Fact Sheet: What are the Benefits and Costs of the Rule?
  - Fact Sheet: Understanding the Hazard Index
- Fact Sheet: Small Systems
  - AS Drinking Water
- Treatment Technologies
- Fact Sheet PFAS NPDWR Monitoring Requirements
- Detailed Q&As for states and systems

## Webinars (recorded)


- General Overview
- Water Sector Professionals Technical Overview
- Small Systems Webinar

**Materials & registration available** on <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>

## Federal Register Notice:

<https://www.federalregister.gov/documents/2024/04/26/2024-07773/pfas-national-primary-drinking-water-regulation>

# Additional Guidance to come....soon!

- PFAS Rule Overview Quick Reference Guide (QRG)
  - PFAS Initial Monitoring Requirements QRG
  - PFAS Health Effects and Public Notification/CCR Requirements
  - Updated Laboratory Certification Officer (CO) training materials for PFAS Methods 533 and 537.1
  - PFAS Data Entry Instructions for Primacy Agency Reporting
  - PFAS Rule Implementation Guidance
  - Primacy Package Training
  - PFAS Rule Training for Regions, Primacy Agencies, and Technical Assistance Providers
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# Pennsylvania's MCLs

**PA DEP PFAS MCL Rule was published as a final rule in the *PA Bulletin* on January 14, 2023.**

- Similarly to the federal rule, PA's rule improves public health protection by setting MCLGs and MCLs for PFOA and PFOS.
- There are communication and outreach concerns for states now that EPA released lower MCLs.
- PA's MCL rule remain in effect until EPA rule is effective.
- Both rules are based on a running annual average (RAA) at each Entry Point (EP).
- [https://files.dep.state.pa.us/Water/DrinkingWater/Perfluorinated%20Chemicals/PFAS\\_PWS\\_Toolkit.pdf](https://files.dep.state.pa.us/Water/DrinkingWater/Perfluorinated%20Chemicals/PFAS_PWS_Toolkit.pdf)

# Pennsylvania's MCLs

PFAS	MCLG (ng/L)	MCL (ng/L)	MCLs Protective Of
PFOA	8	14	Adverse developmental effects (including neurobehavioral and skeletal effects)
PFOS	14	18	Adverse immune system effects (including immune suppression)

Source: EQB PADEP presentation 10/12/2022

	NY	MI	NJ	NH	PA	MA	VT	WA
PFOA	10	8	14	12	14	20*	20*	10
PFOS	10	16	13	15	18	20*	20*	15



# Pennsylvania's PFAS Rule: Monitoring

- PA's PFAS MCL rule remains in effect and water systems need to continue to monitor and report results as specified in the rule.
  - Monitoring and reporting under PA rule must be followed until April 2027 (when EPA's M&R kicks in)
- Initial monitoring has begun and is conducted quarterly.
  - Monitoring applies to all community, nontransient noncommunity, bottled, vended, retail, and bulk hauling water systems.
- Repeat compliance sampling is quarterly, annual, or triennial based on results.
- Systems may use some of the data collected from PA's rule to comply with EPA requirements.
- Under both rules, MCL violations require Tier 2 public notice.
  - Systems must comply with PA MCL until EPA MCL compliance date (April 2029), including the provision of Tier 2 PN.

# Unregulated Contaminant Monitoring Rule (UCMR5)



- EPA's Fifth Unregulated Contaminant Monitoring Rule (UCMR5) is sampling for 29 PFAS (+ lithium).
  - Sampling between January 2023-December 2025.
  - All PWSs serving 3,300 or more people + representative PWSs serving <3,300 will collect samples.
  - EPA to arrange for the analysis of small-system samples and will pay for shipping and analytical costs.
  - This significantly expands the number of water systems participating in sampling.
  - Data released quarterly.
  - UCMR5 data finder: <https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule-data-finder>

# Bipartisan Infrastructure Law and PFAS

The Bipartisan Infrastructure Law provides \$10 billion to invest in communities impacted by PFAS and other emerging contaminants.

\$4 billion	Drinking Water State Revolving Fund
\$1 billion	Clean Water State Revolving Fund
	Small or Disadvantaged Communities
\$5 billion	Drinking Water Grants

- BIL dedicates \$9 billion specifically to invest in communities with drinking water impacted by PFAS and other emerging contaminants. \$1 billion of these funds can be used to help private well owners.
- An additional \$12 billion in BIL funding is available for general drinking water improvements.
- PA has been awarded \$37,543,000 so far.

For more: [https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta-information#Adtnl\\$ResSec](https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta-information#Adtnl$ResSec)

# The Road Ahead



Establish a national primary drinking water regulation for PFOA and PFOS

↳ Spring 2024

Restrict PFAS discharges from industrial sources through a multi-faceted Effluent Limitations Guidelines program

↳ Spring 2024

Publish updates to PFAS analytical methods to monitoring drinking water

↳ Fall 2024



Publish final recommended ambient water quality criteria for PFAS

↳ Fall 2024

Finalize risk assessment for PFOA and PFOS in biosolids

↳ Winter 2024

# Additional Key Roadmap Actions: Cleaning Up PFAS Contamination and Addressing PFAS Air Emissions

**Develop regulations to designate PFAS as CERCLA hazardous substances** (*PFOA and PFOS proposal published September 2022, final CERCLA designation due spring 2024*)

**Take regulatory action to tackle PFAS under RCRA** (*ongoing*)

**Update research and guidance on PFAS destruction and disposal** (Published April 8, 2024)

**Build the technical foundation for potential Clean Air Act regulation** (*ongoing*)

# More Key Roadmap Actions: Ensuring Chemical Safety

**Deepen our understanding of PFAS categories through the National PFAS Testing Strategy** (*October 2021, June 2022*)

**Strengthen EPA oversight over both new and existing PFAS** (*summer 2022 and ongoing*)

**Collect data and improve reporting of how PFAS are used and released** (*winter 2022*)

**Establish a PFAS voluntary stewardship program** (*ongoing*)

**Reduce PFAS in federal procurement** (*ongoing*)





Thank you!  
Questions?

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**For PA questions:**

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