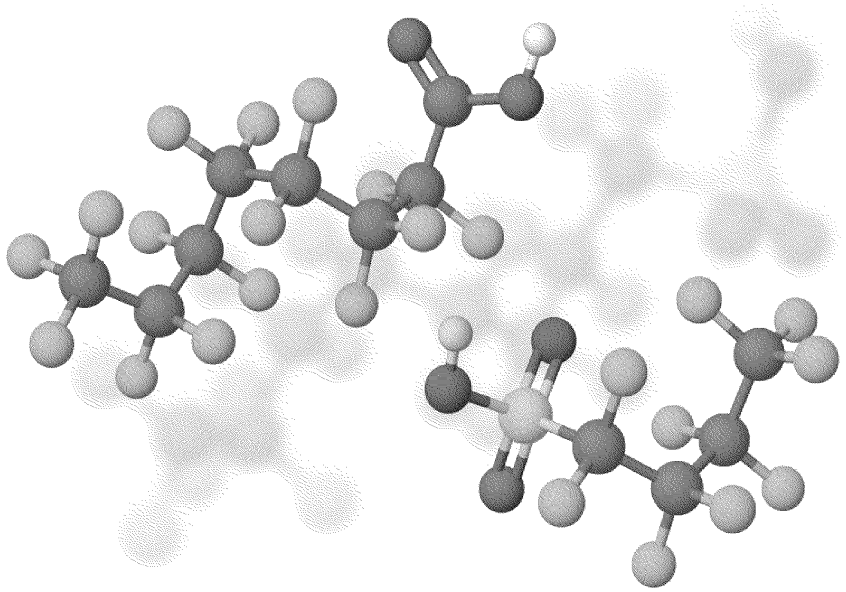
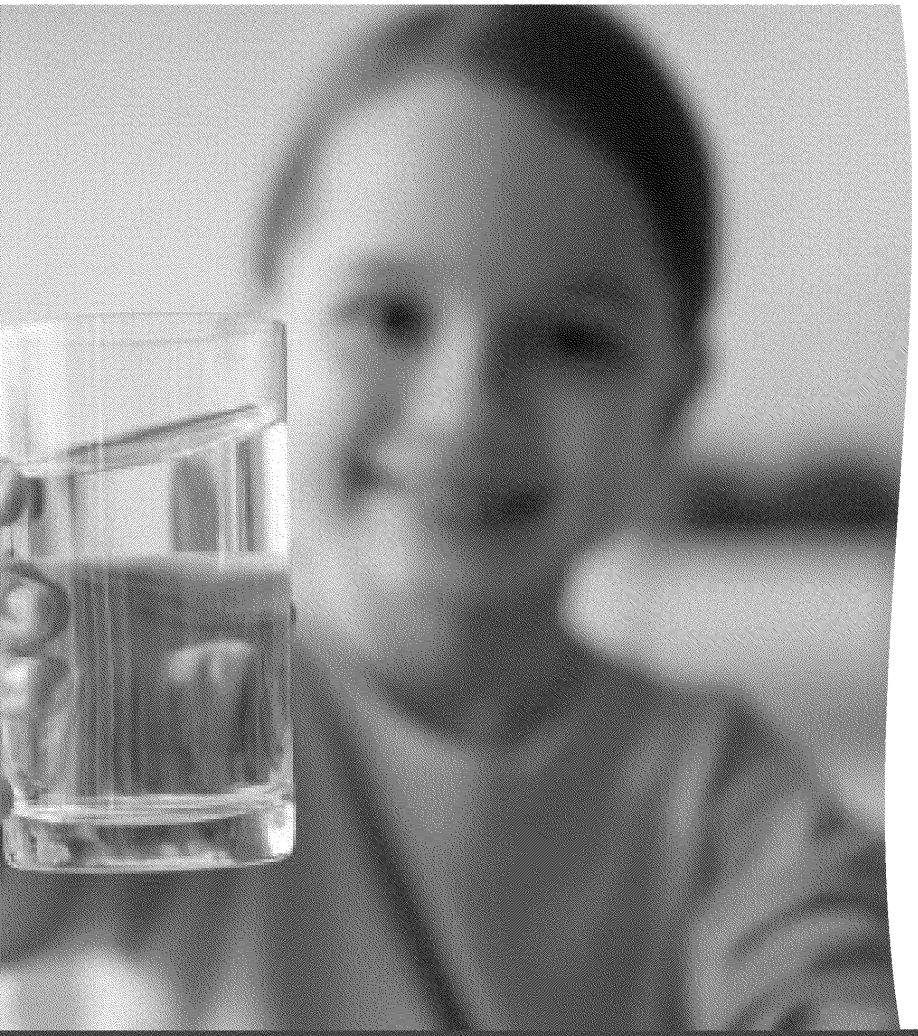
Final PFAS National Primary Drinking Water Regulation

March 12, 2025

PFAS in Drinking Water

- Certain PFAS cause a variety of health effects, including multiple cancers, heart disease and strokes, and developmental effects, in addition to effects on most other systems in the human body
- Technologies are available that remove PFAS from water
- The PFAS drinking water rule sets feasible limits that consider costs and benefits





Regulatory Determinations for PFAS

- EPA's 2019 PFAS Action Plan committed the Agency to make regulatory determinations for PFOA and PFOS in drinking water.
- EPA proposed regulatory determinations for PFOA and PFOS in 2020, finalizing them in early 2021.
  - EPA proposed and then committed to "making regulatory determinations in advance of the next SDWA deadline for additional PFAS" when health, occurrence, and other information were available.
- EPA made regulatory determinations for four additional PFAS concurrently with the proposed (2023) and final (2024) PFAS drinking water regulation.

PFAS Standards: Summary

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

Costs and Benefits

	How Much?	What From?	The Potential Impact
Costs	$1.5 Billion per year	Monitoring, communicating with customers, and if necessary, obtaining new or additional sources of water or installing and maintaining treatment technologies.	States, Tribes, and territories with primacy will have increased oversight and administrative costs. **66,000 regulated water systems** will have to conduct monitoring and notifications. **4,100 – 6,700 water systems** may have to take action to reduce levels of PFAS.
	Non-quantified*	Costs for some systems to comply with the Hazard Index, HFPO-DA, and PFNA MCLs.	
Benefits	$1.5 Billion per year	The rule results in fewer cancers, lower incidence of heart attacks and strokes, and fewer birth weight-related deaths. Benefits will prevent over **9,600 deaths and reduce approximately 30,000 serious illnesses.**	**83 – 105 million people** will have improved drinking water as a result of lower levels of PFAS
	Non-quantified*	Increased ability to fight disease, reductions in thyroid disease and impacts to human hormone systems, reductions in liver disease, and reductions in negative reproductive effects such as decreased fertility. Actions taken to implement the rule may also lead to associated health benefits from reductions in other PFAS and unregulated disinfection byproducts	

***Non-quantified benefits and costs are those that EPA could not assign a specific number to as part of its national level quantified analysis. EPA determined that the benefits of the rule justified the costs.**

PFAS Rule – Built-in Burden Reduction / Flexibilities

- Compliance is based on a running annual average
  - Single result above MCL is not an automatic violation
  - Results below the quantitation limit are considered to be zero
  - Annual average is rounded to determine compliance
- Provisions to reduce the monitoring burden
  - Systems may use previously collected drinking water data for initial monitoring
  - Small groundwater systems are only required to collect two samples for initial monitoring
  - Systems may reduce the monitoring frequency based on sampling results
- 2-year extension to the typical 3-year deadline to comply with the PFAS MCLs
  - Provides time for systems until 2029 to plan, design, and fund capital improvements
- Does not dictate how water systems must reduce PFAS levels the to meet MCLs

NGOs Perspectives on the PFAS Rule

- Support
  - PFOA and PFOS MCLs are readily achievable
  - Serious health risks from mixtures of PFAS
- Concerns
  - Consider all monitoring results with detectable levels of PFAS (rather than considering levels below quantitation limits as zero)
  - No reduced monitoring frequency
  - Require 24-hour public notification instead of 30 days for MCL violations
  - Lower MCLGs to address children's risks
  - Use the authority of other statutes to control PFAS chemicals and other drinking water contaminants at the source

Water Associations' Perspective on the PFAS Rule

- Supported
  - Two-year capital improvements extension for MCL compliance
  - Reduced monitoring frequencies and use of previously collected monitoring data
  - 30 day public notification for MCL violations
- Concerns
  - Water systems are "passive receivers" and should not be responsible for the cost to remove PFAS
  - EPA should not issue concurrent regulatory determinations and proposed rule
  - MCLs for PFOA and PFOS are infeasible and should be higher
  - EPA should not issue a MCL to address a mixture of contaminants (hazard index)
  - EPA should not regulate HFPO-DA or PFNA
  - EPA underestimated number of systems impacted and the costs of rule

State Associations' Perspective on the PFAS Rule

- Supported
  - Two-year capital improvements extension for MCL compliance
  - Addressing PFAS in groups
  - Ability to use previously acquired data
  - Ability to reduce monitoring frequency
- Concerns
  - Funding insufficient to address needs (particularly for states and small systems)
  - Laboratory capacity to support rule monitoring is uncertain

Ex. 5 Deliberative Process (DP)

Consolidated Litigation in D.C. Circuit

- Petitioners
  - American Water Works Association, Association of Metropolitan Water Agencies, American Chemistry Council, National Association of Manufacturers, The Chemours Company
- Intervenors on behalf of EPA
  - Concerned Citizens of WMEL Water Authority Grassroots, Environmental Justice Task Force, Fight for Zero, Merrimack Citizens for Clean Water, Natural Resources Defense Council, Buxmont Coalition for Safe Water, Newburgh Clean Water Project, Clean Haw River, Clean Cape Fear
- Key Issues raised
  - EPA's use of concurrent process to issue NPDWR and regulatory determinations.
  - EPA's regulation of PFAS mixtures and use of the hazard index for MCL.
  - EPA's record to support its regulation of HFPO-DA and basis for MCLG and MCL.
  - EPA's assessment of the costs and benefits of the rule.
- Status: EPA filed a response brief. Case held in abeyance until April 8, 2025.

PFAS Success Strategy for Reducing Household Costs for Ratepayers

- Goal to ensure all water systems, especially small water systems, have affordable fit-for-purpose solutions that enable sustained operations and maintenance for the delivery of safe drinking water.
- Five prongs that together will support providing clean water to all Americans through innovation, cooperative federalism, and partnerships.

Prong One: Direct support through funding and technical assistance

- Direct technical assistance rooted in SDWA and the principles of cooperative federalism, such as that provided through the Water Technical Assistance (WaterTA) initiatives, strengthens states and utilities' ability to address PFAS contamination and protect public health.
- Deploy funding resources, like DWSRF and most notably, the Emerging Contaminants in Small or Disadvantaged Communities (EC-SDC) grant, to reduce the financial burdens on small systems in the most cost-effective manner feasible.

Prong Two: Evaluate innovative technologies and develop data-driven tools to support cost-effective decision making

- Evaluating, demonstrating, and advancing alternative technologies allows systems to choose smarter, more cost-effective solutions to reduce PFAS in drinking water, ensuring safer, cleaner water for all.
- With the right tools and information, decision-makers can make informed, cost-effective choices that streamline technology adoption and future operations & maintenance costs while reducing financial burdens.

Prong Three: Share PFAS tools and understanding nationally

- Host a national convening through a cross-sector partnership between EPA, states, utilities, and technology industries that will enable the agency to refine its implementation tools and deliver information on the latest technological innovations based on real-world insights to support sound operational decision-making.
- Following the national convening, EPA can host regional technology workshops, in partnership with states and technical assistance providers such as the National Rural Water Association (NRWA) and Rural Community Assistance Partnership (RCAP), to pave the way for scalable, cost-effective PFAS removal strategies that ensure cleaner, safer drinking water for all.

Prong Four: Highlight SDWA Compliance Flexibilities

- SDWA section 1416(a) provides for exemptions that allow eligible systems additional time to achieve compliance
  - All systems that meet the minimum criteria are eligible for an exemption of up to three years (until 2032).
  - Further, for small systems serving populations of 3,300 or fewer, exemptions can provide up to six additional years (until 2038) to achieve MCL compliance.
- EPA can provide guidance and share best practices for states to:
  - Assess compelling factors that make a system unable to comply or develop an alternative source of water supply by 2029
  - Determine if an exemption poses an "unreasonable risk to health"

Prong Five: Prevent PFAS Pollution at the Source

- Industrial discharges are one of the primary sources of PFAS in surface water.
- Regulating industrial sources of PFAS puts the financial responsibility on the polluter and not municipalities.
- In January 2021, the EPA announced its intent to regulate facilities engaged in PFAS manufacturing to limit PFAS discharges to surface waters.

Ex. 5 Deliberative Process (DP)

Next Steps

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