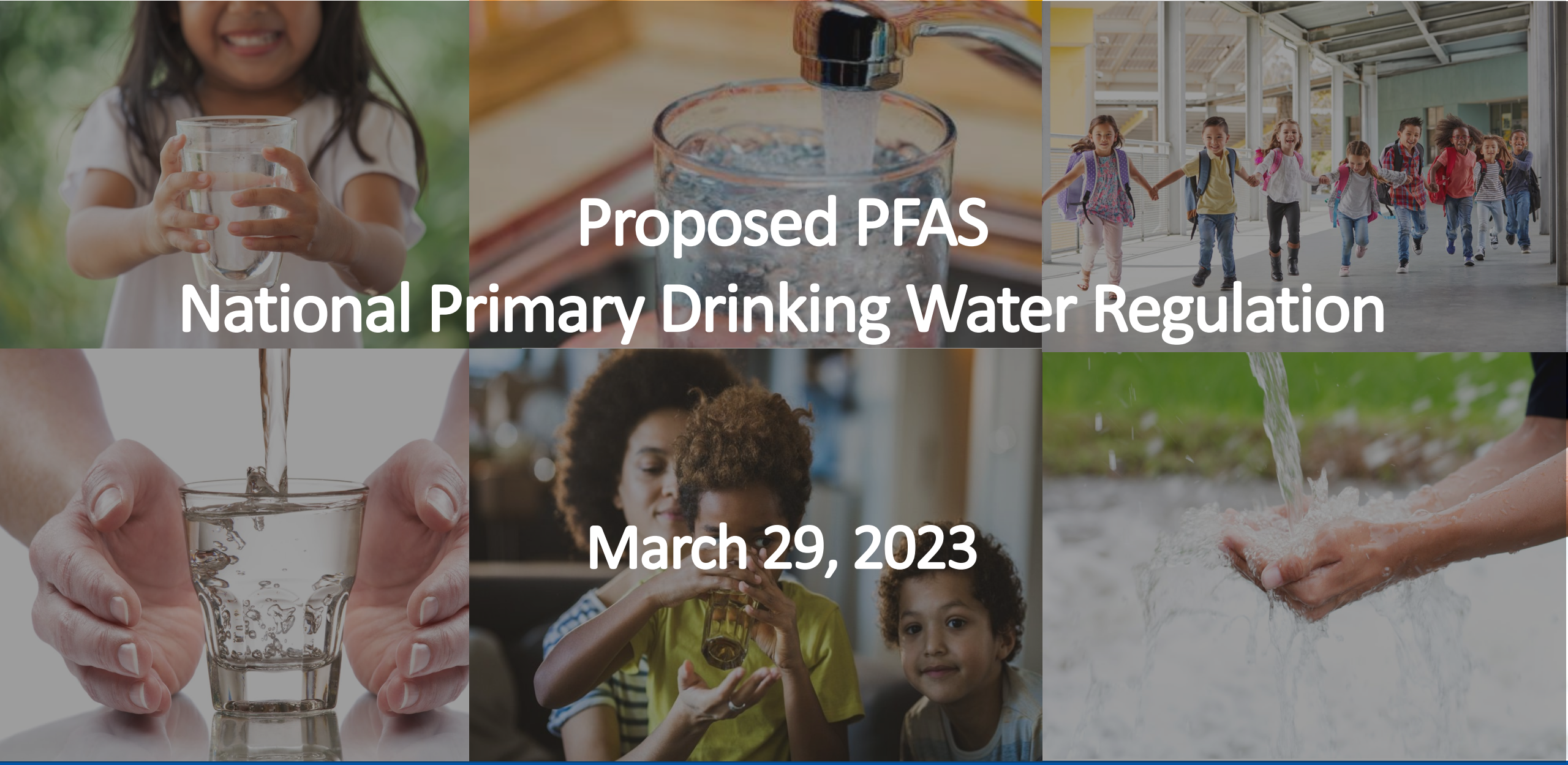


Proposed PFAS National Primary Drinking Water Regulation

March 29, 2023

United States Environmental Protection Agency

Office of Water

PFAS Background

- PFAS are a category of manufactured chemicals that have been used in industry and consumer products since the 1940s.
- PFAS have characteristics that make them useful in a variety of products, including nonstick cookware, waterproof clothing, and firefighting foam, as well as in certain manufacturing processes.
- PFAS tend to break down extremely slowly in the environment and can build up in people, animals, and the environment over time.
- Even though some specific PFAS have been largely phased out due to health and environmental concerns, they may still be found in the environment and in drinking water.

PFAS Background

- We now know that over a long time PFAS may:
  - Lead to negative health effects on pregnant people and in developing babies
  - Weaken a body's ability to fight disease
  - An increased risk for some cancers, liver damage
  - Elevated cholesterol levels (which can increase the risk for heart attack or stroke)
- PFAS can enter drinking water in many ways, including discharges to rivers and lakes from manufacturing and processing facilities, as well as during industrial and commercial use. Areas can also be exposed due to proximity to industrial sites, airports, military installations, and other sites where PFAS have been produced or used.
- Drinking water is one of several ways people may be exposed to PFAS.
- Different PFAS are often found together and in combinations (or mixtures) in drinking water and the environment.
- EPA is acting to protect people's drinking water and reducing our exposure to PFAS, can lower our risk for these health effects.

What is a National Primary Drinking Water Regulation?

- An NPDWR establishes enforceable standards, such as Maximum Contaminant Levels (MCLs), which apply to public water systems.
- EPA must promulgate an NPDWR if the Agency determines after considering public comment that a contaminant:
  - May have adverse health effects;
  - Occurs or is substantially likely to occur in public water systems frequently at levels of concern; and
  - There is a meaningful opportunity for health risk reduction for persons served by public water systems.
- A public water system provides water for human consumption to at least 15 connections or serves an average of at least 25 people for at least 60 days a year.
  - EPA is proposing that the PFAS NPDWR will not apply to transient systems.

EPA's Regulatory Determinations for PFAS

- EPA issued final regulatory determinations for PFOA and PFOS in March 2021. As a part of that action, EPA stated it would continue to evaluate additional PFAS to consider regulatory actions for other PFAS as supported by the best available science.
- EPA is requesting comment on preliminary determinations to regulate PFHxS, PFNA, PFBS, HFPO-DA (commonly referred to as GenX Chemicals), and mixtures of these four PFAS.
- Concurrent with these preliminary regulatory determinations, EPA is proposing an NPDWR for these four PFAS as well as for PFOA and PFOS.

Overview of NPDWR Development Process

Evaluate Data Availability

What are the best available, peer-reviewed science and supporting studies?

Establish MCLG

What is the level at which no known or anticipated adverse effects on the health of persons occur and which allows for an adequate margin of safety?

Develop Rule Analyses

Develop a health risk reduction and cost analysis and determine what are the impacts of policy alternatives?

Set Standard as Close as Feasible to MCLG

What is the regulatory standard that may be achieved with the use of best available technologies taking cost into consideration?

Benefit-Cost Determination

Are the benefits justified by the costs?

Stakeholder Input During Development of Proposed PFAS NPDWR

- To inform the proposed NPDWR, EPA gathered input from several stakeholder groups and public meetings including:
  - Local, state, and tribal governments and officials
  - Public drinking water systems,
    - Small system representatives to the Small Business Advocacy Review Panel
  - Science Advisory Board
  - National Drinking Water Advisory Council
  - Public meetings on environmental justice considerations

EPA's Proposed Action for the PFAS NPDWR

- EPA is proposing health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for six PFAS.
  - PFOA and PFOS as individual contaminants, and
  - PFHxS, PFNA, GenX Chemicals, and PFBS as a PFAS mixture
  - MCLGs are the maximum level of a contaminant in drinking water where there are no known or anticipated negative health effects allowing for a margin of safety.
- EPA is proposing an NPDWR to establish legally enforceable MCLs for these six PFAS in drinking water.

Proposed PFOA and PFOS MCLGs Considerations

- To establish the MCLGs for PFOA and PFOS, EPA assessed the peer reviewed science examining cancer and noncancer health effects associated with oral exposure.
- Consistent with SDWA statutory definition of an MCLG, EPA establishes MCLGs of zero for carcinogens classified as *Carcinogenic to Humans* or *Likely to be Carcinogenic to Humans* where there is insufficient information to determine that a carcinogen has a threshold dose below which no carcinogenic effects have been observed.
- Under the EPA Guidelines for Carcinogen Risk Assessment, EPA reviewed the weight of the evidence and determined that PFOA and PFOS are *Likely to Be Carcinogenic to Humans*.
  - For PFOA, this determination is based on the statistically significant evidence of kidney cancer in humans and Leydig cell tumors, pancreatic acinar cell tumors, and hepatocellular adenomas in rats.
  - For PFOS, this determination is based on the statistically significant evidence of potentially human relevant tumors, including hepatocellular tumors in male and female rats and pancreatic islet cell carcinomas in male rats.

Proposed Hazard Index PFAS Considerations

- To establish the proposed Health Based Water Concentrations (HBWCs) for PFHxS, PFNA, GenX Chemicals, and PFBS, which is the level below which no health effects are expected for that PFAS, EPA assessed the best available peer reviewed science with final toxicity values for noncancer health effects associated with oral exposure.
  - PFHxS HBWC is derived from a chronic reference value of 2E-06 mg/kg/d based on the Agency for Toxic Substances and Disease Registry (ATSDR) intermediate-duration oral Minimal Risk Level (MRL) of 2E-055 mg/kg/day for thyroid effects in male rats, with additional uncertainty factor of 10 to adjust for subchronic-to-chronic duration per agency guidance.
  - PFNA HBWC is derived from an ATSDR Intermediate-Duration Oral MRL 3E-06 mg/kg/d, which was based on development effects in mice.
  - GenX Chemicals HBWC is from an EPA 2021 human health toxicity assessment and derived from a reference dose (RfD) of 3E-06 mg/kg/d that is based on liver effects of mice following oral exposure.
  - PFBS HBWC is from an EPA 2021 human health toxicity assessment and derived from an RfD of 3E-04 mg/kg/d based on thyroid effects of newborn mice from mothers orally exposed to PFAS during gestation.

Highlights: Advice from the EPA Science Advisory Board

- EPA is committed to using the best available science to tackle PFAS pollution, protect public health, and harmonize policies that strengthen public health protections.
- EPA asked the Science Advisory Board (SAB) for advice and review of key scientific and technical information used to support the development of the proposed MCLGs and NPDWR.
  - Proposed Approaches to the Derivation of a Draft MCLGs for PFOA and PFOS in Drinking Water
  - EPA's Draft Framework for Estimating Noncancer Health Risks Associated with Mixtures of PFAS
  - EPA's Analysis of Cardiovascular Disease Risk Reduction as a Result of Reduced PFOA and PFOS Exposure in Drinking Water
- The SAB PFAS Review Panel convened and deliberated on the agency's charge question. Oral and written public comments were considered throughout the advisory process. The final SAB consensus report provided recommendations to EPA which the Agency considered for the proposed NPDWR (see EPA-SAB-22-008, August 22nd, 2022).

Highlights: Changes to Respond to SAB Recommendations

- PFOA and PFOS MCLG Approaches:
  - EPA improved transparency and completeness by adding further details about the methods, including a protocol; quantitative approaches (e.g., modeling); and rationales for decisions that all support the development of toxicity values.
  - EPA consistently implemented the evidence integration framework provided in the Integrated Risk Information System (IRIS) Handbook (EPA, 2022), including incorporation of mechanistic data.
  - EPA added a Weight of Evidence for Carcinogenicity section, based on the EPA Cancer Guidelines (EPA, 2005) to both assessments and tables outlining the evidence and rationale to support the cancer designations selected for PFOA and PFOS.
  - EPA considered other human toxicokinetic (TK) models and deriving internal dose points-of-departure (PODs) and provided detailed rationale on the selected TK approach.
- Hazard Index (HI) Approach:
  - SAB supported dose additivity as a health protective default assumption to assess potential health risks associated with exposure to PFAS mixtures. EPA added information to describe uncertainties associated with dose additivity, and deviations such as synergy or antagonism.

Proposed MCLs Considerations

- EPA is proposing MCLs as close as feasible to the MCLGs.
- For the feasibility determination, EPA considers factors including:
  - Availability of analytical methods: There are multiple methods available (EPA Methods 533 and 537.1) to reliably measure and quantify the six PFAS at or below their proposed MCLs.
  - Identification of treatment technologies: There are several treatment technologies available and currently in use to treat and remove the six PFAS to levels at or below their proposed MCLs.

EPA's Proposed Action for the PFAS NPDWR

Compound	Proposed MCLG	Proposed MCL (enforceable levels)
PFOA	0 ppt*	4.0 ppt*
PFOS	0 ppt*	4.0 ppt*
PFNA	1.0 (unitless) Hazard Index	1.0 (unitless) Hazard Index
PFHxS		
PFBS		
HFPO-DA (commonly referred to as GenX Chemicals)		

The Hazard Index is a tool used to evaluate potential health risks from exposure to chemical mixtures.

*ppt = parts per trillion (also expressed as ng/L)

What is a Hazard Index?

- The HI is a tool used to evaluate potential health risks from exposure to chemical mixtures, based on an assumption of dose additivity.
- EPA is proposing that water systems use this approach to limit any mixture containing one or more of PFHxS, PFNA, PFBS, and GenX Chemicals. The HI does not include PFOA and PFOS which are proposed for regulation as individual contaminants due to their likely carcinogenicity.
- To determine the HI, water systems would monitor and compare the amount of each of the four PFAS in drinking water to its associated HBWC, which is the level below which no health effects are expected for that PFAS. The proposed HBWCs are:

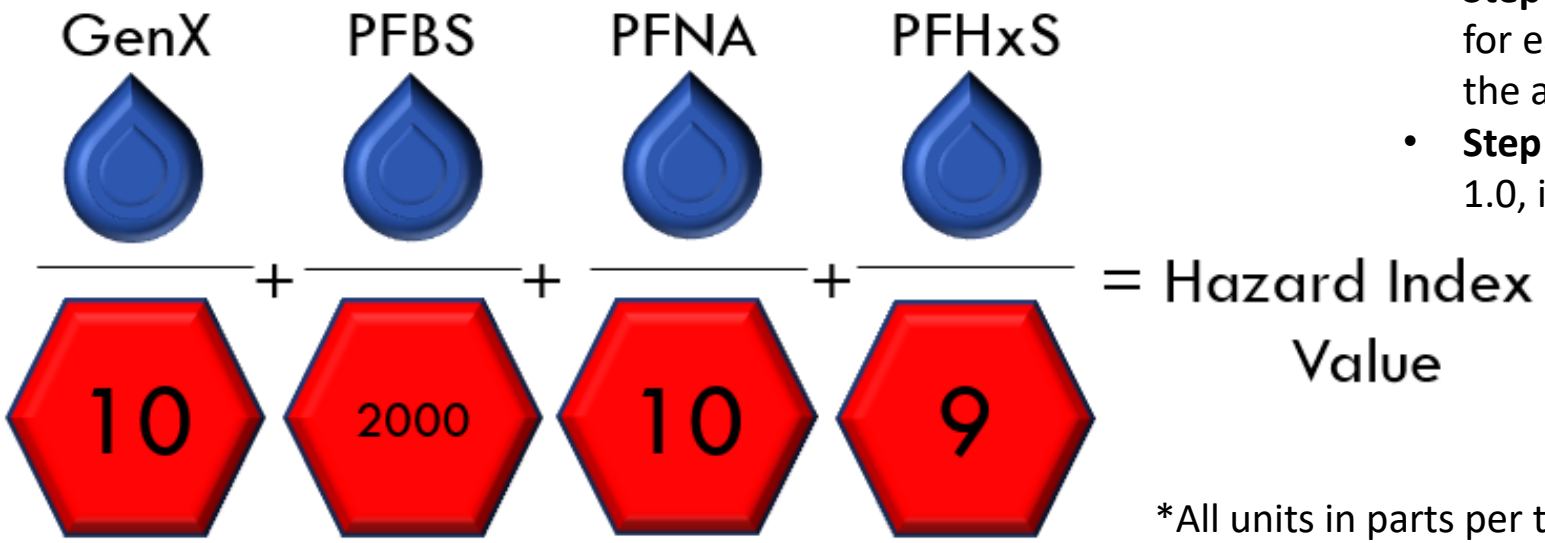
Compound	Proposed HBWC (ppt)
PFHxS	**9.0**
PFNA	**10**
PFBS	**2000**
HFPO-DA (commonly referred to as GenX Chemicals)	**10**

How do I calculate the Hazard Index?

The HI is used to understand health risks. For the PFAS NPDWR proposal, the HI considers the combined toxicity of PFNA, GenX Chemicals, PFHxS, and PFBS in drinking water.

What is a Hazard Index?

The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the level determined not to cause health effects (i.e., HBWC).



Steps:

- **Step 1:** Divide the measured concentration of **GenX** by the health-based value of **10 ppt***
- **Step 2:** Divide the measured concentration of **PFBS** by the health-based value of **2000 ppt**
- **Step 3:** Divide the measured concentration of **PFNA** by the health-based value of **10 ppt**
- **Step 4:** Divide the measured concentration of **PFHxS** by the health-based value of **9.0 ppt**
- **Step 5:** Add the ratios from steps 1, 2, 3, and 4 together
- **Step 6:** To determine HI compliance, repeat steps 1-5 for each sample collected in the past year and calculate the average HI for all the samples taken in the past year
- **Step 7:** If the running annual average HI greater than 1.0, it is a violation of the proposed HI MCL

*All units in parts per trillion (ppt)

Hazard Index MCL Calculation Examples

GenX Chemicals	PFBS	PFNA	PFHxS	HI

- **Example 1** – Exceedance of proposed Hazard Index MCL

$$\left(\frac{[5\ \text{ppt}]}{[10\ \text{ppt}]}\right) + \left(\frac{[200\ \text{ppt}]}{[2000\ \text{ppt}]}\right) + \left(\frac{[5\ \text{ppt}]}{[10\ \text{ppt}]}\right) + \left(\frac{[9\ \text{ppt}]}{[9.0\ \text{ppt}]}\right) = \mathbf{2.1}$$

- **Example 2** – Exceedance of proposed Hazard Index MCL

$$\left(\frac{[0\ \text{ppt}]}{[10\ \text{ppt}]}\right) + \left(\frac{[200\ \text{ppt}]}{[2000\ \text{ppt}]}\right) + \left(\frac{[2\ \text{ppt}]}{[10\ \text{ppt}]}\right) + \left(\frac{[7\ \text{ppt}]}{[9.0\ \text{ppt}]}\right) = \mathbf{1.1}$$

- **Example 3** – Exceedance of proposed Hazard Index MCL

$$\left(\frac{[12\ \text{ppt}]}{[10\ \text{ppt}]}\right) + \left(\frac{[0\ \text{ppt}]}{[2000\ \text{ppt}]}\right) + \left(\frac{[0\ \text{ppt}]}{[10\ \text{ppt}]}\right) + \left(\frac{[0\ \text{ppt}]}{[9.0\ \text{ppt}]}\right) = \mathbf{1.2}$$

- **Example 4** – Meets proposed Hazard Index MCL

$$\left(\frac{[0\ \text{ppt}]}{[10\ \text{ppt}]}\right) + \left(\frac{[100\ \text{ppt}]}{[2000\ \text{ppt}]}\right) + \left(\frac{[4\ \text{ppt}]}{[10\ \text{ppt}]}\right) + \left(\frac{[3\ \text{ppt}]}{[9.0\ \text{ppt}]}\right) = \mathbf{0.8}$$

EPA's Proposed Action for the PFAS NPDWR

- The proposed rule would require public water systems to:
  - Monitor for these PFAS;
  - Notify the public of the levels of these PFAS; and
  - Reduce the levels of these PFAS in drinking water if they exceed the proposed standards.
- EPA is requesting comment on the proposed rule.
- EPA is also requesting comment on its preliminary determinations to regulate PFHxS, PFNA, PFBS, GenX Chemicals, as well as mixtures of these four PFAS.
- This action is not final and does not require any actions until after EPA considers public input and finalizes the regulation.
- EPA anticipates that if fully implemented the rule will prevent tens of thousands of serious PFAS-attributable illnesses or deaths.

Proposed NPDWR Monitoring Requirements

- EPA's proposed requirements are based on EPA's Standardized Monitoring Framework for both initial and ongoing compliance monitoring of regulated PFAS to ensure that drinking water is not above MCLs.
- Initial monitoring must be completed in the three years between the rule promulgation date (anticipated end of 2023) and the rule effective date (anticipated end of 2026). Proposed initial monitoring requirements to establish baseline PFAS levels include any combination of:
  - Two or four samples collected at public water systems over one year, dependent on system population size and system type
  - Use of recent, previously acquired PFAS drinking water data from the fifth Unregulated Contaminant Monitoring Rule (UCMR 5), state-level drinking water occurrence monitoring, or other appropriate data collection program
- Initial monitoring results will determine the ongoing compliance monitoring requirements. Proposed ongoing compliance monitoring requirements include:
  - Quarterly monitoring as the normal frequency for all sampling locations
  - Reduced monitoring flexibility to once or twice every three years for sampling locations where the result is below 1/3 of the MCLs (i.e., rule trigger level)
- A system is in violation if monitoring results (based on running annual averages) exceed one of the MCLs.

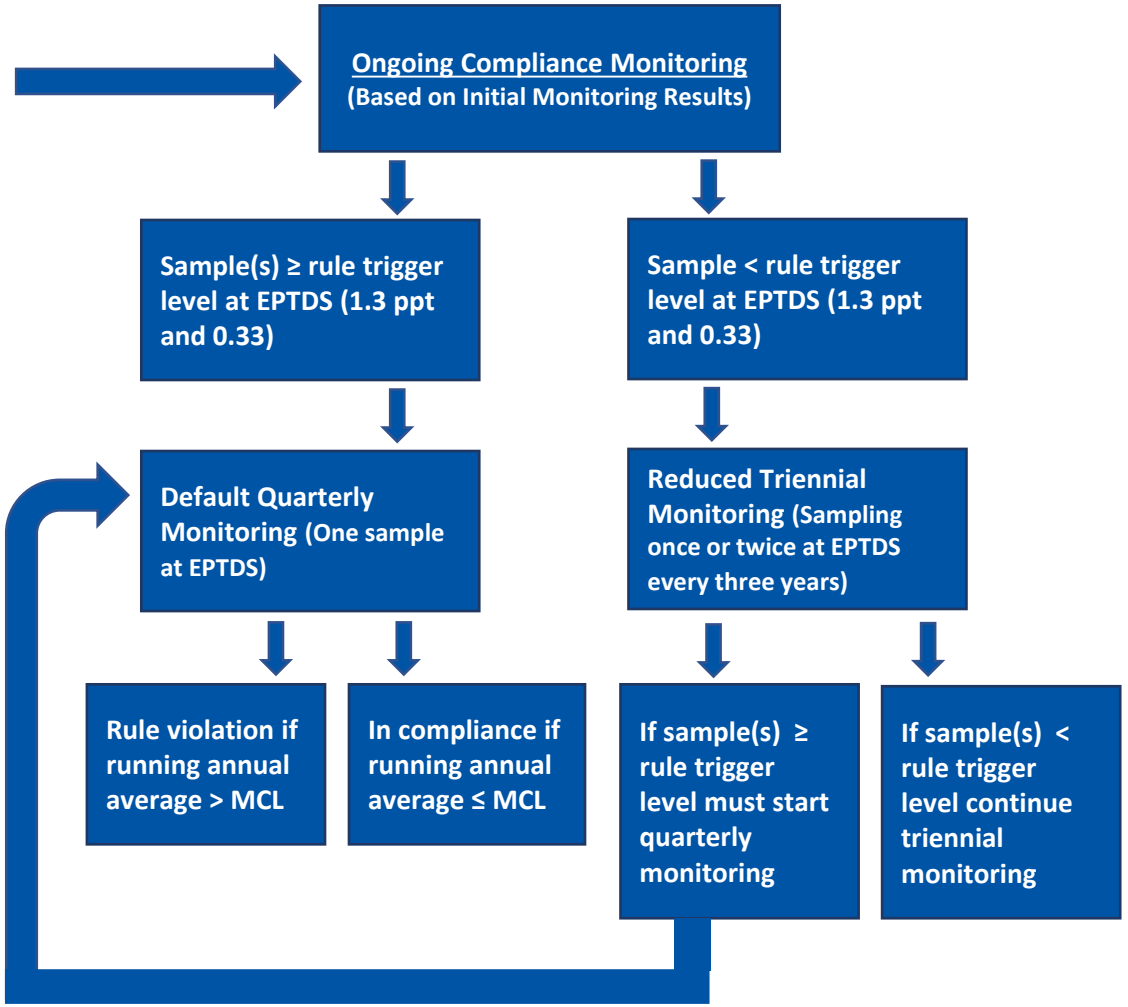
Proposed NPDWR Monitoring Requirements

Initial Monitoring

- Four quarterly samples within a 12-month period for ground water systems serving greater than 10,000 and all surface water systems
- Two semi-annual samples within a 12-month period for ground water systems serving 10,000 or fewer

AND/OR

- Use of recent, existing PFAS drinking water occurrence data



Rule Trigger Levels (1/3 Proposed MCLs)

- **PFOA and PFOS = 1.3 ppt**
- **Hazard Index PFAS = 0.33**

*** EPTDS = Entry point to the distribution system**

Proposed NPDWR Monitoring Requirements

- EPA used Practical Quantitation Levels (PQLs) for the six PFAS proposed for regulation in determining the proposed MCLs. PQLs are the lowest concentration of a contaminant that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.
- The proposed rule trigger levels are set at levels that are useful in determining whether the contaminant is present in a sample rather than to determine its specific concentration.
- EPA is requesting comment on establishing the proposed rule trigger levels at 1/3 of the proposed MCLs and on alternative trigger levels such as 1/2 of the proposed MCLs.

Proposed NPDWR Public Notification Requirements

- EPA is proposing that public water systems be required to issue public notification to customers if the levels of regulated PFAS exceed the proposed PFAS NPDWR.
- Under the Public Notification Rule, EPA is proposing the PFAS NPDWR as a "Tier 2" notification.
  - This would require notice as soon as possible, but within 30 days of the violation.
- EPA is proposing that community water systems be required to include PFAS information in the Consumer Confidence Report distribution to customers including:
  - The level of the regulated PFAS that is measured in their drinking water.
  - The potential health effects of the regulated PFAS detected in violation of the PFAS NPDWR.

PFAS Drinking Water Treatment Technologies

- Water systems with regulated PFAS above their proposed MCLs will be required to install treatment or take other action to reduce regulated PFAS levels in their drinking water and meet MCLs.
- As proposed, the rule would allow water systems the flexibility to determine the best actions and approaches to their specific situation.
- EPA evaluated technologies and has studies that demonstrate effective removal of all regulated PFAS. EPA has identified the following as best available technologies:
  - Granular activated carbon(GAC)
  - Anion Exchange (AIX)
  - Nanofiltration (NF) and Reverse Osmosis (RO)
- Some water systems may be able to reduce PFAS levels without installing treatment by using an alternative source of water that does not have PFAS contamination.

PFAS Drinking Water Treatment Technologies

- EPA conducted an extensive review of available PFAS removal treatment literature in EPA's Drinking Water Treatability Database and detailed in EPA's proposed rule support documents. The available data includes hundreds of studies conducted in the laboratory, in the field at pilot scale, and in full-scale application.
- Based on the best available science, EPA found that all of the best available technologies (GAC, AIX, RO, and NF) can exceed treatment removal efficiencies > 99% and can achieve concentrations below analytical detection limits.
- These technologies can also co-remove PFAS. For example, PFHxS is removed approximately as well as PFOA.

PFAS Drinking Water Treatment Technologies

Broad Considerations

- **“Longer Chain” PFAS are typically easier to remove**
- **Site specific footprints**
- **Formation from precursors**
- **GAC, AIX, RO, and NF can also remove other PFAS, disinfection byproducts, pesticides, certain heavy metals, and may help control for taste and odor.**
- **These technologies have been demonstrated to reduce PFAS concentrations to at or below current PFAS analytical quantitation limits in drinking water.**

PFAS Treatment Residuals and Disposal

- EPA evaluated actions that public water systems must take to dispose of treatment residuals that contain PFAS.
- EPA has developed interim guidance for the destruction and disposal of PFAS and PFAS-containing materials from some products, including spent drinking water treatment media.
- EPA is aware that actions resulting from other environmental statutes (e.g., Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)) may impact future drinking water treatment and disposal options.
  - As part of the proposed PFAS NPDWR, EPA has considered the costs of various disposal options for drinking water treatment residuals that contain PFAS.
- EPA is prioritizing research on PFAS disposal options in different environmental media and best management practices.

Economic Analysis for the Proposed Rule

- Benefits are assessed as avoided cases of illness and deaths associated with exposure to the six PFAS in the NPDWR. EPA's benefits analysis considered the strength of evidence for each effect and the availability of data to quantify the associated morbidity and mortality impacts.
- Costs are assessed as the expenses incurred by public water systems to monitor for the six PFAS included in the NPDWR, install and operate treatment technologies, inform consumers, and perform record-keeping and reporting responsibilities. State (or primacy agency) costs are assessed as expenses incurred to administer and implement the rule.
- EPA used the best available science and peer reviewed models to complete the economic analysis for the proposed rule. **The Administrator has determined that the benefits of this proposed regulation justify the costs.**

National Benefits Summary

- EPA has quantified some of the reduced adverse health effects expected from the proposed rule including kidney cancers, heart attacks, strokes, and developmental (birth weight) effects. EPA relied on the assessment of adverse health effects of PFOA and PFOS in the MCLG documents to inform the benefits analysis.
- EPA anticipates significant additional benefits beyond those that EPA has quantified associated with the following adverse health effects:
  - Immune
  - Developmental
  - Cardiovascular
  - Hepatic
  - Carcinogenic
  - Endocrine
  - Metabolic
  - Reproductive
  - Musculoskeletal

Annualized Quantified Rule Benefits (i.e., per year)	3% Discount Rate	7% Discount Rate
	$1.23 billion	**$908 million**

National Costs Summary

- EPA expects roughly 66,000 water systems to be subject to the rule, with approximately 3,400-6,300 systems anticipated to exceed one or more MCL.
- EPA has estimated the costs of the proposed rule to public water systems associated with administration, monitoring, and treatment and costs to primacy agencies associated with rule implementation and administration.
- Public water system treatment cost estimates include capital, and yearly operation and maintenance costs over the period of analysis and are derived using peer-reviewed work breakdown structure models.

Annualized Quantified Rule Costs (i.e., per year)	3% Discount Rate	7% Discount Rate
	$772 million	**$1.20 billion**

- EPA also prepared a supplemental cost analysis that estimates the annual costs would increase by $30-$61 million per year if water systems are required to dispose of PFAS treatment as hazardous waste.

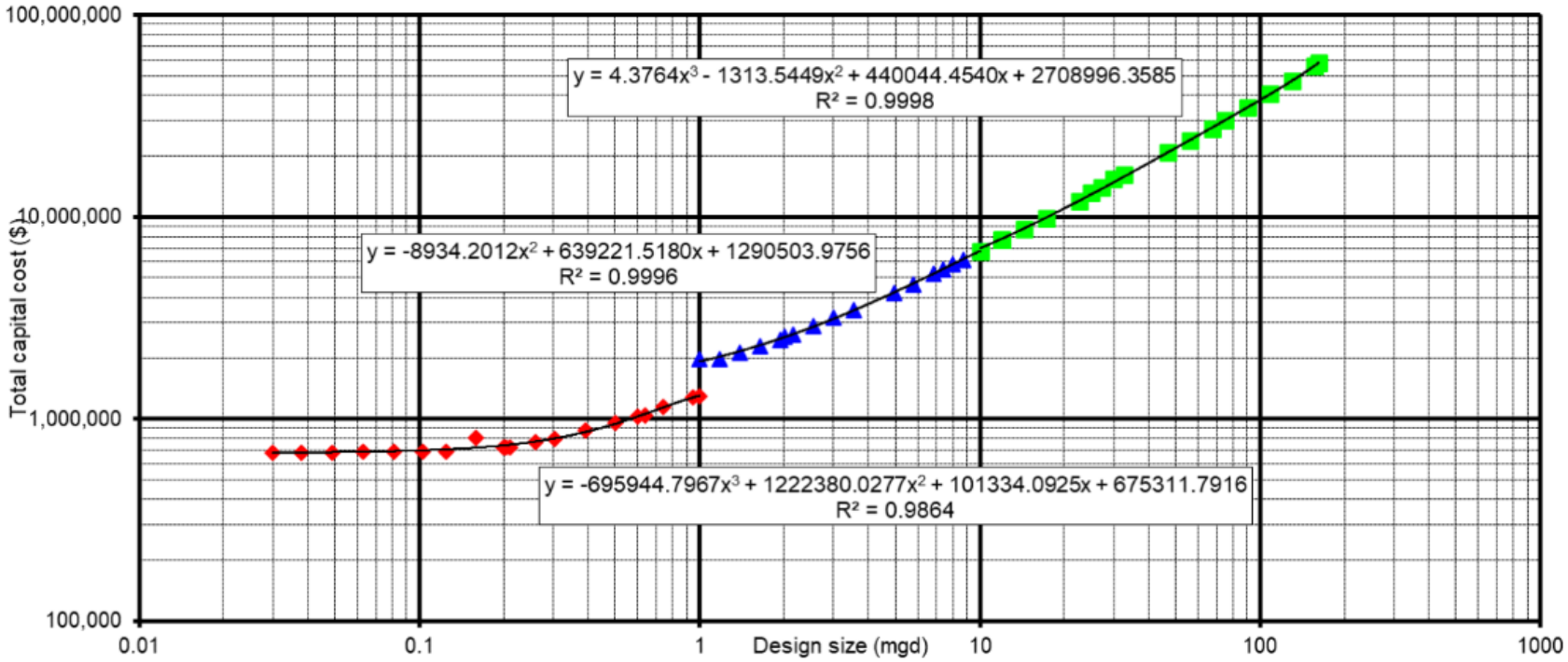
EPA appreciates additional information and will use input received in public comments to inform the economic analysis for the final rule.

Water System Treatment Costs

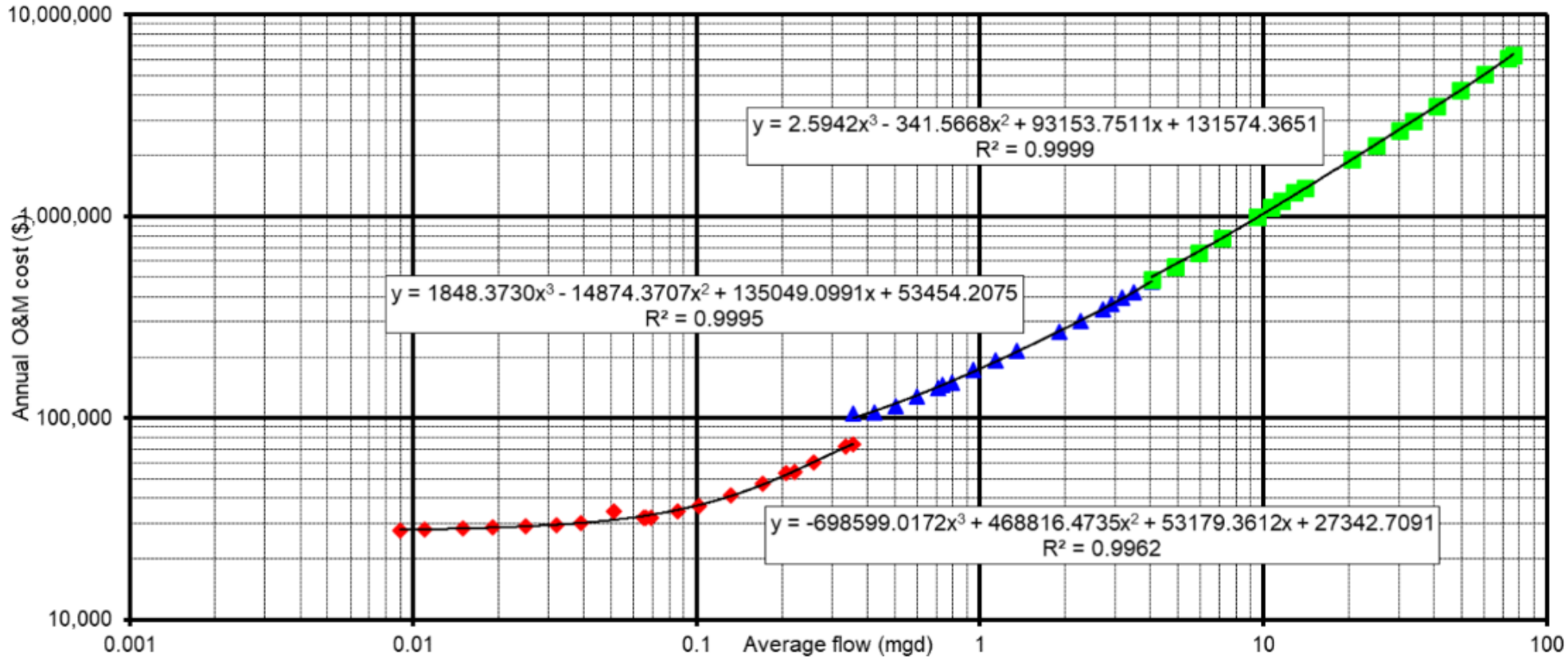
- EPA estimated annualized costs per year for water systems that treat or change water source.
  - Costs of system capital, operation, and maintenance are annualized.
- Quantified costs are estimated over a human lifetime (82 years) to be comparable to quantified benefits estimates.
- Costs factor in repairs and replacement of capital infrastructure at the end of its lifespan (variable, based on materials used; for example, useful life range of approximately 20-35 years for GAC capital).
- Costs differ based on treatment technology used.
- For more information, see USEPA (2023) Economic Analysis of the Proposed National Primary Drinking Water Regulation for Per- and Polyfluoroalkyl Substances. EPA-822-P-23-001.

Capital Cost Estimates

- EPA developed dozens of Work Breakdown Structure cost equations for treatment at surface and ground water systems across the range of bed life (5,000 to 150,000 BVs) and residuals management scenarios (hazardous and non-hazardous), including high, mid, and low-cost levels.
- The mid-level capital cost curve (right) estimates costs of removal of PFAS from surface water using GAC.
- These curves are used to inform the SafeWater model, which estimates national level treatment costs.



Operation and Maintenance Cost Estimates



Mid-level Cost Results for Removal of PFAS from Surface Water Using Gravity GAC ($2020)

Bipartisan Infrastructure Law Funding for PFAS

- The Bipartisan Infrastructure Law provides $9 billion to invest in drinking water systems specifically impacted by PFAS and other emerging contaminants.
  - $4 billion through the Drinking Water State Revolving Fund (DWSRF)
  - $5 billion through EPA's Emerging Contaminants in Small or Disadvantaged Communities Grant Program
- States and communities can also leverage an additional nearly $12 billion in BIL DWSRF funds dedicated to making drinking water safer.

Key Questions and Answers

QUESTION: My state (or tribe or territory) currently has a different safety level for these six PFAS other than EPA's proposed values. Why is this?

ANSWER: Some states have established drinking water regulations or guidance values for some PFAS prior to this proposed rule and have led the way in monitoring for and limiting some of these chemicals. The NPDWR proposed by EPA, if finalized, will provide a nationwide, health protective level for these six PFAS in drinking water. The rule reflects regulatory development requirements under the Safe Drinking Water Act (SDWA), including EPA's analysis of the best available and most recent peer-reviewed science; available drinking water occurrence, treatment and analytical feasibility information; and consideration of costs and benefits.

At this time, communities and water systems should follow all applicable current state requirements, recognizing that EPA's proposed rule does not require water systems to take any action at this time. When the final NPDWR goes into effect, states will be required to have a standard that is no less strict than the NPDWR – as SDWA requires.

Key Questions and Answers

QUESTION: What is the difference in this proposed PFAS drinking water regulation and the recently released drinking water health advisories for PFOA, PFOS, PFBS, and GenX Chemicals?

ANSWER: This is a proposed rule for public comment. It does not require any action for drinking water systems until the rule is finalized. Once the rule is finalized, water systems would have three years to be in compliance with the MCLs.

The proposed regulation includes MCLs which, if finalized, are legally enforceable regulatory drinking water standards. EPA establishes MCLs as close as feasible to the health-based, non-enforceable MCLG, taking into consideration the ability to measure and treat to remove a contaminant, as well as the costs and benefits.

Drinking water health advisories are different from MCLs and MCLGs. Each serves a different purpose. Health advisories are not regulatory and are not legally enforceable. Health advisories reflect EPA's assessment of health risks of a contaminant based on the best available science and provide advice and information on actions that water systems may take to address contamination for these and other PFAS. After EPA has considered public comments and issues a final NPDWR, EPA will decide whether to update or remove the interim health advisories for PFOA and PFOS and the final health advisories for PFBS and GenX Chemicals.

For more information on the health advisories, please visit https://www.epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfos.

Dates of Proposed Action for the PFAS NPDWR

- On March 14, 2023, Administrator Regan announced the Proposed PFAS National Primary Drinking Water Regulation (NPDWR).
  - The prepublication Federal Register Notice (FRN), technical health and Maximum Contaminant Level Goal (MCLG) documents, and the economic analysis were concurrently posted on EPA's PFAS NDPWR website on this date.
- The FRN was formally published in the Federal Register on March 29, 2023 (today). This also initiated the public comment period.
- Public commenters have until May 30, 2023, to provide comments.
- EPA is providing commenters with a 60+ day comment period, in addition to the 15 days when the documents posted to EPA's PFAS NDPWR website were made available for public review.

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Public Comment Period and Docket

- The public is invited to review the proposal and supporting information and provide their written input to EPA through the public docket.
- The public docket can be accessed at: www.regulations.gov under Docket ID: EPA-HQ-OW-2022-0114.
- Written comments must be submitted to the public docket within the public comment period which ends on **May 30, 2023.**
- For more information on submitting information EPA dockets: https://www.epa.gov/dockets/commenting-epa-dockets

Public Comment Period and Public Hearing

- During the public comment period, EPA will be holding a virtual public hearing on the proposed PFAS NPDWR on May 4, 2023, to listen to the public's views about the proposal.
- EPA invites members of the public to register and attend the hearing where there will also be an opportunity to make oral comments to EPA.
- Details on the public hearing, including registration, are available in the proposed rule preamble and on EPA's PFAS NPDWR website.
- EPA will consider both written and oral public comments equally in the development of the final NPDWR.

Additional Resources

- EPA PFAS NPDWR Website
- EPA PFAS Website
- EPA PFAS Strategic Roadmap
- EPA Basics of Regulatory Process Website
- EPA Get Involved in EPA Regulations Website
- EPA Commenting on EPA Dockets Website
- Regulations.gov
- FederalRegister.gov

PFAS NPDWR Key Milestones and Path Forward

- Final Regulatory Determinations for PFOA and PFOS: March 2021
- Preliminary Regulatory Determinations for PFHxS, PFNA, PFBS, GenX Chemicals, and their mixtures: March 2023
- Proposed PFAS NPDWR for PFOA, PFOS, PFHxS, PFNA, PFBS, and GenX Chemicals: March 2023
- Public Comment Period on Proposed PFAS NPDWR: March 29 – May 30, 2023
- Public Hearing on Proposed PFAS NPDWR: May 4, 2023
- Final PFAS NPDWR Promulgated: Anticipated December 2023
- PFAS NPDWR Effective Date: Anticipated December 2026 (three years following final rule promulgation)

EPA's PFAS NPDWR website:

https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas