

Regulatory Update: PFAS

JBCC CT Meeting

April 12, 2023



Overview

- PFAS Background
- SDWA Regulatory Process
- EPA's Proposed Regulation
- Additional Resources
- Key Milestones & Path Forward
- New Federal Funding Available



PFAS Background

- Manufactured chemicals used since the 1940s
- Used in manufacturing processes and are found in numerous products
 - nonstick cookware, waterproof clothing, & firefighting foam (AFFF)
- Break down extremely slowly
- Bioaccumulate in people, animals, and environment

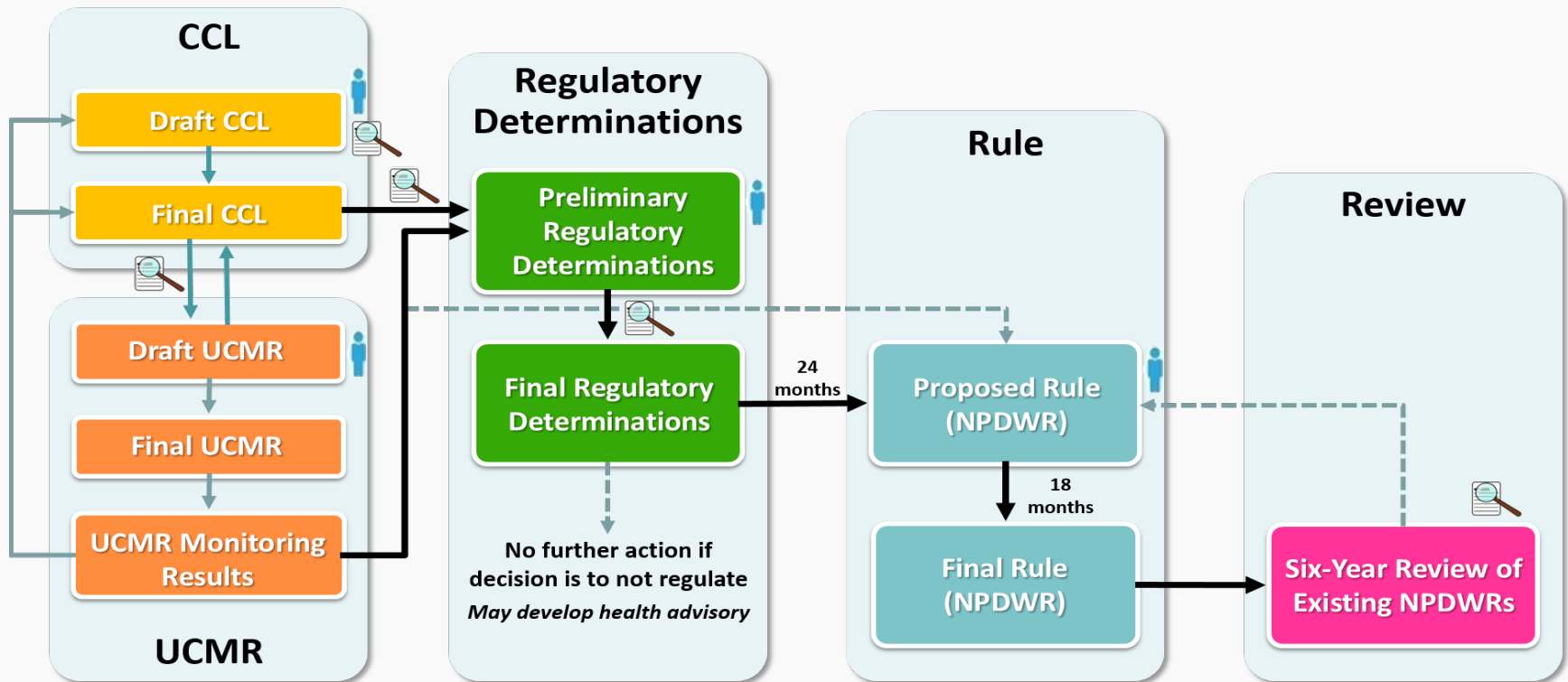


PFAS Background

- Over a long time PFAS may:
 - Impact health of pregnant women & developing babies
 - Weaken the ability to fight disease
 - Increase risk for some cancers
 - Cause liver damage
 - Elevate cholesterol levels
- Drinking water is only one exposure route.
- Often found in combinations in drinking water & the environment.

SDWA Regulatory Process

Public Review and Comment
 Research Needs Assessment





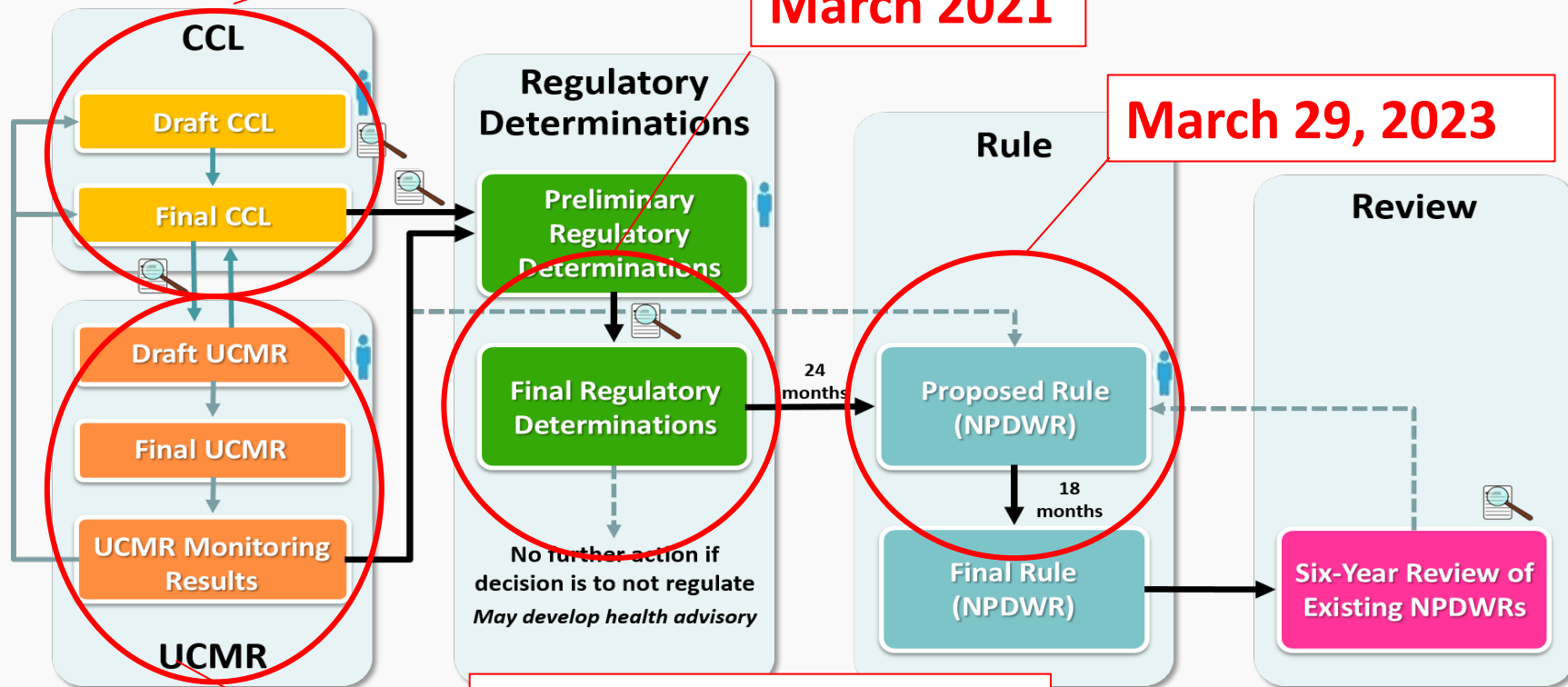
SDWA Regulations

CCL3 (2009)
CCL4 (2016)

Public Review and Comment
Research Needs Assessment

March 2021

March 29, 2023



UCMR3 (2013-2015)
UCMR5 (2023-2025)



EPA's Proposed Regulation

- All Community and Non-Transient Non-Community
- Proposing legally enforceable Maximum Contaminant Levels (MCLs) for six PFAS:
 - PFOA and PFOS as individual contaminants
 - And mixture of
 - PFHxS, PFNA, PFBS, & HFPO-DA (commonly referred to as GenX Chemicals)



EPA's Proposed Regulation

Compound	Proposed MCL (Enforceable Levels)
PFOA	4.0 ppt*
PFOS	4.0 ppt*
PFHxS	1.0 (unitless) Hazard Index
PFNA	
PFBS	
HFPO-DA (GenX Chemicals)	
*ppt = parts per trillion (also expressed as ng/L)	



What is a Hazard Index?

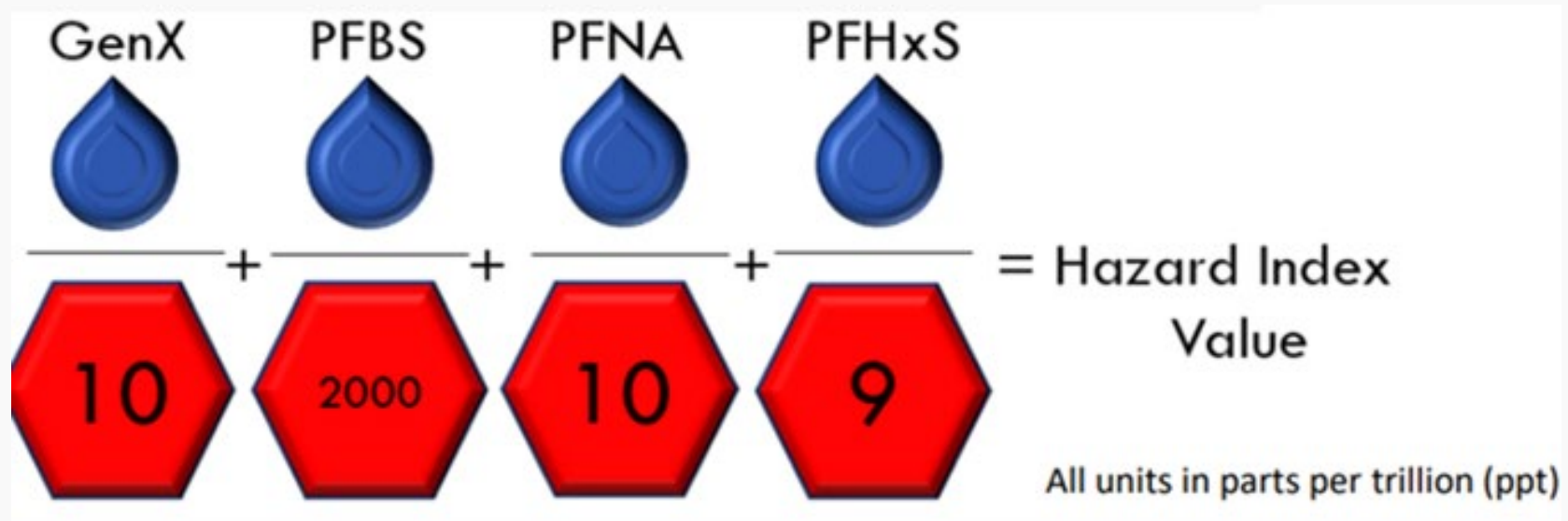
- Is used to evaluate potential health risks from exposure to chemical mixtures by considering their combined toxicity.
- Monitoring concentrations are compared to individual **Health-Based Water Concentration (HBWC)** - the level at which no health effects are expected for that PFAS.

Compound	Proposed HBWS (ppt)
PFHxS	9
PFNA	10
PFBS	2000
HFPO-DA (GenX Chemicals)	10



How do I calculate the Hazard Index?

The Hazard Index (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.





Proposed Monitoring Requirements

Sample at distribution system entry points

Initial Monitoring

Complete within 3 yrs. btw rule promulgation & effective dates
(anticipated late 2023 to 2026)

- SW systems monitor quarterly within a 12-month period
- GW systems > 10,000 monitor quarterly within a 12-month period
- GW systems \leq 10,000 monitor twice within a 12-month period; each sample at least 90 days apart
- Systems allowed to use previously acquired monitoring data to satisfy the initial monitoring (conditions apply).



Proposed Monitoring Requirements

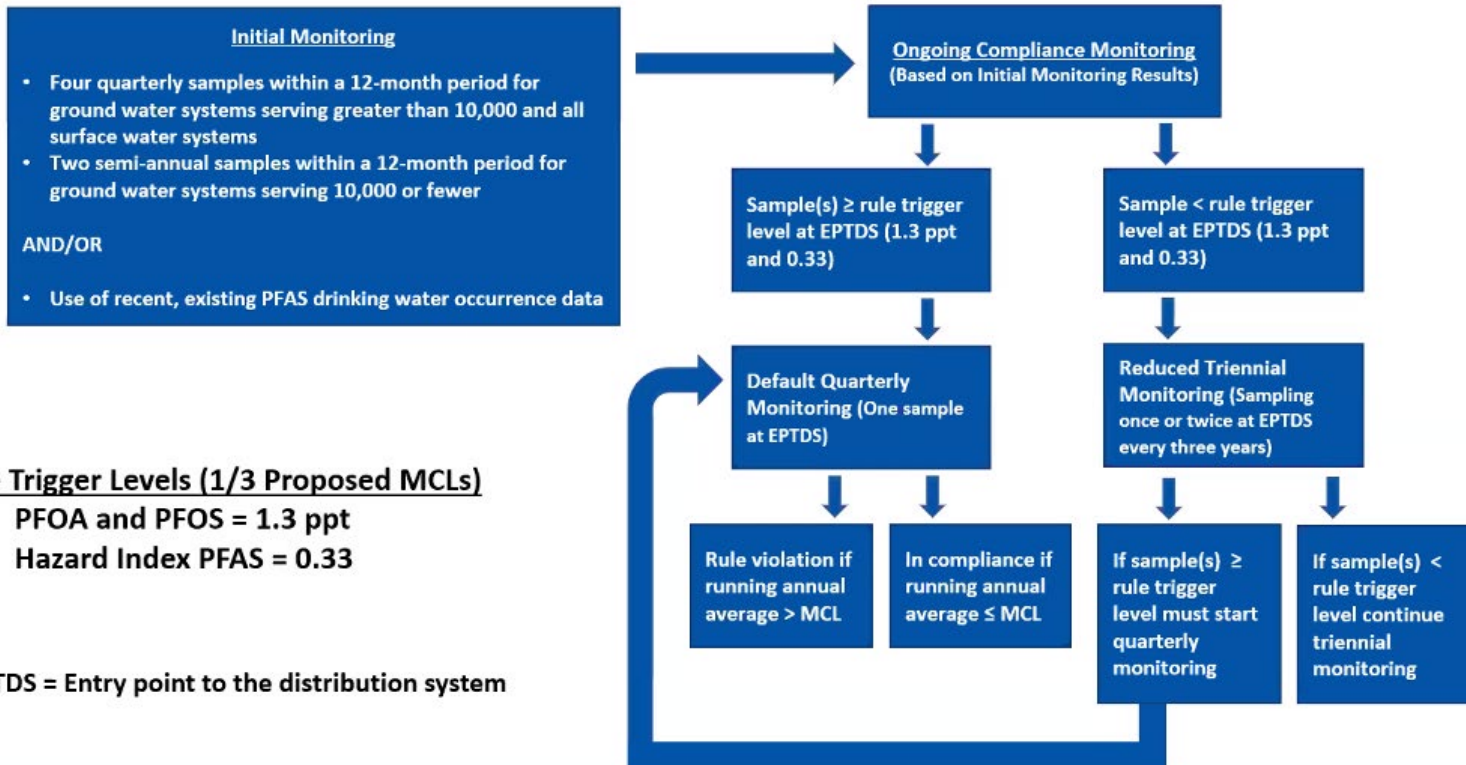
Ongoing Compliance Monitoring

- Based on initial monitoring results
- Quarterly monitoring for all sample locations (GW and SW)
- Reduced monitoring to 1x or 2x every 3 years for individual sample locations where the result is below 1/3 of the MCL (i.e., rule trigger level)
- Monitoring regime similar to SOCs

Violation if running annual average (RAA) exceeds the MCL.



Proposed NPDWR Monitoring Requirements





Proposed Public Notification Requirements

“Tier 2” Public Notification

- Issue if the MCL is exceeded
- As soon as possible, but within 30 days of violations

Consumer Confidence Report to include:

- PFAS detections
- Potential health effects language for MCL exceedances



Summary

- The proposed rule requires:
 - Monitoring for six PFAS;
 - Notifying the public of PFAS levels; and
 - Reducing levels if they exceed the proposed standards.
- This action is not final – no actions required until after EPA considers public input and finalizes the regulation.
- If implemented 10s of 1,000s of serious illnesses or deaths will be prevented.
- EPA is requesting comments
 - EPA is requesting comment on its preliminary determinations to regulate PFOA and PFOS.
 - EPA is also requesting comment on its preliminary determinations to regulate PFHxS, PFNA, PFBS, GenX Chemicals, as well as mixtures of these four PFAS. 15



Important Dates

- March 14, 2023: EPA announced proposal
- March 29, 2023: Federal Register Notice was formally published. This also initiated the public comment period.
- May 30, 2023: Public comment period closes



Public Comment Period & Hearing

- May 4, 2023 – virtual public hearing to hear oral public views on the proposal
 - Register at <https://www.eventbrite.com/e/proposed-pfas-npdwr-public-hearing-tickets-549335536377>
 - Submit Comments by May 30, 2023
 - Must include Docket ID No.: EPA-HQ-OW-2022-0114
 - Electronic: <https://www.regulations.gov/>
 - Mail: Environmental Protection Agency, EPA Docket Center, Office of Ground Water and Drinking Water Docket, Mail Code 2822IT, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
 - Hand Delivery or Currier



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

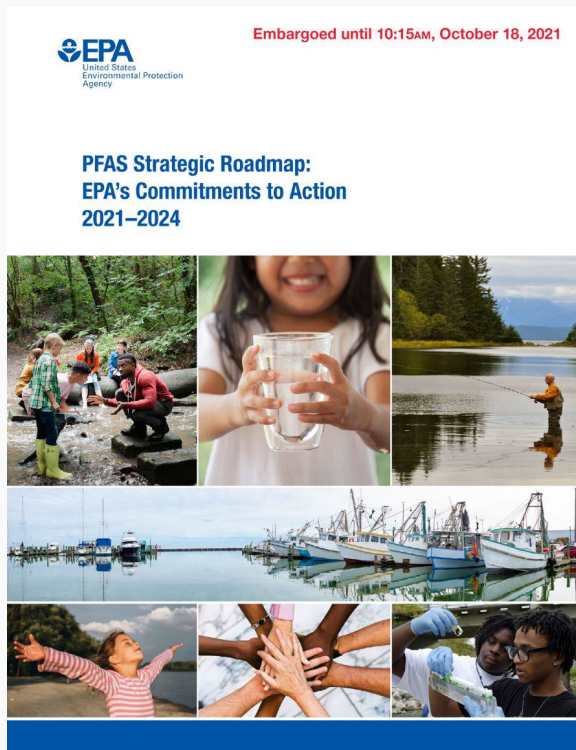
Public Hearing on Proposed PFAS NPDWR: May 4, 2023

Final PFAS NPDWR Promulgated: Anticipated December 2023

PFAS NPDWR Effective Date: Anticipated December 2026 (three years following final rule promulgation)



PFAS Strategic Roadmap



- Released October 2021
- Presents EPA's whole-of-agency approach to protect public health and the environment
- Focused on three goals:
 - Research
 - Restrict
 - Remediate
- Upcoming virtual listening session for New England communities to learn about and share feedback on EPA's PFAS Strategic Roadmap on **April 11, 2023**.
 - <https://pfascommunityengagement.org/register/>



Bipartisan Infrastructure Law (BIL) Funding

- BIL provides \$9B to DW systems impacted by PFAS & 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 & communities can also leverage an additional nearly \$12B in BIL DWSRF funds dedicated to making drinking water safer.



Thank you!

Denise Springborg, P.E.

Drinking Water Quality & Protection Section,
Chief

Springborg.Denise@epa.gov

617-918-1681