



# PROPOSED REGULATORY NOTIFICATION

## Summary of Proposed PFAS National Primary Drinking Water Regulation

April 18<sup>th</sup>, 2023

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Per- and polyfluoroalkyl substances (PFAS) are a group of synthetic chemicals that have been in use since the 1940s. The US Environmental Protection Agency (USEPA) was first alerted to the health hazards of toxic fluorinated chemicals in 1998. Last month, USEPA proposed a National Primary Drinking Water Regulation to set legally enforceable levels, called Maximum Contaminant Levels (MCLs), for six PFAS in drinking water.

The proposed regulation is summarized in the table below. The regulation proposes MCLs for PFOA and PFOS as individual contaminants. It also proposes a Hazard Index for four PFAS contaminants: PFHxS, PFNA, PFBS, and HFPO-DA (commonly referred to as GenX Chemicals). EPA establishes MCLs as close as feasible to the health-based, non-enforceable, Maximum Contaminant Level Goal (MCLG), taking into consideration the ability to measure and treat to remove a contaminant, as well as the costs and benefits.

The USEPA is taking public comments on the proposed rule until May 30, 2023. No action is required 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<sup>1</sup>.

### New USEPA Proposed MCLs (enforceable) and MCLGs (non-enforceable)

Compound <sup>2</sup>	Health Effect	Proposed MCLG	Proposed MCL
PFOA	Cancer	Zero	4.0 parts per trillion (ppt)
PFOS	Cancer	Zero	4.0 ppt
PFNA	Development Effects	1.0 (unitless)	1.0 (unitless)
PFHxS	Thyroid Effects		
PFBS	Thyroid Effects	Hazard Index	Hazard Index
HFPO-DA ( GenX Chemicals)	Liver Effects		

### Why did USEPA propose a Hazard Index for PFSxS, GenX Chemicals, PFNA, and PFBS?

USEPA is following recent peer-reviewed studies that indicate that mixtures of PFAS can pose a health risk greater than each chemical on its own. A Hazard Index helps to account for the increased risk from mixtures of PFAS by considering the different toxicities of PFNA, GenX Chemicals, PFHxS, and PFBS. For these PFAS, water systems would use a hazard index calculation to determine if the combined levels of these PFAS in the drinking water at that system pose a potential risk and require action.

### How is the Hazard Index for PFHxS, GenX Chemicals, PFNA, and PFBS calculated?

Water systems would use a calculator tool provided by EPA to easily determine their Hazard Index result. The tool performs the calculation explained below. For each of the four PFAS, the calculation first divides the results of the drinking water sample by the HBWC and then adds all the values for each PFAS. If the total value is greater than 1.0, it would be an exceedance of the proposed Hazard Index MCL as follows:

$$\text{Hazard Index} = \left( \frac{[\text{GenX}_{\text{water}}]}{[10 \text{ ppt}]} \right) + \left( \frac{[\text{PFBS}_{\text{water}}]}{[2000 \text{ ppt}]} \right) + \left( \frac{[\text{PFNA}_{\text{water}}]}{[10 \text{ ppt}]} \right) + \left( \frac{[\text{PFHxS}_{\text{water}}]}{[9.0 \text{ ppt}]} \right)$$

Where GenX<sub>water</sub> = monitored concentration of GenX

PFBS<sub>water</sub> = monitored concentration of PFBS

PFNA<sub>water</sub> = monitored concentration of PFNA

PFHxS<sub>water</sub> = monitored concentration of PFHxS



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### What are the next steps in the Rule-Making process?

Date	Activity
March 16, 2023	EPA Information Webinar “General Overview of Proposed NPDWR”
March 29, 2023	EPA Information Webinar “Technical Overview of Proposed NPDWR”
Late March / Early April	Publication of Federal Register
May 30, 2023	EPA Public Hearing on Proposed NPDWR
Late May / Early June 2023	End of 60-Day Public Comment Period
Anticipated December 2023	Final PFAS NPDWR Promulgated
PFAS NPDWR Effect. Date	Anticipated December 2026 (3 years following final rule promulgation)

### Where are PFAS in Illinois?

Illinois Environmental Protection Agency (IEPA) recently completed its statewide sampling to investigate the prevalence and occurrence of PFAS in finished drinking water at all community water systems (CWSs) in Illinois. A map of Illinois showing the sampling results can be found [here](#).

### How does the USEPA proposed rule compare to the IEPA Health Advisory?

During the PFAS investigation, Illinois EPA also issued Health Advisories for six PFAS chemicals. Health Advisories are issued when there is a detection of a chemical substance(s) harmful to human health for which no numeric groundwater standard(s) exists, and resampling confirms the presence in a community water supply well (35 Ill. Adm. Code 620.605). Health advisory guidance levels are informal, non-enforceable standards used to help guide responses to these detections. The below chart provides the health advisory guidance level for each chemical identified:

Compound <sup>2</sup>	IEPA Health Advisory Guidance Level (ppt)	USEPA Proposed MCL (ppt)
PFOA	2	4.0
PFOS	14	4.0
PFNA	21	Hazard Index of 1.0 (unitless)
PFHxS	140	
PFBS	2,100	
HFPO-DA (GenX Chemicals)	-	
PFHxA	560,000	-

### References:

1. [https://www.epa.gov/system/files/documents/2023-03/FAQs\\_PFAS\\_States\\_NPDWR\\_Final\\_3.14.23\\_0.pdf](https://www.epa.gov/system/files/documents/2023-03/FAQs_PFAS_States_NPDWR_Final_3.14.23_0.pdf)
2. <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>