

Article

PFAS in Water: Understanding the New EPA Drinking Water Rule

Montrose is committed to keeping you ahead of the curve as concerns over per- and polyfluoroalkyl substances (PFAS) continue to capture headlines and attention even in this deregulation environment. Over the coming months, we'll be rolling out a series of focused articles that delve into PFAS across five key media—Water, Waste, Air, Remediation, and Reporting—examining both the regulations in place today and the proposals on the horizon. In this installment, we'll sketch the broad regulatory landscape, share our perspective on what's next, and guide you through this evolving terrain.

As the previous administration's EPA sharpened its focus on PFAS occurrence, discharge limits, and reporting requirements, businesses now face a dynamic set of rules that vary by state, industry, and discharge pathway. Whether it's the new national primary drinking water standards under the Safe Drinking Water Act or proposed effluent guidelines for wastewater treatment plants, these developments can feel overwhelming. Our team continually monitors federal rulemakings, state-level initiatives, and enforcement trends so you don't have to—providing clear, actionable insight at every step.

PFAS IN WATER: REGULATIONS AND IMPACTS

How the New National Primary Drinking Water Rule Impacts Community Systems

Montrose has long recognized that water is the first—and often most critical—pathway for PFAS exposure. Under the Safe Drinking Water Act, EPA's finalized National Primary Drinking Water Rule will establish maximum contaminant levels (MCLs) for PFOA, PFOS, PFHxS, PFNA, HFPO-DA ("GenX"), and mixtures of PFHxS/PFNA/HFPO-DA/PFBS, with compliance required by 2031 (EPA has since stated it intends to re-evaluate PFHxS, PFNA, HFPDA-DA & the hazard-index mixture). As these enforceable limits take shape, community water systems must evaluate treatment upgrades, source-water protection plans, and monitoring strategies to ensure compliance. Montrose's team of hydrogeologists, chemists, and treatment-system designers has supported dozens of municipal and industrial clients through SDWA implementation—from pilot testing advanced adsorption systems to drafting operations plans that satisfy both federal and state requirements—so you can move forward with confidence.

Breaking Down PFAS Compliance: What Businesses Need to Know

To help you quickly reference the most recent federal actions affecting PFAS in water, here's a snapshot of the latest EPA initiatives:



DECEMBER 2024

Surface Water

Proposed 2026 Industrial Stormwater Multi-Sector General Permit (MSGP) with PFAS monitoring requirements; public comment extended



DECEMBER 18, 2024

Wastewater

Preliminary Effluent Guidelines Program Plan 16 (Preliminary Plan 16) notice



APRIL 2025

Drinking Water

Final National Primary Drinking Water Rule setting PFAS MCLS and health-based MCLGS



JUNE 30, 2025

Air

CAA Section 129 New Source Performance Standards for solid-waste incineration units

Surface Water

Draft MSGP adds PFAS sampling and analysis to stormwater monitoring. Operators must track PFAS in runoff and quarterly "report-only" indicator monitoring report per permit schedule.

Wastewater

Initiates discharge/treatment studies for PFAS in select industries (Battery Manufacturing; Centralized Waste Treatment; Oil & Gas Extraction). Data will inform forthcoming ELG rulemaking. EPA is also studying PFAS processors and Textile Mills and accepted comments through 17 Jan 2025.

Drinking Water

MCLs: 4 ppt (PFOA), 4 ppt (PFOS), 10 ppt (PFHxS), 10 ppt (PFNA), 10 ppt (HFPO-DA); HI = 1 for mixtures. MCLGs: 0 ppt (PFOA), 0 ppt (PFOS), 10 ppt (others); HI = 1 for mixtures (health based water concentrations (HBWCs) that go into the HI: PFHxS = 10 ppt, PFNA = 10 ppt, HFPODA = 10 ppt, PFBS = 2,000 ppt. Federal Register). Public water systems must sample and report.

STATE-LEVEL PFAS WATER REGULATIONS: WHAT'S CHANGING?

Across the country, many states have already adopted or proposed PFAS standards and permit requirements to complement federal rules. Below is a summary of state-specific water regulations:

REGION	STATE	WATER REGULATION SUBCATEGORY
WEST COAST	Oregon	Discharge Permits
	Washington	Discharge Permits
	Hawaii	Proposed Discharge Permits
MIDWEST	Illinois	Proposed Groundwater Standards, Discharge Permits
	Michigan	Surface Water Standards, Discharge Permits
	Minnesota	Surface Water Standards
	Wisconsin	Surface Water Standards, Discharge Permits, Groundwater Standards
NORTHEAST	Connecticut	Discharge Permits
	Rhode Island	Surface Water Standards
	New Hampshire	Groundwater Standards
	New Jersey	Groundwater Standards, Discharge Permits
	New York	Groundwater Standards, Discharge Permits, Proposed Discharge Permits
MID-ATLANTIC	Maryland	Discharge Permits
	Pennsylvania	Discharge Permits
SOUTH	Virginia	Discharge Permits
	West Virginia	Discharge Permits
MOUNTAIN WEST	Colorado	Surface Water Standards, Stormwater General Permit
	Montana	Groundwater Standards
	New Mexico	Groundwater Standards

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NAVIGATING PFAS DISCHARGE LIMITS: A GUIDE FOR WASTEWATER FACILITIES

At the same time that drinking water systems prepare for their MCL deadlines, individual wastewater dischargers are beginning to see PFAS appear in NPDES permits: many include technology-based limits derived from site-specific risk assessments plus monitoring requirements. States such as Michigan, Massachusetts, and New York have already issued draft numeric discharge limits or guidance values, and EPA has signaled an upcoming Effluent Limitations Guideline (ELG) rulemaking. Montrose's regulatory specialists stay ahead of these developments—helping clients characterize influent concentrations, evaluate treatability options like ion exchange or reverse osmosis, and negotiate realistic permit schedules with regulators.

ADAPTING TO CHANGING SURFACE WATER QUALITY STANDARDS

Finally, surface water quality standards are evolving to address PFAS's persistence and bioaccumulation potential. Ambient criteria from EPA and individual states inform designated-use classifications (e.g., recreation, aquatic life) and drive Total Maximum Daily Load (TMDL) development. Whether you're conducting a mixing-zone analysis, refining a site-specific criteria study, or modeling downstream concentrations, our environmental scientists bring both the technical rigor, and the regulatory insight needed to navigate complex standard-setting processes.

STAY TUNED FOR PFAS IN WASTE, AIR, REMEDIATION, AND REPORTING

In our next installment, we'll turn our attention to PFAS in waste streams—breaking down storage, handling, and disposal rules. With Montrose at your side, you'll have a trusted partner translating every shift in water regulations into clear, actionable strategy.



MEET OUR PFAS EXPERT

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Mr. Gilday is Vice President Risk Management Solutions at Montrose with over 20 years of EHS auditing and compliance experience. Mr. Gilday has served as audit program manager for a number of large multi-media audit engagements as well as lead auditor for national and international audits across the oil and gas, chemical, and industrial manufacturing space and for a number of railroad operators and food and beverage clients. Mr. Gilday has broad multi-media experience and expertise in regulatory interpretations and EHS Program Development. Mr. Gilday has designed and established audit EHS programs and management systems for several fortune clients.