



AMERICAN WATER

WE KEEP LIFE FLOWING®

PFAS

Providing safe and reliable water service is American Water's business.

We are recognized as an industry leader and work cooperatively with the U.S. Environmental Protection Agency so that implementation of existing drinking water standards and development of new regulations will produce benefits for our customers.



COMMONLY ASKED QUESTIONS AND ANSWERS



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Our scientists and engineers are experts in addressing this important issue and have a long history of researching and addressing contaminants of concern in our water. We continue to focus on water quality and treatment technologies and processes that can effectively remove PFAS from drinking water.

Lauren Weinrich, Ph.D.
Principal Scientist,
Water Research and Development

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WHAT ARE PFAS?

Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals historically used in many household products including nonstick cookware (e.g., Teflon™), stain repellants (e.g., Scotchgard™), and waterproofing (e.g., GORE-TEX™). They are or were also used in industrial applications such as in firefighting foams and electronics production. There are thousands of PFAS chemicals and they persist in the environment. The most well-known are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS).

Additional information on PFAS from the United States Environmental Protection Agency (U.S. EPA) can be found at <https://www.epa.gov/pfas>.

HAS U.S. EPA SET DRINKING WATER LIMITS FOR PFAS?

On April 10, 2024, the U.S. EPA announced its final drinking water regulation for six PFAS. American Water has extensive experience in designing and installing treatment for groundwater and surface water, including treatment for PFAS that allows us to meet state standards, and implementing drinking water regulations across our footprint.

Additionally, U.S. EPA has established guidance in the form of health advisories for PFOA, PFOS, PFBS, and HFPO-DA.

With the U.S. EPA's new water quality regulations, we will make necessary improvements or treatment adjustments to comply with the new standards.

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PROTECTING PUBLIC HEALTH THROUGH DRINKING WATER STANDARDS FOR PFAS

- American Water supports the United States Environmental Protection Agency's (U.S. EPA) efforts to protect public health by proposing national drinking water standards for PFAS. These contaminants are among the multiple challenges the water industry faces regarding water quality, quantity, and reliability. That is why American Water remains committed to being a leader in the U.S. water and wastewater industry and a provider of solutions to these challenges.
- We carefully reviewed and submitted comments regarding the U.S. EPA's proposed drinking water regulation to assess the 4.0 parts per trillion (ppt) requirements for PFOA and PFOS and the application of the Hazard Index approach for PFNA, PFBS, PFHxS, and HFPO-DA chemicals.
- As of August 2024, the American Water Works Association requested an update of the 2023 EPA analysis of occurrence and treatment cost nationally (analysis performed by Corona and Black & Veatch). The updated analysis using UCMR 5 data specifically found:
 - The installation of new drinking water treatment for PFAS will reduce PFAS exposure from drinking water for 35 million Americans, roughly half of the EPA's estimate as part of the final rulemaking.
 - More than 7,000 entry points will need capital improvement investments to install treatment of PFAS in drinking water, totaling \$37.1 to \$48.3 billion in the next five years. Combined with costs of operations and maintenance the annualized cost is estimated to be \$2.7 to \$3.5 billion, roughly twice the EPA's estimate as part of the final rulemaking.
- It will require, on a national basis, more than \$700 million annually for operating costs, which is approximately \$500 million more than what would be required to meet current state-established PFAS limits. These dollar values are significantly higher than EPA's cost estimates. (Data and approach as presented in a recent study conducted by Black & Veatch on behalf of American Water Works Association.)
- The implementation timing should also consider the available capacity of engineers, contractors, and suppliers to build the required treatment and the available capacity of vendors to supply ion exchange resin, granular activated carbon, and media reactivation/waste disposal services on an ongoing basis.
- American Water calls for sound policies that will ensure compliance by all water utilities—whether privately or municipally owned—while protecting customers and communities from the high cost of monitoring and mitigating PFAS. This includes advocating for policies that hold polluters accountable.
- American Water's operating utilities in most of our states are currently plaintiffs in the Multi-District Litigation against multiple PFAS manufacturers because we firmly believe that the ultimate responsibility for the cleanup of these contaminants should fall to those who created the problem.
- American Water joins other water organizations urging the U.S. EPA, Congress, and other decision-makers to implement policies that will:
 - keep harmful PFAS out of our drinking water supplies and our communities;
 - exempt all water and wastewater systems from financial liability for PFAS under CERCLA;
 - ensure all water and wastewater utility providers, regardless of ownership, have equal access to any and all Federal and/or state funding related to treating PFAS; and
 - establish a permanent federally funded water and wastewater low-income customer assistance program.
- States should treat these expenditures for regulated utilities as federally mandated requirements that are recoverable in customer rates through expedited means.
- Providing safe, reliable, and affordable water service is American Water's business, and we look forward to working cooperatively and collaboratively with the U.S. EPA, Congress, regulators, and policymakers so that the implementation of these water standards protects customers, communities, and the general public.

HAS AMERICAN WATER ADDRESSED PFAS IN THE PAST?

Yes. We have successfully addressed PFAS in the past. Here are two examples:

- **Picatinny Arsenal, NJ:** In January 2018, American Water's Military Services Group made recommendations to remove PFOA/PFOS contaminants and were awarded a contract in April 2018 to install a temporary Granular Activated Carbon (GAC) system within 90 days. The American Water-led team kept the project ahead of schedule, completing the design, permitting, implementation, construction and treatment in just 38 days. Sample results were returned that showed PFOA/PFOS were at non-detect levels across the system, highlighting the effectiveness of the GAC treatment system.
- **Sacramento Region, CA:** California American Water applied for grant funding for PFAS treatment to address PFOA in a well in the Suburban-Rosemont system in July 2016, and in March 2017, the notice to proceed on construction of a treatment plant was issued. Four months later, California American Water learned that it was denied state grant funding due to lack of state guidance on the contaminant. However, the company continued with construction, and in September 2017, California American Water placed its new PFAS treatment unit into operation.

WHAT IS AMERICAN WATER DOING TO ADDRESS PFAS AND HELP PROTECT OUR CUSTOMERS?

- American Water has a cross-functional team focused on the scientific and regulatory framework related to PFAS detection and emerging technologies for removal.
- Selecting the most efficient and cost-effective PFAS removal process(es) is strongly dependent on background water matrix composition and targeted PFAS. American Water's engineering and research teams regularly conduct studies to evaluate new monitoring and treatment technologies.
- We are piloting ion exchange resins along side granular activated carbon (GAC) to compare PFAS removal and media performance.
- American Water's research group is actively involved in externally-funded projects related to the detection, occurrence and removal of PFAS.
- American Water continues to improve analytical method detection limits for PFAS.
- GAC has been installed to remove PFAS compounds from five locations that have elevated source water levels.

EXPERTISE

Our Central Laboratory, located in Belleville, IL, is a U.S. EPA accredited lab with high throughput, fast turnaround time, and expanded capability for PFAS. The Central Laboratory is NELAC certified and prepared for UCMR 5 monitoring of 29 PFAS chemicals. UCMR 5 monitoring will be done with U.S. EPA methods 533 and 537.1. American Water is also using expanded technologies and analytical capabilities in our research labs to better understand the broader occurrence of these chemicals in the environment, including fluorinated replacements such as short-chain and other next generation PFAS chemicals.



WORKING WITH OTHERS ON PFAS

American Water is active in several external collaborations that are helping us stay at the forefront of regulatory and monitoring strategies:



- American Water staff are members of the technical advisory workgroup for Safe Drinking Water Act Processes and New Contaminants of the American Water Works Association, which has been actively contributing to the fast-paced changes related to detection and regulatory strategies for PFAS.
- American Water experts frequently collaborate with state and federal regulators in departments of environmental protection, EPA, CDC, American Water Works Association, Water Research Foundation, universities and other organizations to better understand issues related to PFAS and public health.
- American Water is a utility participant in the Water Research Foundation project, entitled "Investigation of Treatment Alternatives for Short-Chain Poly and Perfluoroalkyl Substances."

FOR MORE INFORMATION

For more information, customers can contact the US Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.