

Providing safe and reliable water service is New Jersey American Water's business. We are proud to have served as a partner to the DEP over the years in its efforts to help ensure the safety of drinking water across the state.



## FOR MORE INFORMATION

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



# PFAS

## 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.

## HAS NEW JERSEY AMERICAN WATER HAD TO ADDRESS PFAS IN THE PAST?

Yes. New Jersey American Water has been in front of this issue since 2007 with NJDEP, implementing treatment to remove PFOA and PFOS as early as 2012, well before state limits were set. We have successfully installed PFAS treatment in several areas across our footprint, using both Granular Activated Carbon and Anionic Exchange Resins for removal. Here are three examples:

- **Short Hills Well Station:** New Jersey American Water installed a cutting-edge treatment system that uses anionic exchange resins to remove PFAS from the source water at our Short Hills Well Station. Different than Granular Activated Carbon, these resins are specifically designed to remove PFAS with less maintenance over time. This new technology not only removes PFAS contaminants that are already regulated, but also has shown the ability to remove shorter-chain PFAS more effectively than Granular Activated Carbon.

**New Jersey American Water was awarded the 2020 Governor's Environmental Excellence Award for the Short Hills Well Station Project.**



- **Green Brook and Charles Street Stations:** At times, the best action to take in response to finding PFAS presence is to remove ground water sources from service, though it is not always possible. When confronted with just such an issue with our Green Brook and Charles Street Stations, New Jersey American Water found a different way to address PFAS detections. The Green Brook and Charles Street Ground Water Stations were converted to booster stations, bringing treated surface water from our Canal Road and Raritan-Millstone Water Treatment Plants into service areas that previously received only ground water.
- **Springfield Station:** New Jersey American Water constructed a new treatment system for PFAS removal from the Springfield Well Field. The new treatment system consists of four anion exchange resin vessels housed in the existing treatment building on the site, chemical feed system upgrades including sodium bisulfite, sodium hypochlorite, and ammonium sulfate constructed in the existing chemical rooms, and new low lift pumps installed to accommodate new head conditions through the new treatment system. This proactive and innovative approach earned New Jersey American Water the New Jersey Alliance for Action's Leading Infrastructure Project Award in February 2021.

## 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.

## 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."



**New Jersey American Water, as the state's largest investor-owned water utility, has always taken its responsibilities in providing safe drinking water to its customers very seriously, and demonstrated this again in its proactive response to detections of PFOA in limited parts of its distribution system.**

**Michele Putnam**

DEP's Acting Assistant Commissioner  
for Water Resources Management in 2017

- 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.

