



# SMALL AND RURAL SYSTEMS FACT SHEET

## Fact Sheet for Small and Rural Water Systems on EPA’s PFAS National Primary Drinking Water Regulation

### Introduction

Safe drinking water is fundamental to healthy people and thriving communities – and nowhere is that more true than for the millions of Americans served by small and rural water systems. EPA believes that all people in the United States should have access to clean, safe drinking water and has been delivering on the promise to protect communities from the harmful effects of toxic substances, including carcinogens. PFAS are a series of man-made chemical compounds that persist in the environment for long periods of time. They are often called “forever chemicals.” For decades PFAS chemicals have been used in industry and consumer products such as nonstick cookware, waterproof clothing, and stain resistant furniture. These chemicals have been important for certain industries and uses. And the latest science shows that these chemicals are harmful to our health. PFAS exposure over a long period of time can cause cancer and other serious illnesses that decrease quality of life or result in death. PFAS exposure during critical life stages such as pregnancy or early childhood can also result in adverse health impacts. EPA’s responsibility through the Safe Drinking Water Act is to protect people’s drinking water, and the agency is taking action to protect public health by establishing nationwide, legally enforceable drinking water limits for several well-researched PFAS chemicals and reduce PFAS exposure for approximately 100 million Americans served by public drinking water systems.

### The Rule

As the lead federal agency responsible for protecting America’s drinking water, EPA is using the best available science on PFAS to set national standards. PFAS can often be found together in water and in varying combinations as mixtures. Decades of research shows mixtures of different chemicals can have additive health effects, even if the individual chemicals are each present at lower levels.

**In this final rule, EPA is setting limits for five individual PFAS: PFOA, PFOS, PFNA, PFHxS, and HFPO-DA (known as GenX Chemicals). And EPA is also setting a Hazard Index for two or more of four PFAS as a mixture: PFNA, PFHxS, HFPO-DA, and PFBS.**

Chemical	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)
PFOA	0	4.0 ppt
PFOS	0	4.0 ppt
PFNA	10 ppt	10 ppt
PFHxS	10 ppt	10 ppt
HFPO-DA (GenX chemicals)	10 ppt	10 ppt
Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS	Hazard Index of 1	Hazard Index of 1
<p><b>Maximum Contaminant Level Goal (MCLG):</b> The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.</p> <p><b>Maximum Contaminant Level (MCL):</b> The highest level of a contaminant that is allowed in drinking water. MCLs are set</p>		

as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.

**ppt:** parts per trillion

**Hazard Index (HI):** The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration. For more visit:

<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>

This new rule will significantly reduce the level of PFAS in drinking water across the United States. Many states have worked to monitor for and reduce PFAS exposure in drinking water through state-specific regulations. This rule builds on these efforts by incorporating the latest science and establishing a nationwide, long-term health-protective level for these specific PFAS in drinking water. Communities and states will need to determine whether PFAS is in their drinking water and take actions such as notifying consumers and reducing the levels of PFAS, as needed.

Water systems must take action to reduce the levels of these PFAS in drinking water if the level of PFAS in their drinking water exceeds regulatory standards. Regulated public water systems have three years to complete their initial monitoring for these chemicals. Systems must include their results in their Annual Water Quality reports to customers. Systems that detect PFAS above the new standards will have five years to implement solutions that reduce PFAS in their drinking water. Water systems must also notify the public if levels of regulated PFAS exceed these new standards.

## Impacts and Costs of the Rule

People will live longer, healthier lives because of this action, and the benefits justify the costs. Once implemented, these limits will reduce tens of thousands of PFAS-attributable illnesses or deaths. EPA estimates that once implemented, this regulation will reduce PFAS exposure for approximately 100 million Americans served by public drinking water systems. EPA considered all available information and analyses for costs and benefits, quantifiable and non-quantifiable, of this rule and determined that the benefits justify the costs.

Fewer people will get cancer or liver disease, pregnant women will have reduced risks, and more children and infants will be stronger and grow healthier. EPA calculated measurable health benefits based on fewer cancers, lower incidents of heart attacks and strokes, and reduced birth complications. These benefits are estimated to be approximately \$1.5 billion per year, and include avoided costs of medical bills, income lost to illness, and death. Additionally, EPA could not quantify all the health benefits, including developmental, cardiovascular, liver, immune, endocrine, metabolic, reproductive, musculoskeletal, and carcinogenic effects, and therefore the benefit estimates are likely greater than \$1.5 billion.

Compliance with this rule is estimated to cost approximately \$1.5 billion annually. The Bipartisan Infrastructure Law has dedicated \$9 billion through to help communities impacted by PFAS pollution in drinking water. In addition, another \$12 billion in Bipartisan Infrastructure Law funding is available to communities to make general drinking water improvements, including addressing PFAS chemicals. Estimated costs include water system monitoring, communicating with customers, and – if necessary – installing treatment technologies.

## Implementation, Funding, and Technical Assistance

The rule is achievable and implementable. Drinking water utilities will be able to implement these new requirements as control technologies exist and are in use today. Water treatment technologies exist to remove PFAS from drinking water including granular activated carbon, reverse osmosis, and ion exchange systems. EPA's

final rule does not dictate how water systems remove these contaminants. The rule is flexible, allowing systems to determine the best solutions for their community. Public water systems can choose from multiple proven treatment options. In some cases, systems can close contaminated wells or obtain a new uncontaminated source of drinking water. For more information visit: [https://www.epa.gov/system/files/documents/2024-04/pfas-npdwr\\_fact-sheet\\_treatment\\_4.8.24.pdf](https://www.epa.gov/system/files/documents/2024-04/pfas-npdwr_fact-sheet_treatment_4.8.24.pdf).

## Additional Resources

Learn more about water infrastructure funding opportunities by visiting EPA's [water infrastructure page](#).

If you are concerned about PFAS in drinking water, there are key actions you can take. People who are concerned about PFAS in their drinking water should first contact their drinking water utility to find out more about their drinking water, including what contaminants may be present, if the utility is monitoring for PFAS, what the levels are, and to see whether any actions are being taken.

If you remain concerned after talking to your utility, then consider using or installing in-home water treatment (e.g., filters) that is certified to lower the levels of PFAS in your water and/or contact your health care provider as well as your state or local health department. You can find more information about water filters that help reduce PFAS [here](#). If you get your water from a home drinking water well, then EPA recommends you conduct regular testing. If PFAS are found, you can take steps to lower the levels of PFAS. For more visit: EPA's website [here](#).

## Flexibilities and Support for Small Water Systems

The PFAS drinking water rule provides flexibility for small water systems to successfully implement the rule and reduce burden, while also ensuring public health protection in all communities (large or small) served by public water systems.

### Initial Monitoring Requirements for Small and Rural Systems

The rule provides burden reduction for small systems the initial monitoring requirements. All community water systems and non-transient, non-community water systems are required to complete initial monitoring within three years after the date of the final rule promulgation. All surface water systems are required to initially monitor quarterly in a 12-month period. However, small groundwater systems serving 10,000 or fewer are only required to monitor twice within a 12-month period. It is important to note that approximately 85 percent of small systems are ground water systems that will be eligible for this burden reduction, accounting for \$63 million dollars in savings.

The PFAS drinking water rule also allows water systems to utilize previously collected monitoring data to satisfy the initial monitoring requirements. This means that small water systems with data previously collected through the Fifth Unregulated Contaminant Monitoring Rule could see a cost reduction of \$21 million dollars nationally. Small water systems can also utilize data collected through other monitoring efforts (e.g., state) to satisfy the initial monitoring requirements allowing for more systems to decrease their burden. For more information visit: [https://www.epa.gov/system/files/documents/2024-04/pfas-npdwr\\_fact-sheet\\_monitoring\\_4.8.24\\_0.pdf](https://www.epa.gov/system/files/documents/2024-04/pfas-npdwr_fact-sheet_monitoring_4.8.24_0.pdf).

### Ongoing Compliance Monitoring for Small and Rural Systems

The rule also allows for flexibility and burden reduction through the ongoing compliance monitoring. The regulation allows reduced monitoring frequencies following the [Standardized Monitoring Framework](#) which has three tiers of monitoring frequency (quarterly, annually, and triennially). This framework ensures public health protection, while providing flexibilities to reduce monitoring where sampling results demonstrate decreased risk

of PFAS contamination. By allowing systems with lower risk of PFAS contamination to reduce their monitoring frequency to annual or triennial, small systems that show they are lower risk will reduce their ongoing sampling burden significantly. For example, systems monitoring triennially may have their costs decreased by as much as \$3,400 every three years. As the majority of systems will only incur monitoring and reporting costs as result of compliance with the rule, this represents substantially less costs for small systems nationally.

### **Rule Compliance Timelines**

In the final rule the EPA has extended the time to comply with the Maximum Contaminant Levels (MCLs) for regulated PFAS to five years after the date of rule promulgation due to the capital investments required, [as provided under the Safe Drinking Water Act](#). Consequently, small community water systems and non-transient, non-community water systems that may need to take actions to reduce levels of regulated PFAS will have an additional two years to take any of these necessary actions and comply with all regulated PFAS MCLs. This additional time will allow water systems, particularly small and disadvantaged systems, to ensure cost-effective compliance with the MCLs, including obtaining any necessary funding, planning, designing, constructing, and installing treatment systems, or identifying alternate sources of water.

### **Information for Communities and Households Served by Privately-Owned Wells**

The quality and safety of drinking water from private domestic wells are not regulated by the Federal Government under the [Safe Drinking Water Act](#) nor by most state governments and laws. Private well owners are responsible for delivering safe drinking water to their households. EPA recommends that well owners test their private well annually for total coliform bacteria, nitrates, total dissolved solids, and pH levels. While the final drinking water regulation that EPA is issuing for public water systems does not create requirements for households served by private wells, the levels established in the rule are a useful guide to well-users who are concerned about PFAS. If you choose to test your water yourself, it is important to use a state-certified laboratory using EPA-developed testing methods. You can also:

- Contact your state environmental or health agency - for detailed advice or to obtain a list of state-certified laboratories using EPA-developed testing methods in drinking water. The [National Environmental Laboratory Accreditation Management System](#) website may also be helpful in finding a laboratory to test for PFAS.
- If you remain concerned about the level of PFAS in your drinking water:
  - Contact your state environmental protection agency or health department and your local water utility to find out what actions they recommend.
  - If possible, consider using an alternate water source for drinking, preparing food, cooking, brushing teeth, preparing baby formula, and any other activity when your family might swallow water.
  - Consider installing an in-home water treatment (e.g., filters) that are certified to lower the levels of PFAS in your water. [Learn about certified in-home water treatment filters](#).

### **Funding and Assistance for Households Served by Private Wells**

With today's announcement of the rule, EPA is also announcing nearly \$1 billion for states and territories, through the Emerging Contaminants in Small or Disadvantaged Communities (EC-SDC) Grant Program, which can be used for initial testing and treatment at both public water systems and for homes served by privately owned wells. Learn more using link 3 below. EPA is updating the EC-SDC and the Small, Underserved, and Disadvantaged Communities (SUDC) grant programs (see links 2&3 below) so that states can further assist private well owners to address drinking water contaminants.

In addition, through an EPA grant, training and technical assistance (see link 1 below) is provided to owners and managers of private drinking water wells and the stakeholder groups that serve private well owners and/or are charged with protecting public health. Under this grant, the technical assistance provider can provide test kits to test for emerging contaminants, such as PFAS, and provide follow-up technical assistance to well owners who receive results indicating contamination.

For more on these grants visit:

1. Training and technical assistance: <https://www.epa.gov/dwcapacity/training-and-technical-assistance-small-systems-funding>
2. Emerging Contaminants in Small or Disadvantaged Communities Grant Program: <https://www.epa.gov/dwcapacity/emerging-contaminants-ec-small-or-disadvantaged-communities-grant-sdc>
3. Small, Underserved, or Disadvantaged Communities Grant Program: <https://www.epa.gov/dwcapacity/wiin-grant-small-underserved-and-disadvantaged-communities-grant-program-0>

As public water systems determine the best way to tackle the investments they may need, the EPA will continue to work with states, Tribes, communities, and other partners to help them make the long-term investments needed to make our nation's drinking water safe from PFAS and will continue to provide assistance accessing funding.