

Testing and treating your private well for PFAS in the Town of Harvard

Note:

- The information provided in *italics* is excerpted from the Massachusetts Department of
 Environmental Protection (MassDEP) website https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas-in-private-well-drinking-water-supplies-faq#how-can-i-test-my-well-water-for-pfas?- The MassDEP website has a wealth of information on a number of questions regarding PFAS and other water quality issues.
- The other information is specific to the Town of Harvard.
- Contact the Board of Health for guidance.

Testing well water for PFAS

The Harvard Board of Health (BoH) regulations prescribe testing for specific water quality parameters. These regulations apply to new wells and to existing wells on properties when they are being transferred (sold). The Board of Health's regulations require the well on the property being transferred to be tested within 12 months prior to the transfer of the house.

The Board of Health requires PFAS testing of drinking water on certain streets where PFAS chemicals have been found. If your house is on one of these streets, in addition to the standard water quality tests, a PFAS test is required. Contact the Board of Health for guidance.

Note:

- ALL water testing conducted to meet the Boards' regulations must be analyzed at a Massachusetts State Certified Laboratory.
- If you are testing your well to meet Board of Health regulations, the well water needs to be collected by the Board of Health, their Health Agent or an approved sampler. The results must be submitted to the Board of Health (in the case of a transfer of property, at least 30 days prior to the sale). Contact the Board of Health for further guidance.

The water sample shall be analyzed by a laboratory certified to perform drinking water analysis by the Massachusetts Department of Environmental Protection (MassDEP) and the chemical and bacteriological analysis shall meet the standards set forth by the MassDEP Public Water Supply Division regulations for potable water. Water quality parameters which exceed the primary (health-related) drinking water standards will need to be treated and retested.

If you are testing your well water for your own information, non-regulatory, the Board of Health strongly recommends that you use a certified laboratory to analyze your water.

How can I test my well water for PFAS? [Note: text from MassDEP website]

- Currently, there are three U.S. EPA testing methodologies for testing drinking water for PFAS.
 Laboratories will analyze drinking water for PFAS using either USEPA Method 537, 537.1, or 533.

 These methods test for multiple PFAS compounds, including the PFAS6 compounds that are part of the current MassDEP Drinking Water Standard. Please note that Method 533 is not yet approved for public water supply testing in Massachusetts.
- Use the <u>Online Searchable Laboratory Certification Listing</u> (Search for Analyte = PFAS and Matrix = Potable (Drinking Water) to find laboratories that have been certified by MassDEP to test for PFAS in drinking water.
- When collecting the sample, to avoid contaminating it we encourage you to carefully follow
 the <u>PFAS sample collection procedures</u> or those provided by the laboratory that will be doing the
 analysis.

Water treatment for the removal of PFAS chemicals

The Board of Health regulations require all treatment systems employed for the removal of a contaminant shall be a <u>point of entry and whole supply system</u>.

Any use of a treatment system for the purposes of achieving compliance with any primary drinking water standard shall require retesting to demonstrate effectiveness and shall require notification, recorded at the Registry of Deeds, of the existence and need for operational equipment to provide potable water.

The discharge from water treatment equipment **cannot** be discharged into your septic system. Please review the information regarding the handling of the treatment system discharge of Reverse Osmosis (RO) systems listed below; a RO unit would not be an acceptable means of treatment to meet the Board of Health regulations.

The information provided below is summarized from the MassDEP website. Contact the Board of Health for guidance.

Can I use a Point of Use (POU) or a Point of Entry (POE) water treatment device to remove PFAS6?

Point of Use (POU) water treatment devices treat the water at one fixture in a home, such as a kitchen faucet. Point of Entry (POE) water treatment devices treat all of the water for the main water line serving a whole house.

Yes. You may use a POU or POE treatment device to remove PFAS6. However, before installing
any treatment device for drinking water, you should get your water tested, because the type of
treatment device you select will depend on the level of specific PFAS in the water. You should
also test your water after the treatment device is installed to verify that it is removing PFAS to
levels less than 20 ppt for the sum of PFAS6.

• Ingestion of water with elevated PFAS is the main health concern, rather than other uses such as showering or use of the water for laundry. Therefore, installing a POU treatment device for drinking or food preparation in the kitchen, e.g., under a kitchen sink, may be a good option and location for a treatment device.

Although POU and POE treatment devices are not specifically designed to meet Massachusetts' drinking water standard for PFAS6, there are systems that have been designed to reduce the sum of PFOS and PFOA to below EPA's former Health Advisory of 70 ng/L. Any treatment device you use should be certified to meet the National Sanitation Foundation (NSF) standards to remove PFOS and PFOA compounds so that the sum of their concentrations is below 70 ng/L. Please be aware that 70 ng/L is significantly greater than the MassDEP's drinking water standard of 20 ng/L for the PFAS6 compounds. Many of these treatment devices certified to meet NSF standards will likely be able to reduce PFAS6 levels to well below 70 ng/L, but there are no federal or state testing requirements for these treatment devices. If you choose to install a treatment device, you should check to see if the manufacturer has independently verifiable PFAS6 monitoring results demonstrating that the device can reduce PFAS below 20 ng/L. In addition, to verify that the device achieves PFAS6 levels less than 20 ng/L you may need to resample your water after the treatment device has been installed.

What types of POU and POE treatment systems are available to treat for PFAS6?

There are several treatment technologies that are capable of removing PFAS from drinking water, including granulated activated carbon (GAC), ion-exchange resin, and reverse-osmosis (RO). It is recommended that you evaluate the pros and cons for each type of treatment device to determine what is best for you.

- **GAC** treatment devices trap the PFAS inside the filter so that the PFAS is not discharged back into the environment. GAC has proven effective in removing PFAS contaminants, particularly the longer chain PFAS.
- Ion-exchange treatment devices also trap the PFAS inside the filter and are effective in removing PFAS.
- Maintaining GAC or ion-exchange treatment devices. These treatment devices must be maintained by replacing the filters periodically in accordance with the manufacturer's instructions. Some manufacturers will recycle spent filter cartridges. Check the website of the manufacturer for recycling locations and disposal options.
- **RO** treatment devices remove and then discharge the PFAS in a concentrated wastewater stream.
 - Discharge of the RO wastewater stream must comply with local and state requirements and may be costly; as such, cost may be a significant concern in determining which treatment device you choose.

Can wastewater containing PFAS from RO treatment systems go to a Title 5 septic or UIC dry well?

The discharge of wastewater from a RO treatment system to a Title 5 septic system is prohibited under MassDEP Title 5 regulations (310 CMR 15.000).

For other RO wastewater discharge options, the answer depends upon the type of RO treatment system; and the concentration of the PFAS in the water.

Note:

- Please see MassDEP guidelines regarding how to calculate PFAS6 in the discharge water.
- Contact the Board of Health for further guidance.

Health related questions regarding PFAS in your well water

What if I have health related questions regarding PFAS, who can I contact?

Where can I get more information on PFAS?

For health-related questions/contact:

Environmental Toxicology Program

Bureau of Environmental Health, MDPH

250 Washington Street

7th Floor Boston, MA 02108

Phone: 617-624-5757 Fax: 617-624-5777 TTY: 617-624-5286