



Town of Mansfield

Department of Public Works

6 Park Row, Mansfield, Massachusetts 02048

Water Operations Manager

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PFAS Public Notification

Polyfluoroalkyl Substances (PFAS)

The Town of Mansfield, through voluntary sampling, has discovered the presence of PFAS in our water supply similar to many other communities in Massachusetts. Recent results from testing performed by Mansfield Water Division at the Cate Springs Water Treatment Plant located at 100 Maple Street and Walsh Well Treatment Plant located at 450 Gilbert Street, have detected PFAS in the drinking water below the current health guideline established by the United States Environmental Protection Agency (EPA) but above the current health guideline established by the Massachusetts Department of Environmental Protection (MassDEP). This notice provides information about the Mansfield Water Division and MassDEP's ongoing efforts to address PFAS in drinking water and provide health-protective guidelines.

Please see the following excerpt from the Environmental Protection Agency (hereinafter EPA) that explains what PFAS is:

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States, since the 1940s. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body — meaning they don't break down and they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects.

PFAS can be found in:

- **Food** packaged in PFAS-containing materials, processed with equipment that used PFAS, or grown in PFAS-contaminated soil or water.
- **Commercial household products**, including stain- and water-repellent fabrics, nonstick products (e.g., Teflon), polishes, waxes, paints, cleaning products, and fire-fighting foams (a major source of groundwater contamination at airports and military bases where firefighting training occurs).
- **Workplace**, including production facilities or industries (e.g., chrome plating, electronics manufacturing or oil recovery) that use PFAS.

- **Drinking water**, typically localized and associated with a specific facility (e.g., manufacturer, landfill, wastewater treatment plant, firefighter training facility).
- **Living organisms**, including fish, animals and humans, where PFAS have the ability to build up and persist over time.

Certain PFAS chemicals are no longer manufactured in the United States as a result of phase outs including the PFOA Stewardship Program in which eight major chemical manufacturers agreed to eliminate the use of PFOA and PFOA-related chemicals in their products and as emissions from their facilities. Although PFOA and PFOS are no longer manufactured in the United States, they are still produced internationally and can be imported into the United States in consumer goods such as carpet, leather and apparel, textiles, paper and packaging, coatings, rubber and plastics.

PFAS Standards

In 2016, EPA published a drinking water Health Advisory Level for two of the PFAS compounds (Perfluorooctane sulfonic acid, PFOS, and Perfluorooctanoic acid, PFOA) combined at 70 nanograms per liter (ng/L) or 70 parts per trillion. In January 2020, MassDEP issued an Office of Research and Standards guideline (ORSG) for drinking water of 20 ng/L or 20 parts per trillion for six PFAS compounds combined. Those compounds are PFOA, PFOS, PFNA (Perfluorononanoic acid), PFHxS (Perfluorohexanesulfonic acid), PFHpA (Perfluoroheptanoic acid) and Perfluorodecanoic acid (PFDA). The ORSG was established to be protective against adverse health effects for all people consuming the water for a lifetime and is also applicable to shorter-term exposures of weeks to months during pregnancy and breast-feeding.

As part of the MassDEP's efforts to address PFAS compounds, in December 2019 MassDEP proposed a PFAS Drinking Water Regulation with a Maximum Contaminant Level (MCL) of 20 ng/L or 20 parts per trillion for the same six PFAS compounds in the ORSG. The public comment period for the proposed MCL closed on February 28, 2020. Information on the PFAS MCL process, can be found at <https://www.mass.gov/lists/development-of-a-pfas-drinking-water-standard-mcl>

PFAS Levels detected at Cate Springs Well

Samples collected at the **Cate Spring Water Treatment Plant for Well #1** on April 14, 2020 for the finished water showed a total combined concentration of **22.0 parts per trillion** for the following six PFAS: PFOA, PFOS, PFNA, PFHxS, PFHpA, and PFDA. These results are above the updated MassDEP guideline of 20 parts per trillion. Upon receiving these results another sample was immediately collected on May 6, 2020 and Cate Springs WTP was taken out of service. Since that date, the Cate Springs WTP has only been used for emergencies. The results of samples collected on April 14th and May 6th showed a total of **22.0 and 22.8 parts per trillion** respectively. The Cate Springs Well source was activated temporarily to avert a water crisis on August 4, 2021.

PFAS Levels detected at Walsh Well Treatment

Samples collected on August 6, 2020 at the **Walsh Well Water Treatment Plant** on August 6, 2020 for the finished water showed a total combined concentration of **22.91 parts per trillion** for the following six PFAS: PFOA, PFOS, PFNA, PFHxS, PFHpA, and PFDA. These results are above, the updated MassDEP 20 parts per trillion guideline. Upon receiving these results, the pumping rate at the Walsh Well was reduced from 500 gallons per minute (GPM) to 225 GPM. This is the lowest amount of water needed to keep the treatment plant operational, and maintain the ability to put the plant in full service if needed.

Next Steps

The Town of Mansfield Water Division has taken the following actions:

- We have shut down the Cate Springs WTP and will only use it in emergencies, dictated by water demand.
- Walsh Well pumping rate was reduced from 500gpm to 225gpm to allow the plant to stay in service and put online if needed for emergencies.
- We are applying for a PFAS Treatment Grant to help fund the investigations of the various treatment options.
- We are working with our consultant on possible solutions which include the installation of a treatment process to remove PFAS from the drinking water and the possibility of blending water sources to reduce the overall PFAS concentration to below the MassDEP guideline of 20 parts per trillion.
- We will continue to sample our water entering the system for PFAS on a quarterly basis from each of our active supplies.
- Please be assured that the Town of Mansfield and its Department of Public Works Water Division will do whatever it needs to do to ensure proper drinking water standards are adhered to.

The Town has six different well sites and all other active wells tested below the MassDEP ORS Guideline of 20 parts per trillion. The Town of Mansfield will continue to work closely with MassDEP and will keep the community updated.

In the meantime, if any resident is concerned about the health effects of PFAS, they should consult their health care professional.

Based on the January 27, 2020 MassDEP ORSG, MassDEP recommends that:

- 1) Consumers in sensitive subgroups (pregnant women, nursing mothers and infants) not consume, drink or cook with water when the level of the six PFAS substances, individually or in combination, is above 20 parts per trillion.
- 2) Water suppliers take steps expeditiously to lower levels of the six PFAS, individually or in combination, to below 20 parts per trillion for all consumers.

What should you consider doing?

You should consider taking the following steps while actions are being implemented to address this issue:

- Sensitive subgroups, including pregnant women, nursing mothers and infants, use bottled water for drinking and cooking of foods that absorb water (like pasta).
- Use bottled water to make infant formula or use formula that does not require adding water.
- For older children and adults, the 20 parts per trillion value is applicable to a lifetime of consuming the water. For these groups, shorter duration exposures present less risk. However, if you are concerned about your exposure while steps are being taken to assess and lower the PFAS concentration in the drinking water, use of bottled water will reduce your exposure.
- Water contaminated with PFAS can be treated by home water treatment systems that are certified to remove PFAS by an independent testing group such as NSF, UL, Water Quality Association or the CSA Group. These may include point of entry treatment systems, which treat all the water entering a home, or point of use devices, which treat water where it is used, such as at a faucet.
- In most situations the water can be safely used for washing foods, brushing teeth, bathing and showering. If you have cuts or broken skin, you may want to avoid long showers or baths. If you are concerned about your exposure, even though the risk is very low, you may want to use bottled water for brushing your teeth and cleaning items like dentures, pacifiers, and fruits and vegetables.
- Note: boiling the water will not destroy these chemicals and will somewhat increase their levels due to evaporation of some of the water.
- If you have specific health concerns regarding your exposure, you should consult a health professional, such as your doctor.

Where can I get more information?

For more information on what our system is doing about this situation, please contact Kurt Gaffney, Water Operations Manager at 508-261-7376, kgaffney@mansfieldma.com.

You can also get more information on PFAS from the following sources:

- MassDEP Fact Sheet – PFAS in Drinking Water: Questions and Answers for Consumers <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas>
- USEPA’s Drinking Water Health Advisories can be found at: <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>
- The Centers for Disease Control and Prevention’s Public Health Statement for PFOS and PFOA can be found at: <https://www.atsdr.cdc.gov/pfas/index.html>

- **For additional information on possible health effects, you may contact the Massachusetts Department of Environmental Protection, Office of Research and Standards, at 617-556-1165.**