



HOUSATONIC WATER WORKS COMPANY

SINCE 1897

PRESS RELEASE

January 10, 2023

Housatonic Water Works Company, Inc. (HWWC) has announced in a letter to customers today the 4th quarter 2022 monitoring results for disinfection byproducts (DBPs) in the treated drinking water supply.

The Massachusetts Department of Environmental Protection (MassDEP) has established a Maximum Contaminant Level (MCL) of 60 µg/L (or parts per billion, ppb) for the DBP class of haloacetic acids (HAA5). Compliance with the MCL is based on the calculated Locational Running Annual Average (LRAA) of monitoring results from four consecutive quarters.

- The November 2022 (4th quarter) result for HAA5 for the new N. Plain Road monitoring location was 69 µg/L (or parts per billion, ppb), and is shown in Figure 1.
- Monitoring at the N. Plain Road location was started during February 2022 at MassDEP's request, and LRAA compliance calculations began with the November 2022 sample. The LRAA at that site is now 66 ppb, above the MCL of 60 ppb (Figure 1).
- The other quarterly DBP monitoring location is at Depot St. (Figure 2) and has been in compliance with the HAA5 MCL for the past two quarters (August and November 2022). After years of compliance, that location exceeded the MCL for the first time in August 2021 due to an unprecedented HAA5 result (Figure 2) following record rainfall that was experienced in July 2021.
- Historically, the HAA5 levels had been fairly steady and well below the MCL at the Depot Rd. location. But during the past four years results have varied more over time and are higher on average (Figure 2).
- The August 2021 HAA5 result was exceptionally rare, as shown in Figure 3 which includes all of the August (3rd quarter) HAA5 monitoring results for HWWC at the Depot St. location since the start of the USEPA Stage 2 Disinfectants/Disinfection Byproducts Rule. The August 2021 HAA5 result was more than twice as high as any of the eight (8)

other August results over the years, including in 2022.

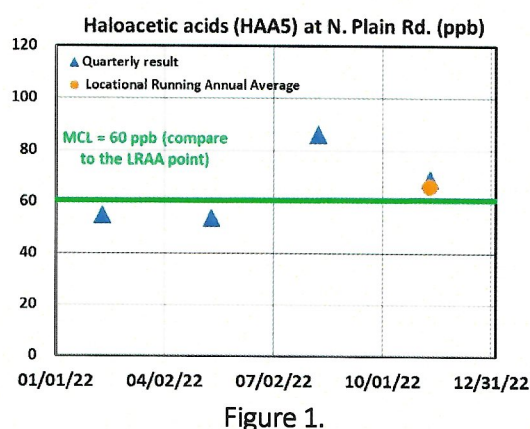


Figure 1.

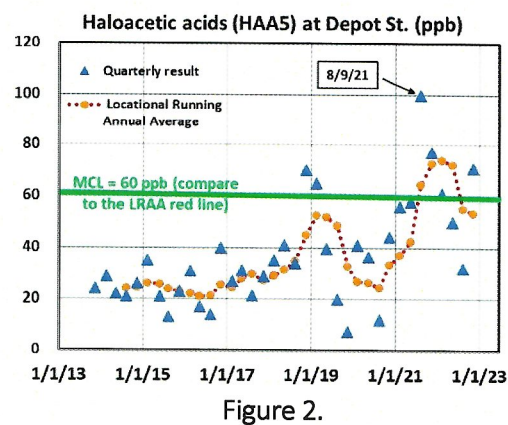


Figure 2.

80 Maple Avenue, Suite 1, Great Barrington, MA 01230

Tel: 413.528.1780

Fax: 413.528.3024

E-mail: housatonicwater@gmail.com

www.housatonicwater.com

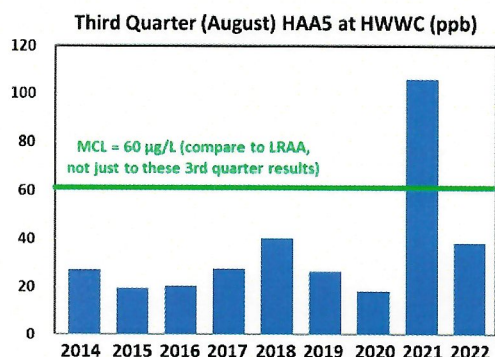


Figure 3.

Haloacetic acids are chemical compounds that form when the chlorine disinfectant reacts with natural organic matter in the water. Per the MassDEP, people who drink water containing HAA5 in excess of the MCL over many years may have an increased risk of getting cancer.

In response to the higher levels of HAA5 experienced in recent years and these MCL exceedances, HWWC is completing an evaluation of alternative methods for reducing these compounds in the future. HWWC expects to submit their proposed corrective actions to MassDEP next month for their consideration and approval.

Manganese Removal Pilot Study a Success!

Good news! Pilot testing of the proposed GreensandPlus™ filtration system was conducted for over 250 hours in September 2022 under a variety of flow conditions, and at a time when manganese in the Long Pond source water was at relatively high levels (about 0.1 to 0.3 mg/L, see open triangles in Figure 4). The filters removed manganese to mostly non-detect levels, and always met the goal of ≤ 0.015 mg/L, well below MassDEP's secondary maximum contaminant level (SMCL) of 0.05 mg/L for manganese. 93% of the filter effluent samples were non-detect for manganese, and the other 7% had just trace levels. The GreensandPlus™ filters also had no observed adverse impact on the many other water quality parameters examined including disinfection byproducts.

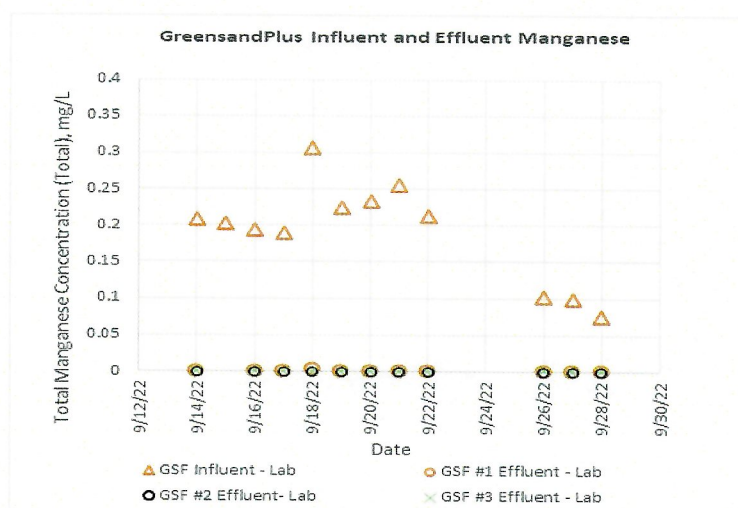


Figure 4.

When dissolved manganese is oxidized into particulate form (such as by HWWC's chlorine disinfectant), it can cause color ranging from light yellow to dark yellow to brown to grey to black. Removing manganese from the source water should eliminate or significantly reduce the colored-water episodes that some customers have experienced in recent summers.

GreensandPlus filtration is a well-established technology for the removal of manganese, and has now been proven highly effective under worst-case manganese loading conditions for HWWC's particular Long Pond source water in this extensive test program. A report on the pilot study results is being completed for submittal to MassDEP, and will be made publicly available on the water company's website. HWWC is prepared to proceed with design and construction of the manganese removal system as soon as MassDEP approves doing so.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

This report contains important information about your drinking water.

Please translate it or speak with someone who understands it or ask the contact listed below for a translation.

Elevated Disinfection Byproducts at Housatonic Water Works Company

Our water system exceeded a drinking water standard, or maximum contaminant level (MCL), for a water disinfection byproduct (DBP) during the fourth quarter of 2022. Testing results came from routine monitoring of drinking water contaminants from February 9, 2022, to November 10, 2022. We have experienced elevated haloacetic acids (HAA5) since August 2021.

The level of haloacetic acid (HAA5) averaged at our system's 314 North Plain Road location was 66 micrograms per liter $\mu\text{g/L}$ (parts per billion, ppb)¹ or 66 $\mu\text{g/L}$. The MCL is 60 $\mu\text{g/L}$ for HAA5. This location was added to our required sampling in January 2022. This is the first time the MCL determination has been made for this location.

The system concentrations are determined by averaging their concentrations in all samples collected at each sampling location for the past 12 months (the Locational Running Annual Average, LRAA). Housatonic Water Works Company's (HWWC) LRAA for HAA5 (66 $\mu\text{g/L}$) for the last quarter of 2022 (Q4 2022) is based on the fourth quarter DBP samples collected by Massachusetts Department of Environmental Protection (MassDEP on November 10, 2022) at the 314 North Plain Road, at the same day and the same time along with HWWC's sampling. The use of MassDEP's DBP sample at 314 North Plain Road was warranted because HWWC was not able to provide HAA5 laboratory sample results for the fourth quarter of 2022 (the testing lab reported the bottle broke while in the lab's possession).

What does this mean?

This is not an emergency. If it had been an emergency, you would have been notified within 24 hours. MassDEP requires that we provide this public notice. MassDEP updated the required public notice language in December 2022.

Chlorine or ozone are added to drinking water sources to disinfect drinking water. They can interact with natural material in the water to form DBPs.

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

In addition, young children (including infants), pregnant women, or those who may become pregnant may be potentially more susceptible to risks from exposures to chemicals, such as HAA5.

¹ $\mu\text{g/L} = \text{mg/L} / 1000$

What is Being Done?

The amount of disinfectant used impacts the formation of HAA5, and there is a balance required between using chlorine to control pathogenic microorganisms and the undesirable byproducts of the chlorination process. In response to the HAA5 levels observed, we have since reduced the chlorine dosing while maintaining more than enough chlorine residual to meet and exceed all disinfection requirements.

We are also preparing a required engineering report on additional actions, including treatment changes, to reduce the formation of DBPs in our drinking water.

What should I do?

You can choose to limit the amount of tap water used if you are pregnant, may become pregnant or are giving water to young children. For example, you can use water from another source, such as bottled water.

While breast milk can be a source of HAA5 exposure for infants, the Center for Disease Control and Prevention recommends that nursing mothers continue to breastfeed their babies because of the numerous protective health benefits, despite the potential presence of environmental contaminants.

You can also use home water filters to reduce exposures. (See MassDEP's HAA5 in Drinking Water. Information for Consumer Fact Sheet - <https://www.mass.gov/media/2532591/download>).

If you have questions about your water system's operation, water quality monitoring, or response to this issue, please contact the system's operator directly. If you have questions about the drinking water regulations or health risks posed by these contaminants², you can contact the MassDEP Drinking Water Program at: program.director-dwp@mass.gov. If you have questions about specific symptoms, you can contact your doctor or other health care provider. If you have general questions about your health, you can contact the Massachusetts Department of Public Health at 617-624-5757. Further information is available in MassDEP's HAA5 in Drinking Water Information for Consumers Fact Sheet (<https://www.mass.gov/media/2532591/download>).

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by:

Housatonic Water Works Company. PWS ID#: 1113003 Date distributed: 01/15/2023.

For more information, please contact the Housatonic Water Works Company at 413-528-1780, housatonicwater@gmail.com, or write to us at 80 Maple Ave, Suite 1, Great Barrington, MA 01230.

² <https://www.mass.gov/doc/supporting-documentation-for-drinking-water-standards-and-guidelines/download>