

SPRINGFIELD WATER AND SEWER COMMISSION P.O. BOX 995, SPRINGFIELD, MA 01101

Date of Issuance: April 6, 2022

Contact: Springfield Water and Sewer Commission, (413) 310-3501 info@waterandsewer.org

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER Disinfection Byproduct (DBP) MCL Violations

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.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Este relatório contém informações importantes sobre a água potável. Ter alguém que traduzi-lo para você, ou falar com alguém que entende-lo.

Báo cáo này có chứa thông tin rất quan trọng về nước uống của bạn. Xin vui lòng dịch nó hoặc nói chuyện với một ai đó hiểu nó.

The Springfield Water and Sewer Commission (Commission) (PWS ID# 1281000) recently violated two drinking water standards. Although these incidents were not an emergency, as our customers, you have a right to know what happened and what we are doing to correct the situation.

The Commission routinely monitors for the presence of drinking water contaminants. Testing results from March 3, 2022, showed that our system exceeded the standard or maximum contaminant level (MCL) established by drinking water regulations for haloacetic acids (HAA5) at 8 sample locations and for total trihalomethanes (TTHM) at 4 sample locations. The MCL for HAA5 is 60 parts per billion (ppb) and for TTHM is 80 ppb calculated as a 12-month running average of quarterly samples. The averages for HAA5 at the 8 locations were 79, 90, 89, 87, 91, 89, 94 and 91 ppb and the averages for TTHM at the 4 locations were 85, 83, 82, and 85 ppb. The Commission first experienced a violation of the drinking water standard in Fall 2018.

What does this mean?

This is not an emergency. If it had been an emergency, you would have been notified within 24 hours. HAA5 are five haloacetic acid compounds and TTHM are four volatile organic chemicals that form when a disinfectant (chlorine) reacts with dissolved natural organic matter (NOM) in the water. Because these compounds (HAA5 and TTHM) are formed during the disinfection process they are known collectively as disinfection by-products (DBP). Each MCL is based on the potential cancer risks associated with drinking water with elevated levels of DBPs over a lifetime. Some people who drink water containing haloacetic acids in excess of the MCL over many years (i.e. decades or a lifetime) may have an increased risk of getting cancer. Some people who drink water containing trihalomethane in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

What should I do?

- There is nothing you need to do. You DO NOT need to boil your water or take other corrective actions. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.
- However, if you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water.

For more information about DBPs, please visit the following links: <u>https://www.mass.gov/service-details/haa5-in-drinking-water-information-for-consumers</u> and <u>https://www.mass.gov/service-details/tthm-in-drinking-water-information-for-consumers</u>.

Why did this happen?

DBPs form when dissolved natural organic matter (NOM) interacts with chlorine. The amount of chlorine necessary to maintain safe disinfection is determined by the amount and types of dissolved NOM in Cobble Mountain Reservoir, the main source of the drinking water supply.

Extreme weather patterns can impact raw water quality and the amount and types of NOM in Cobble Mountain Reservoir. The higher-than-average rainfall in summer 2021, including rainfall from two hurricanes, has resulted in an increase in the amount of dissolved NOM in Cobble Mountain Reservoir. Additionally, annual reservoir turnover, during which the top layer of water and the bottom of the reservoir mix, occurred in fall 2021, resulting in higher NOM levels deeper in the reservoir where the raw water intake is located. This continued to impact raw water quality into the winter. NOM levels in the reservoir have remained unprecedently high. The increase in NOM in the raw water and necessary chlorine dosages contributed to elevated HAA5 and TTHM levels in the distribution system.

What is the Commission doing to resolve the problem?

To reduce the formation of DBPs in the distribution system, the Commission continues to adjust the existing treatment process to the fullest extent possible based on the influent raw water quality while maintaining adequate disinfection levels. The Commission's existing treatment plant was last modernized in 1974 and is not capable of removing the unprecedented levels of NOM in the reservoir (caused by current climate conditions) to the extent necessary to meet DBP regulations. As a solution, the Commission has begun rapidly advancing the design of a new drinking water treatment facility at West Parish Filters.

Progress of West Parish Filters Facility Improvements:

- Comprehensive planning process initiated in 2015 for major upgrades to the treatment plant.
- A pilot study in 2019-2020 concluded that adding Dissolved Air Floatation (DAF) to the treatment process would most effectively remove NOM and reduce the formation of DBPs.
- Design of a new water treatment plant, including DAF, is underway and on schedule.
- Construction is scheduled to start in 2024 at an estimated cost of approximately \$238 million and is expected to be complete by December 2027.
- A \$250 million low-interest loan from the U.S. Environmental Protection Agency's (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) Program is allowing the Commission to advance all plant upgrades on an accelerated schedule.

Design and construction of a new treatment plant is a complex process to ensure that the plant will meet system needs to maintain regulatory compliance, enhance water quality, and ensure reliability well into the 21st century. Until the new treatment plant is online, the Commission expects there will continue to be exceedances of the MCL for DBPs. Customers will receive notification any time there is an exceedance.

What can I do to help?

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.

What if I have further questions?

Please contact **413-310-3501** or **info@waterandsewer.org** if you have any questions about this notification. More information is also available at <u>https://waterandsewer.org/DBPs-FAQs</u>

Sent by Springfield Water and Sewer Commission. PWSID#1281000. Date Distributed: April 6, 2022