



Total Trihalomethanes (TTHM) MCL Violation Update: 12/03/2021

The Dedham - Westwood Water District routinely monitors the Dedham – Westwood the public water drinking supply for water contaminates. Our water system recently violated a drinking water standard. As our customers you have the right to know what happened and what we are doing to correct the situation.

 50 Elm Street
Dedham, MA 02026

 (800) 279-8810

 WaterQuality@dwwd.org

 www.dwwd.org

We are here to answer your questions, call our water quality hotline to speak with a live representative Monday through Friday between the hours of 8 AM and 5 PM at (800) 279-8810.

What happened?

The quarterly water samples taken on October 7th showed elevated levels of Total Trihalomethanes, exceeding the maximum contamination level of 80 ppb. The sample results were provided to the Dedham Westwood Water District on October 15th and in return, the Dedham Westwood Water District notified the Massachusetts Department of Environmental Protection (MassDEP) on October 18, 2021. The maximum contamination level (MCL) for total trihalomethanes is calculated at Locational Running Annual Average (LRAA) by both the MassDEP and the US Environmental Protection Agency, all of the quarterly sampling results from January 1, 2021, through December 31, 2021, contribute to the LRAA. The average at our sampling location that exceeded the MCL at 83 ppb. The October 7, 2021 sample, would be considered the last quarter sample for the LRAA compilation of the TTHM exceedance.

The following chart depicts the quarterly testing results for total trihalomethanes from January 5, 2021 (Quarter 1) through October 7, 2021 (Quarter 4):

Sample Location	Q1 (Jan - Mar)		Q2 (Apr - Jun)		Q3 (Jul - Sep)		Q4 (Oct - Dec)		LRAA
	Date	ppb	Date	ppb	Date	ppb	Date	ppb	
Dedham Medical Associates	1/5/2021	40	4/6/2021	58	7/8/2021	89	10/7/2021	118	77
Getty Gas Station	1/5/2021	45	4/6/2021	33	7/8/2021	46	10/7/2021	81	51
East Dedham Fire Station	1/5/2021	55	4/6/2021	45	7/8/2021	64	10/7/2021	42	52
Far Reach Pump Station	1/5/2021	74	4/6/2021	59	7/8/2021	89	10/7/2021	109	83

Why did this happen?

Our team consistently monitors the public drinking water supply for all regulated inorganic substances, unregulated (secondary) substances, organic disinfection byproducts, radionuclides, as well as lead and copper. We have been paying close attention and taking proactive measures to mitigate THMs in the public drinking supply due to an elevated sample result in 2019 (that did not exceed the Massachusetts Drinking Water Regulation). However, during this past summer, we saw record high temperatures in the month of June and historic rainfall amounts in July and August. We believe these two factors greatly contributed to the October THMs exceeding the LRAA. Other public drinking water suppliers in the Commonwealth have also been impacted by these unprecedented weather conditions.

What are we doing about it?

We immediately began measures to improve water quality and reduce the TTHMs in the public drinking water supply by:

- ✓ Reducing the age of the water in the distribution system through flushing. (The age of the water within the tanks and distribution lines can impact the level of TTHM in the public drinking water supply)
- ✓ Increased and blended supplemental water from the Massachusetts Water Resource Authority to reduce TTHM in the water supply.
- ✓ Increased sampling, testing, and monitoring TTHM monthly to gauge our actions and to implement other necessary actions to reduce TTHMs in the water supply.

Monthly Total Trihalomethanes (TTHM) Testing Results

The Dedham – Westwood Water District has implemented monthly sampling at the Fox Hill Water Storage Tanks 1 & 2, and at the Far Reach Pump Station and Dedham Medical Associates (the two sampling locations that had the highest results for TTHMs in the final quarter of 2021) to measure the impact of our corrective actions and determine our next steps. Water storage tank sampling is not a compliance measure of a public drinking water supplier, however sampling at the tanks can provide our team with a subsequent data set for comparative analysis and determine if modifications are needed in the treatment process.

The sampling results in the chart below are not an indication that we are no longer in violation of the maximum contamination level for TTHM. The Dedham – Westwood Water District is sharing this information with the public in the spirit of transparency.

Date	Tank Samples				Distribution Samples	
	Fox Hill 1	Fox Hill 2	Sandy Valley	Stoughton Road	Far Reach Pump Station	Dedham Medical Associates
10/7/2021	-	-	-	-	109	118
10/21/2021	94.5	86.4	86.8	43.6	109	82.1
10/28/2021	74	54.6	-	-	-	-
11/18/2021	53.7	46.4	98.2	72.6	63.7	55.8

These combined actions and the change of seasons will help abate the immediate impact; however, we are committed to providing a long-term solution and have also implemented the following:

- ✓ We have engaged the services of Weston & Sampson, a recognized leader in the engineering field of water projects to analyze the total organic carbon sampling data and research the cause of the elevated levels of TTHMs.
- ✓ We are investigating alternative ways to reduce the age of the water in our storage tanks without impacting the pressure in the system for fire flows.
- ✓ We have also included additional equipment in the plants, tanks and distribution system as well as implementing a unidirectional flushing program in our 2022 capital plan.

We are committed to providing clean, safe water, these are the first initial steps in our corrective action plan to reduce TTHMs in the public water supply. As stewards of this valuable resource, we take our job to protect public health and safety seriously. Our team of 30+ professionals work around the clock to provide reliable, cost-effective, high-quality water service that protects public health, promotes environmental stewardship, maintains customer confidence, and supports economic development and sustainability.

Should you have any questions, you may speak with a water quality representative by calling **(800) 279-8810** or by emailing us at waterquality@dwwd.org. For more information on TTHMs visit dwwd.org/tthm or <https://www.mass.gov/service-details/tthm-in-drinking-water-information-for-consumers>

