

## Board of Health

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**From:** Town Admin <townadmin@millvillema.org> on behalf of Town Admin  
**Sent:** Tuesday, January 9, 2024 8:29 PM  
**To:** jdefalco@bmrds.net; smoniz@bmrds.net; tlacroix@bmrds.net; shebert@bmrds.net; jwolford@bmrds.net; dsaltzman@bmrds.net; nstevens@bmrds.net; skonklin@bmrds.net; dcarrier@bmrds.net; ldamon@bmrds.net; dallard@bmrds.net; msimard@bmrds.net; jpilla-gallerani@bmrds.net; jhernandez@bmrds.net; sdesilets@bmrds.net; mcolannino@bmrds.net; sgrace@bmrds.net; ctoomey@bmrds.net; lrobinson@bmrds.net; dfeliciano@bmrds.net; eguido@bmrds.net; lboisvert@bmrds.net; kboisvert@bmrds.net; asullivan@bmrds.net; klangone@bmrds.net; mwalker@bmrds.net; jleballister-dudka@bmrds.net; lgrube@bmrds.net; ecote@bmrds.net; jparadis@bmrds.net; mhauer@bmrds.net; pbacon@bmrds.net; jcahill@bmrds.net; disenberg@bmrds.net; tlabonte@bmrds.net; rharpin@bmrds.net  
**Cc:** Board of Health  
**Subject:** MES Water Notice Required by MassDEP: 4th Quarter 2023  
**Attachments:** Millville-2188004-Tier 2 (HAA5-THM MCL) Q4 2023-PN-2024-01-09 (.doc)

Greetings and Happy New Year to all,

Attached please find a notice required by MassDEP to be sent to all users of the public water supply at Millville Elementary School (MES). Your email address was included in a list of all users provided by the Superintendent's office.

The attached notice refers to exceedances of MassDEP established Maximum Contaminant Levels (MCLs) as measured on a running annual average basis calculated after each quarter for byproducts as described in the notice resulting from chlorine used in the MES water system to remove iron and manganese from the ground water supply.

Please note, the chlorine is **not** used as a disinfectant in the system – instead ultraviolet light is used for disinfection purposes.

Also please note, the water is regularly tested for a variety of contaminants, none of which exceeded MassDEP MCLs – only the chlorine byproducts resulting from system treatment of manganese and iron.

The notice describes the health risks as determined by MassDEP, including potential risks from long term use for drinking and for cooking. The notice includes reference to pregnant women and those who may become pregnant, small children, and infants as being potentially at greater risk to the long term exposures.

MassDEP and other water quality experts have defined long term exposure as:

- For drinking – consuming 2 liters per day every day for 70 years.
- For cooking – consuming the equivalent of 20 plus servings of pasta per day every day for 70 years.

In the case of MES, MassDEP has required the Town to provide bottled water for any consumption or cooking.

As the measurement of the MCL exceedances for these chlorine byproducts is based on running annual averages, even if and when the results of monthly testing measure below the MCLs, the Town anticipates that future quarterly notices will be required due to the math of averaging prior testing results.

The notice provides information should you have questions or wish to learn more, including reference to the Town web site where much information on MES water is provided.

For your convenience I also include a direct link here where you can find much information on MES water:  
<https://www.millvillema.org/home/news/millville-elementary-school-water-information-0>

Best Regards,

Peter D. Caruso  
Town Administrator  
290 Main St.  
Millville, MA 01529  
508-883-1186

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

To all users of the Millville Elementary School located in Millville, Massachusetts  
**Haloacetic Acids (HAA5) and Total Trihalomethanes (TTHMs)**  
**are Above Drinking Water Standards**

***This is an important notice - please translate it for anyone who does not understand English.***

This notice is to advise our customers that our water system is in noncompliance with the drinking water standards for Haloacetic Acids (HAA5) and Total Trihalomethanes (TTHM) which are by-products of chlorination. Although this is *not an emergency*, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We are required to monitor the drinking water for HAA5s and TTHM levels on a routine basis. The standard or maximum contaminant level (MCL) for HAA5s is 60 parts per billion (ppb), and compliance is determined on a quarterly basis by averaging all samples collected at each location for the last 12 months (Locational Running Annual Average or LRAA). Previous notifications were issued reporting that the sample results of Q2, Q3 of 2022 and Q1, Q2, Q3 of 2023 showed that our system exceeded the MCL for HAA5s during those compliance periods. **The results of the last four quarters' samples (ranging between 18 and 250 ppb) show that the LRAA exceeded the standard or maximum contaminant level (MCL) for HAA5s during the October through December (Q4) 2023 compliance period.** Individual samples collected during the October through December 2023 compliance period reported levels between 20 and 42 ppb, however the LRAA remains above the MCL. The locations and LRAA compliance averages are as follows (averages above the MCL have been highlighted):

HAA5 Locational Running Annual Average (LRAA) (ppb)								
Location	Q2 Apr-Jun 2022	Q3 Jul-Sep 2022	Q4 Oct-Dec 2022	Q1 Jan-Mar 2023	Q2 Apr-Jun 2023	Q3 Jul-Sep 2023	Q4 Oct-Dec 2023	HAA5 MCL
DBP1 – Room 113/111	64	65	57	71	82	80	75	60
DBP2 – Room 308/322	59	60	59	71	67	69	62	60

The standard or maximum contaminant level (MCL) for TTHMs is 80 parts per billion (ppb), and compliance is determined on a quarterly basis by averaging all samples collected at each location for the last 12 months (Locational Running Annual Average or LRAA). A previous notification was issued reporting that the sample results of Q3 (Jul – Sep) of 2023 showed that our system exceeded the MCL for TTHMs during the compliance period. **The results of the last four quarters' samples (ranging between 14 and 160 ppb) show that the LRAA exceeded the standard or maximum contaminant level (MCL) for TTHMs during the October through December (Q4) 2023 compliance period.** Individual samples collected during the October through December 2023 compliance period reported levels between 36 and 60 ppb, however the LRAA remains above the MCL. The locations and LRAA compliance averages are as follows (averages above the MCL have been highlighted):

TTHM Locational Running Annual Average (LRAA) (ppb)					
Location	Q1 Jan-Mar 2023	Q2 Apr-Jun 2023	Q3 Jul-Sep 2023	Q4 Oct-Dec 2023	THM MCL
DBP1 – Room 111	71	73	92	91	80
DBP2 – Room 308/322	77	77	90	89	80

## What does this mean?

This is not an immediate risk. If it had been, you would have been notified right away.



- *Some people who drink water containing haloacetic acids (HAA5s) in excess of the MCL over many years may have an increased risk of getting cancer.*
- *Some people who drink water containing trihalomethanes (TTHMs) 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.*

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 TTHMs and HAA5s.

### **What happened?**

HAA5s and TTHMs are byproducts of chlorine which form when chlorine (a disinfectant and oxidant) combines with natural organic matter commonly found in surface and ground water supplies. Levels can vary depending on a number of factors including the amount of chlorine used, amount of organic plant material in water sources, temperature, water age and seasons. We must control these by-product levels while also maintaining appropriate levels of chlorine in the water necessary to remove contaminants (iron and manganese) and to avoid potential bacterial issues. Our water system has been required by MassDEP to submit a plan containing immediate short-term and long-term actions to correct the issue.

### **What is being done?**

We have hired consulting and engineering services to evaluate our treatment system and other corrective action options.

### **What can you do to reduce exposure?**

- Use bottled water for drinking, preparing formula, beverages, or food that retains water (e.g., hot cereals, rice, or pasta). While actions are being implemented to lower the by-product water concentrations, **bottled water (or bottled water stations) are being made available** at locations throughout the facility.

### **Where to find more information?**

- A question and answer document for consumers about HAA5 and TTHM by-products has been provided by MassDEP and is available at <https://www.mass.gov/doc/factsheet-haloacetic-acids-and-total-trihalomethane-in-drinking-water-information-for-consumers/download>
- You can also contact the US EPA Safe Drinking Water Hot Line at 1-800-426-4791.

### **Additional Information**

For more information please visit our website at [www.millvillema.org](http://www.millvillema.org) or contact Peter Caruso, Town Administrator at [townadmin@millvillema.org](mailto:townadmin@millvillema.org) or 508-883-1186.

If you have questions about your water system's operation, water quality monitoring, or response to this issue, please contact the system operator directly. If you have questions about the drinking water regulations or health risks posed by these contaminants, you can contact the MassDEP Drinking Water Program at: [program.director-dwp@mass.gov](mailto:program.director-dwp@mass.gov) or (617) 292-5770. If you have questions about specific symptoms, you can contact your doctor or other health care provider. If you have general questions about public health, you can contact the Massachusetts Department of Public Health at 617-624-5757.

*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.*