

**The Town of Marshfield & the Residents of Duxbury, Scituate & Pembroke who are directly serviced by the Marshfield Water Department, WERE under a BOIL WATER ORDER per Massachusetts Department of Environmental Protection (MassDEP) from 8/14/19 – 8/20/19**

**SUMMARY**

Marshfield Water Department (Water Dept.) experienced a Cross Connection Contamination Event due to a water main break and sewer main break at the same area on Monday, 8/12/19. We failed to notify MassDEP and the public of this emergency within 24 hours as required. Repairs were made on Tuesday, 8/13/19, and investigatory sampling was conducted (by a non-state certified lab). On Wednesday, 8/14/19 we notified MassDEP, Southeast Regional Office (SERO) that one of the investigatory samples was *E. Coli* positive. MassDEP SERO provided verbal notification of a Boil Order to the Water Dept. Initial notification to the public of the BOIL per MassDEP was provided on August, 14, 2019. An update was provided to the public on 8/15/19 which included the following information: Two out of five samples collected Wednesday 8/14/19 from Island Street in response the water & sewer main event were total coliform positive and *E.coli* positive; one of five samples was total coliform positive, *E.coli* absent, and two of the five samples were absent. All of the samples collected on 8/14/19 from the Low Zone (routine sample locations) were absent.

Subsequently, three out of six samples collected Thursday 8/15/19 from the Island St. area were total coliform positive, *E.coli* absent; all samples collected on 8/15/19 from the High Zone and the Low Zone (routine locations), were absent. These total coliform positive samples, following the initial *E.coli* positive samples constitutes an *E.coli* MCL violation.

One out of five samples collected Friday 8/16/19 from Island St. was total coliform positive, *E.coli* absent; all samples collected on 8/16/19 from the High Zone and the Low Zone were total coliform absent.

Four out of nine sample collected Saturday 8/17/19 from Island St. were total coliform positive, *E.coli* absent; all samples collected on 8/17/19 from the High Zone and the Low Zone were total coliform absent.

All nine samples collected Sunday 8/18/19 and Monday 8/19/19 from Island St. and all of the routine locations in the Low Zone (Zone that Island St. is within) collected on Sunday 8/18/19 and Monday 8/19/19 were all total coliform absent.

**Notification of the absent results, for samples collected on 8/18/19 and 8/19/19, was provided by the certified laboratory on Tuesday 8/20/19 and the Boil Order was lifted by the MassDEP SERO.**

Additional sampling was conducted as a precaution per MassDEP SERO. All samples collected from the High Zone on Monday 8/26/19 were total coliform absent. All sampled collected from the Low Zone and Island St. on Wednesday 8/28/19 were total coliform absent. All routine finished entry point samples and routine distribution samples collected in September were also total coliform absent.

*Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify any problems that were found during these assessments.*

*E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found E. coli bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments.*

*We had three total coliform positive repeat samples following two E.coli positive routine samples. We were required to complete a Level 2 Assessment by 9/12/19 because we found E.coli in our water system. The Level 2 Assessment was completed and submitted to MassDEP on 9/10/19. We repaired the water and sewer main on 8/13/19. A broken gate has been cut out and a section of pipe has been installed. There is now a physical barrier between the water and sewer main. We continued with increased chlorination, and increased sampling in August as per MassDEP, both of which are standard post-Boil Order actions.*

- The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice from their healthcare providers about drinking this water.

For more information, please contact the Marshfield Water Dept. at 781-834-5589.

General guidelines on ways to lessen the risk of infection by bacteria and other disease-causing organisms are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

*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.*