CHLORINE QUESTIONS AND ANSWERS

- **What is Chlorine and Why Is It Being Added to the Water System?**
  Chlorine is a naturally occurring element that is commonly used as a disinfectant. Since the early 1900’s, water systems in the U.S. have used chlorine to eliminate bacteria (a process called chlorination). Because total coliform bacteria were previously found in the West Boylston Water District water system, chlorine is being added temporarily. Chlorine will be held in the distribution system at the level of 0.5 ppm (parts per million) (equivalent to about one drop in 44 gallons of water) for a period of time to be determined by the District and MassDEP.

- **What Areas Will Be Chlorinated?**
  The entire system is receiving a low level of chlorination. The areas closest to the wells may detect a stronger dosage than areas further out into the system. The wells are located on Lee Street, Thomas Street and Temple Street.

- **What Should I Expect During Chlorination?**
  Because of the natural mineral content of our groundwater, it is possible that chlorine will react with iron and manganese to give the water a yellow or brown tint. Chlorine may cause material inside the water lines to slough off and enter the distribution system, also resulting in discoloration. Of course, chlorine has a distinct odor and may affect the taste of the water. These changes do not affect the safety of the water.

  The District will continue to monitor the water carefully to ensure that it meets state and federal drinking water standards. We will also monitor the water to assure that it contains an appropriate and effective amount of chlorine.

  If your water is not running clear, letting the water run for 15-30 minutes may clear it up. If the water does not clear after running for 30 minutes, please call the West Boylston Water District at 508-835-3025 during regular business hours or 508-210-5646 for emergencies after hours.

  Avoid using discolored water for drinking and cooking. Whenever possible, avoid the use of discolored water to do laundry, as this may result in stained clothes items. The water can be used for dishwashing, bathing, and outdoor uses. Customers with skin sensitivities to chlorine may wish to purchase an inexpensive chlorine filter attachment for their shower or bathtub faucet.

  Because chlorine has adverse effects for fish and aquatic life, treat water for use in aquariums with a de-chlorinating conditioner, available at many locations where pet supplies are sold. Customers with home dialysis systems should recognize that chlorine and other materials might be present in the water and maintain their filter systems accordingly.
- **Is the Water Safe to Drink?**
  The water is safe to drink for our general public. However, as an added precaution, people with compromised immune systems may wish to consult with their health care providers.

- **How Long Will the Chlorine be Added to the Water?**
  The District has been adding chlorine to the water since 2004 whenever bacteria has been detected and will continue chlorination for a period of time to be determined by MassDEP and the District. This period will be sufficient to eliminate any coliform bacteria detections from the distribution system. However, it is possible that chlorination will need to be continued longer. We will make every effort to minimize the chlorination period, recognizing that the elimination of the coliform bacteria and supplying safe drinking water to our customers is our top priority.

- **How Can I Stay Informed About this?**
  Customers can check our website or Facebook page for updates on our efforts. If you have additional questions, feel free to call the West Boylston Water District at 508-835-3025.

- **Why is this Occurring?**
  The exact cause of these occurrences is difficult to pinpoint since coliform bacteria are ever-present in the environment. It is possible that soil containing coliform bacteria entered the distribution system from a construction project or waterline repair. It is also possible that there was an undetected cross connection that carried bacteria into the system.

  A cross connection is a situation where water flows backward from a home or business into the water distribution system. If a hose is submerged in polluted or contaminated water, the water can be sucked back into the pipes and into the water system if there is a drop in pressure. Drops in pressure are not common, but may occur when water demand increases suddenly. The West Boylston Water District has a cross connection control program that requires businesses and irrigation systems to regularly test and repair their backflow prevention devices. Inexpensive backflow prevention devices are encouraged for residential use as well and should be installed on all threaded faucets around your home. They are available at many hardware stores and home improvement centers.

- **What is Total Coliform Bacteria?**
  Coliform bacteria are organisms that are present in the air, soil, and surface waters like lakes and streams, as well as the digestive tracts of all warm-blooded animals and humans. Coliform bacteria are normally present in the environment and are generally harmless. However, the presence of coliform bacteria in drinking water indicates that other disease-causing organisms (pathogens) may be present in the water system.

- **Why is Chlorine Being Used?**
  Chlorine is used by hundreds of water systems across the country for temporary or permanent disinfection of their water systems.

- **Can the chlorine be removed from the water?**
  Most of the chlorine can be removed from the water with a carbon activated filter such as a Brita or other faucet mounted filters. To remove just the odor you can fill a vented container and the chlorine smell will dissipate from the water.

  The addition of chlorine has caused some concern and inconvenience for some of the residents. We are indebted to the residents of West Boylston for their patience and understanding. Please contact us with any questions at 508-835-3025 or email us at commissioners@westboylstonwater.org