

Boil Water Advisories (BWA)

Occasionally, the Milton Water Company will announce a boil water advisory (BWA), typically after a water line break or replacement. A BWA is a public health advisory, required by the West Virginia Department of Health and Human Resources – Bureau for Public Health, issued when a public water supply **could** be contaminated by pathogens. If you are under a BWA, you should boil your water for at least one minute, then cool before consuming or using.

Although it is important that you comply with BWAs, it is also important to understand that these advisories do not necessarily indicate the presence of contaminated water. Instead, they are triggered, under state health department regulations, by a significant loss of pressure on the system that creates the **possibility** of contamination.

Here's what that means. The way our system works is that water is constantly being forced through the water lines, either by the pump at the water plant, pump stations, and/or the gravity feed from the City's reservoir tanks. This "forcing" is what generates water pressure in your home. The water in the system is constantly being pushed through all the pipes, ready for you to utilize the water. We usually have all the pressure we need, when we need it.

No one likes to experience disruption of service, low water pressure or discolored water. Water line leaks and breaks are never planned, and definitely not a happy surprise. How do we determine if the disruption of service will necessitate a Boil Water Advisory? It can't always be determined quickly. Most times, the entire line must be uncovered to

ascertain whether the water line is merely leaking, or if it has broken apart into pieces.

If there is just a leak, this can often be repaired with clamps that do not require us to shut off the water. If that is the case, the water pressure does not slow enough to allow contaminants to get into the water line. Sometimes, the field employees are able to cap the ends of the line while a section of the water line is replaced. This method prohibits the introduction of outside contaminants, although it can stir up rust and sediment that is already present in the main lines and/or household systems. In these situations, a BWA is not necessary.

However, in the case of some water main breaks, or when a main line is being replaced, the system could lose so much water, so quickly, that it pulls too much water out of the system to be quickly replaced. This, in turn, causes the water pressure to drop. In addition to offering convenience and comfort, positive water pressure is a safety feature. By always pushing water out through the system, it reduces the opportunity for anything else to get in. When we detect low pressure across too much of the system, it means that this safety feature has been compromised, and that contamination could occur as a result.

So, whenever this happens, we call a BWA and test for bacteriological contamination. In fact, the health department regulations require us to do so, and govern the process we must follow when we do. Under those regulations, and with good common sense, the advisory cannot be lifted until testing results come back stating that the water meets drinking water standards. The testing process typically requires 24-48 hours, although it can take longer if the event occurs around weekends or holidays when the laboratory is closed. Once we get clean results back from the lab, the BWA can be lifted.

We announce BWAs, and the lifting of the advisory, to potentially affected customers via a telephone system, so make sure your contact information is up-to-date so that we can keep you informed. In addition, we provide this information to local media and post it on the City's website. Following is a list of frequently asked questions about BWAs. After reading, if you still have questions, please call us during our normal business hours.

BWA FAQs

Q1 Why was a boil water notice issued?

A boil water advisory is issued by water utilities or health agencies as a precaution to protect consumers from drinking water that **might** have been contaminated with disease causing organisms. Boil water notices are typically issued when an unexpected condition occurs, such as a water line break, that **could** cause bacterial contamination of water in a public water system.

Q2 How long will the BWA be in effect?

Telephone calls will be made to affected customers, and public notice will be given when the BWA has been lifted. This generally takes 24-48 hours after water samples are gathered. However, if the event occurs on a weekend or holiday, it can take longer depending on the operating hours of the laboratory.

Q3 How do I disinfect the tap water so that it is safe to drink?

Boiling water kills harmful bacteria and parasites (freezing will not disinfect water.) Bring water to a full, rolling boil for at least 1 minute to kill most infectious organisms, then allow the water to cool before use. Boiled water can be used for drinking, cooking and washing.

If you are living in an area without power and the inability to boil the water, we suggest using bottled water. However, if that is not an option, disinfect water by adding 1/8-1/4 teaspoon of plain, unscented household bleach to a gallon of water. Thoroughly mix the solution and allow the water to stand for at least 30 minutes before use. **CAUTION:** Chemical disinfection is limited in effectiveness and is not appropriate for very turbid (muddy) water. In this case, only use an alternate source of water.

Q4 Can I use the water for cooking?

No. Any water used for food preparation or cooking needs to be boiled first.

Q5 What if I am boiling water as part of the cooking process?

It is more protective to boil the water first to prevent the potential for inadequate heating. The cooking process should bring the water to a full rolling boil for at least one minute before adding the food item (for example, making pasta.)

Q6 How should I wash fruits and vegetables and make ice?

Fruits, vegetables and other foods that will not be cooked should be washed and rinsed with boiled (then cooled) water or with bottled water. Similarly, ice should be made with boiled (then cooled) water or bottled water. Throw out any ice made with water

Q7 Can I use my water to make baby formula or drinks?

No. Any water used for baby food, formula or making beverages must be boiled (then cooled) or from bottled water. In addition, be certain to sterilize the bottles, nipples etc., before use.

Q8 Can I use my coffee maker, ice machine, water dispenser...?

No. Do not use these if they are directly connected to your water supply. Turn off the water to your refrigerator if possible and throw away any ice made with the potentially contaminated water. Use bottled water or water that has been boiled (then cooled) for making ice or coffee. When the advisory is lifted, consult the owner's manual for these devices to find out how to flush and sanitize the appliances.

Q9 Can I just use my water filter?

No. Most home water filters will not provide adequate protection from microorganisms.

Q10 Can I wash dishes?

Hand-washed dishes: Not without precautions. Use boiled (then cooled) water or bottled water, or after washing with dish detergent, rinse for a minute in a dilute bleach (1 tablespoon of unscented household

bleach per gallon of water.) Allow dishes, cutlery, cups, etc. to **completely air dry** before use.

Home dishwasher: Yes. If the hot wash is at least 170°F and includes a full dry cycle. However, some home dishwashers do not reach this temperature. If you are uncertain of the temperature of your dishwasher, rinse in dilute bleach and **completely air dry** as described for hand-washed dishes.

Commercial dishwasher: Yes. If it is an NSF listed washer and manufactured and operated with a heat sanitizing rinse set at 170°F that lasts for at least 30 seconds.

Q11 Can I wash my hands using tap water?

Yes. Hand washing using tap water under a BWA is safe. Wash hands vigorously with soap and water and rinse well. If you are going to prepare food, use boiled (and cooled) water or bottled water to wash your hands.

Q12 Can I bathe/shower using tap water?

Yes. You can use tap water for bathing, showering, shaving and hand washing, just don't let water get into your eyes, nose or mouth. Children, disabled individuals and persons with health issues may need to be assisted to make sure they don't ingest water. Though the risk of illness is minimal, individuals who have recent surgical wounds, have compromised immune systems, or have a chronic illness should use bottled water to wash until the BWA is lifted.

Q13 Can I use the tap water to brush my teeth?

No. Any water you ingest or place in your mouth should be disinfected by being boiled (then cooled.) Bottled water is also an option.

Q14 Is the water safe to give to my pet?

Care for your pets the way you would care for yourself. To be safe, give them water that has been boiled (then cooled,) or water from an acceptable alternate source. Many pets regularly drink some pretty bad water, but pets come in a wide variety with variable resistances to pathogens. Many pets are vulnerable to the same diseases that humans can get from contaminated water. Check with your veterinarian to get more information about your specific pet.

Q15 Can I wash clothes?

Yes. It is safe to wash clothes in tap water as long as the clothes are completely dried before being worn. However, increased turbidity that sometimes occurs during a boil water event may discolor clothing, especially whites. Use common sense. If the water looks muddy or rusty, don't use it to wash your clothes.

Q16 What if I have already consumed potentially contaminated water?

Even if someone has consumed potentially contaminated water before they were aware of the boil water advisory, the likelihood of becoming ill is low, and most of these illnesses are not usually serious or life-threatening, except in the elderly, very young, or those who are immune compromised. Anyone experiencing symptoms such as diarrhea, nausea, vomiting, abdominal cramps, with or without fever, should contact their healthcare provider. Symptoms associated with waterborne

illnesses are also associated with foodborne illness, or even the common cold. If your doctor suspects a waterborne illness, you may be asked to provide blood and/or stool samples.

Q17 Why did my neighbor get a BWA but I did not?

The areas affected by boil water advisories are determined by our field staff, using their knowledge of valve locations, pressure zones and connections to the mains. It is possible to have houses across the street, around the corner, or even right next door be affected, while yours is not. These advisories are updated as affected areas are identified.

If you experience a loss of water at your address, but you were not notified of a BWA, we recommend that you follow the same precautions. Call the water company to make sure that your contact information is up-to-date.

Q18 What do I do once the BWA has been lifted?

Residents are advised to “flush” their interior and exterior water lines after a BWA has been lifted. Follow the specific requirements outlined by the equipment manufacturer for your appliances (refrigerator water/ice/filtration systems, dishwashers, humidifiers, etc.) to clean and flush those systems.

Cold Water Faucets: Run cold tap water at all faucets for several minutes until you feel a change in temperature (i.e., the water gets noticeably colder.)

Hot Water Faucets: To clear hot water pipes and water heater of untreated water, change all faucets to hot water and flush for ten or fifteen minutes to empty the hot water tank.

Clean all Faucet Aerators: Unscrew and remove all faucet aerators (screens.) Rinse completely and reinstall on faucet.



Due to the flushing of lines by residents and the flushing of hydrants by the Utilities, some customers may experience a lack of water pressure and/or discolored water. However, this is an expected result and does not pose an immediate health risk.

Q19 Where can I get additional information?

www.cdc.gov