

A Boil Water Advisory

From time to time, the Town of Davis may announce a “boil-water advisory,” usually after a water-main break or replacement. If you are under such an advisory, you should boil water at a rolling boil for a minimum of one minute before consumption or cooking.

First things first: to keep yourself and your family safe under a boil-water advisory, please do not drink tap water in the affected area without first boiling it. Bring water to a boil, let it boil for one minute, and let it cool before using. Alternatively, use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation until further notice. Boiling kills bacteria and other organisms in the water.

Although it is important that you comply with boil-water advisories, 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 losses of positive pressure on the system that create the possibility of contamination.

Here’s what that means. The way our water system works is that water is constantly being forced through the town’s water lines, by the pump at the water plant and/or by the feed from the town’s reservoir tanks.

This “forcing” is what generates water pressure in your home or business: the water in the system is constantly being pushed through all the pipes in the town, right up to your taps and faucets, ready for you to open a valve to run a hose, fill a pot, or take a shower.

If everyone in the town were to open every tap, faucet, or other valve at once, it could conceivably pull too much water out of the system to be quickly replaced, and everyone would notice low pressure coming out of their faucets or taps. However, under normal operations, this doesn’t happen, and we all usually have the pressure we need when we need it.

However, in the case of some water main breaks, or when we have to replace a water main, the system could lose so much water, so quickly, that it is as if many of the town’s taps and faucets are open at once. In other words, it pulls too much water out of the system to be quickly replaced. This, in turn, causes the water pressure to drop.

Why does this trigger a boil-water advisory? Because, 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 enough pressure across enough 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 boil-water advisory and test for bacteriological contamination. In fact, health department regulations require us to do so and govern the process we must follow when we do. Under those regulations, and also in accordance with good common sense, the advisory cannot be lifted until we receive clean results back from the independent lab that we use. The testing process requires at least 24 hours.