



A Tradition of Stewardship  
A Commitment to Service

## Water Wells, Springs and Septic Systems

As an owner of a septic system, private domestic water well or spring that may be damaged by a wildfire, you may have some concerns about fire related impacts to your septic and water systems.

The County of Napa, Division of Environmental Health recommends the well owner perform a visual inspection of their well or spring and water system, including the piping and plumbing that provide water to and throughout your home. Items that you should check include:

- Damaged and melted or exposed electrical wiring
- Damaged and melted PVC casing, liner or pipe
- Damaged spring box
- Damaged well houses, pressure tanks and equipment such as chlorinators, water treatment equipment and electronic controls
- Damage to pressure tanks which could have been caused by exposure to excessive heat
- Damage to storage tanks, vents, and overflow pipes
- Debris, such as ash and sediment entering uncovered wells, springs or storage tanks.

Exposed electrical wiring to the well poses a significant electrical safety hazard with potential for an electrical short to the metal casing. If the electrical wiring has been damaged by fire, do not handle the wiring or touch the casing.

If your well or spring has been damaged by fire, contact a local licensed and bonded well contractor or pump installer to determine the extent of the damages and what must be done to either repair or destroy the well. Information on constructing a spring box is available from this Division. If you think a fire may have damaged your water supply, bring bottled water back with you when you return to your home until repairs can be made.

### Water Taste and Odors

You may notice that your water tastes or smells earthy, smoky, or burnt, thorough flushing of the water lines is strongly recommended.

### Inside Your Home

To the extent you can, visually check the water-supply system, including plumbing, for any damage, signs of leaks, or changes in operation. You should check to see if your well and plumbing system

maintained positive pressure during the fire. This can be done by simply turning on a faucet in the household to see if water flows. You should not hear any air being released from the faucet. The flow of water should be steady and uninterrupted. If you do hear air escaping from the faucet with water intermittently spurting out when it is turned on, that is an indication that your well and household plumbing had a loss of pressure and may have been damaged.

### **If You've Had Loss of Water Pressure**

If your visual inspection shows that there was a loss of pressure or the water system has been damaged, it is possible your water may be contaminated with bacteria. Damaged components should be repaired or replaced. Anytime a water system loses pressure, the water should be tested for the presence of bacteria before it is used for drinking or cooking. Anytime the well or water system is repaired, it should be disinfected after a repair is made and then tested to ensure the water is safe for drinking or cooking.

### **Testing Your Well or Spring for Bacteria**

When testing drinking water for the presence of bacteria, it is necessary to collect a sample and deliver it to a CA-certified laboratory. To locate a laboratory check your local Yellow Pages under "Laboratories – Testing" or refer to the list of laboratories maintained by this Division. Bacteria samples must be collected in an approved container provided by the laboratory. When collecting a sample, follow the instructions that come with the bottle and return the sample bottle to the laboratory in the recommended time.

### **Using Your Water While You Wait for Test Results**

You can use your water for showering and flushing toilets. Take care to avoid swallowing water from showers or baths. You should not use your water for drinking or cooking purposes unless you have boiled or disinfected it. Potentially contaminated water should not be used to brush teeth or wash dishes and/or cooking utensils. While you are waiting to receive the results of bacteria testing, you can boil the water you will be using for drinking and cooking for at least 1 minute at a full rolling boil.

You can also disinfect your well and water system while waiting for sample results. If the well tests positive for the presence of coliform bacteria, you should have the well and water system disinfected. Instructions for disinfecting wells can be found below.

Wells must be maintained to prevent health hazards. Take steps to ensure your water is safe to drink after an emergency.

### **Disinfection of Domestic Water Wells**

- Disinfection of a well is recommended to eliminate disease causing organisms. A well should be disinfected following a repair, maintenance or replacement of the pump or if the power has been off for an appreciable period of time possibly causing the pressure tank to loose pressure and the distribution system to back siphon into the well causing possible contamination.
- Use only a freshly opened bottle of liquid chlorine, as the solution weakens with exposure to air.
- It is advisable to premix the liquid chlorine into a 5-gallon container prior to pouring the disinfectant into the well. **The recommended dosage for a 50.0 PPM chlorine residual is 2-3 cups of 8.25% liquid chlorine for a standard well.**

- Mix thoroughly after adding the chlorine solution. If the well is deep, turn the pump on and off to surge the well.
- Allow the system to rest for 24 hours.
- To reduce excess chlorine, pump the well several times then turn on all the outside faucets until the chlorine odor is at an acceptable level.
- Take a bacteriological sample into a certified private laboratory for analysis. If the test results for total coliform are positive, then repeat disinfection procedure.

### **Septic Systems**

Onsite wastewater (septic) systems have most of their functional components below ground and are typically more resistant to fire damage. However, it is important to inspect your system for damage to PVC piping above or near the ground that may have been impacted by heat. Tanks and lids made of plastic and/or fiberglass may melt when exposed to fire and extreme heat creating a hole or weak spot in the tank or riser. Rope off the area to avoid accidental falls into the septic tank and cover any openings with plywood or similar material until repairs can be made. If your wastewater system has been damaged, or if your system is backing up or malfunctioning, discontinue use and contact a licensed septic contractor and our office.

If you have any questions regarding your particular situation, please do not hesitate to contact us at (707) 253-4471.