



## WATER WELL RECOMMENDATIONS AND REQUIREMENTS AFTER WILDFIRE STORMS

Private well water is **not regulated by any government agency** and it is the **responsibility of the individual property owner** to ensure that their drinking water supply is safe by having the well water tested by a state certified laboratory. Landlords are required to provide potable water to their tenants.

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

The County of Sonoma recommends the well owner perform a visual inspection of their well 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 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 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.

**Please Note:** Building permits are required for electrical work.

If your well has been damaged by fire, contact a local C-57 licensed and bonded water well contractor to evaluate the extent of damages and what must be done to either repair or decommission the well. Permit Sonoma, Well & Septic permits are required to drill and/or decommission water wells. Wild fire damaged water wells are a high priority defined as emergency wells seeking replacement/decommissioning permits.

**Please Note:** After the parcel has been completely cleaned and given clearance to proceed toward rebuilding, a copy of the C-57 licensed contractor's well evaluation, with recommendations and completed repairs, shall be submitted to Permit Sonoma Well & Septic Section for sign off and assist in streamlining issuance of the building permit.

If you think a fire may have damaged your water supply, bring bottled water back with you when you return to your home.

### **Water Taste and Odors**

You may notice that your water tastes or smells earthy, smoky, or burnt. If so, you may need to



thoroughly flush your water lines.

### **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 likely that 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 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. For more information on CA-certified laboratories, visit the [Division of Drinking Water Environmental Laboratory Accreditation Program](#) webpage. You can also go to the [Sonoma County Department of Health Services Environmental Health, Water Testing](#) list of laboratories located in Sonoma County or your local Yellow Pages under "Laboratories – Testing." 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. This caution includes not washing dishes or other cooking utensils in it. 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.

### **Well Disinfection**

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. Additional information may be found at [Sonoma County Department of Health Services Environmental Health, Well Water Quality](#).



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

#### **Disinfection of Private 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 lose 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 50.0PPM 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 overnight 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 indicate unsafe conditions, then repeat disinfection procedure.

For more information on well repairs, well deconstruction, and well reconstruction, please contact Permit Sonoma's Well & Septic program at 707-565-2849. For questions related to water quality and testing, please contact the Department of Health Services' Environmental Health and Safety division at 707-565-6565.