

# Drinking water and septic systems — *What you need to know after the fire*

Homeowners returning to their sites affected by fire may have questions about their drinking water and septic systems.

Individuals with private wells need to be concerned about how safe the water is to drink. Have the water tested at a certified environmental testing laboratory to ensure the water is safe. Environmental and ecological service listings can be found in the yellow pages in a telephone book. Each lab will have directions how to submit a sample, what they charge, and other information. You will want the laboratory to test for total coliforms.

Laboratories will provide a bottle for collection and normally will have results in a few days. Instructions with the sample container must be followed very carefully for accurate results.

The laboratory should test for bacterial contamination – total coliform bacteria. If there are specific concerns about chemicals in the water, talk with laboratory personnel about additional tests they could recommend.

The water should only be used for showering and flushing toilets while waiting for test results. Use bottled water for drinking, brushing teeth, or cooking. If bottled water is not available, disinfect small quantities of water by boiling it for two to five minutes. If impractical, mix 1 gallon of clear water with 6 to 8 drops of 5 percent regular household bleach (do not use scented or perfumed bleach). Regular household bleach is 5 percent to 5.25 percent. Do not use ultra bleach, which has a higher concentration. Let the mixture stand 30 minutes before drinking. If the water is cloudy and contains particulates, allow the particles to settle, drain the clear solution from the top into another clean container, and add double the amount of drops listed above.

If the water sample comes back positive for bacteria, the well needs to be disinfected. To disinfect a well, mix 2 quarts of 5.25 percent bleach (regular household bleach) with 10 gallons of wa-

ter. Use only regular, unscented bleach. Pour the solution into the well, start the pump, and open all the faucets in the home. When a chlorine odor is noticeable at the faucets, close them and stop the pump. Allow the well to stand for 24 hours without pumping.

After 24 hours, open taps and flush all lines until the chlorine odor is no longer detected. The laboratory testing the water will provide more information on how to disinfect a well if results are positive for bacterial contamination.

Thoroughly flush water lines if the water tastes or smells smoky after a fire. If there was a loss of pressure, some backflow of water and other contamination could have occurred. Be sure to have the water tested, and thoroughly flush the entire system.

Perform a visual inspection of the well. The following should be checked to ensure there is no damage:

1. Electrical components that supply power to the pump
2. Additional disinfecting equipment, if applicable (UV lamps, reverse osmosis filter)
3. Pressure tanks, storage tanks, and vents
4. Wellhouse, aboveground cap and casing
5. Any pipes aboveground that bring water into the home

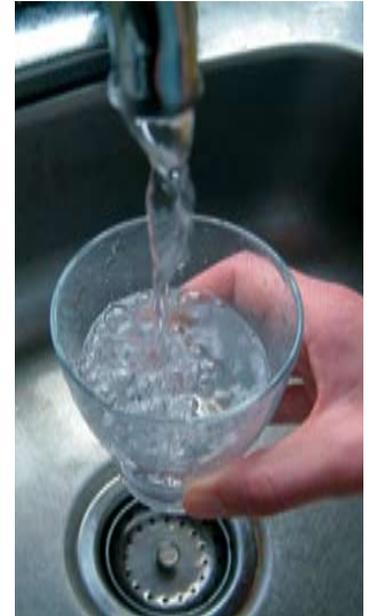
If damage is found, contact a professional knowledgeable with well maintenance. Listings should be available in the yellow pages of the telephone book. If the well top was not capped or otherwise protected, call a laboratory to determine if there are additional tests to consider.

## Septic System

Homeowners will want to determine whether the septic system was damaged. The fire should not have affected the underground system; however, there is the possibility of damage if heavy equipment was parked on top.

Look for damage from the clean-out outside the house to the end of the drainfield. Often, fire-

fighters dig fire-breaks or dozer lines to protect a structure from a fire. A dozer line through the drainfield will be noticeable, and damage to the drainfield could have occurred. Once the system is used again, there may be surfacing sewage or toilets and plumbing fixtures that may not drain properly. These are good indications something is wrong.



Contact the local agency that permitted the septic system to help determine where the problem is. Most systems are installed in a flat area. In mountainous areas, systems are sometimes installed on slopes. Since vegetation in the area is likely gone, there is a concern the topsoil could start eroding away from the septic system.

Articles on erosion and how to deal with it are included on previous pages. Be advised to only use shallow-rooted plants, such as grass, to revegetate around septic systems. Plants that grow long roots, such as trees, should not be planted on top of septic systems. Their roots can grow into the system and cause damage as these plants seek water and nutrients.

Contact a local health department for information about any of the above topics.

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