



STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL HEALTH
DRINKING WATER PROGRAM



Wildfire Information for Private Well Owners

Drinking Water Supply System

Be sure the power to your well pump is turned off before inspecting for damage. Onsite wells at undamaged/unaffected homes should not have been affected by the wildfire. Be sure the sanitary seal or well cap is securely fastened on top of the well casing to prevent any foreign material from dropping into the well. The following are damage to look for:

- Rubber gaskets in the sanitary seal on the top of the well casing;
- Electrical wiring and conduits that supply power to your well;
- Well casing and/or PVC/HDPE liners inside the well;
- Aboveground or encased plumbing that brings water from your well to your house;
- Pressure tanks; or
- Storage tanks, vents, and overflow pipes.

If you suspect damage to your well or associated electrical or plumbing components, contact a water well or pump contractor for repair. Contractor contact information can be found on the DEC Private Water Wells web site, http://dec.alaska.gov/eh/dw/DWP/DWP_PrivateWells.html.

If your house was damaged, there is a potential that your drinking water system became contaminated with bacteria and/or petroleum products from fuel spills in nearby areas. These forms of contamination may constitute a hazard to public health. ADEC recommends that homeowners carefully check their water systems for damage and any nearby sources of contamination. As an initial precaution, ADEC advises that water used for drinking, cooking, hand washing, or dish washing, should first be boiled for at least 2 minutes.

If you detect a fuel spill near your well, contact your local ADEC office to report the spill. You may want to have your well water tested to see if it may be contaminated with petroleum products that could pose a health risk to you and your family. For specific testing of your well water, ADEC recommends that you talk with an independent, state-certified laboratory about the problem you suspect and their recommendation for sampling analysis. A standard, and the least expensive, screening test for petroleum hydrocarbons is called BTEX (benzene, toluene, ethylbenzene, and xylenes). A BTEX analysis could be done if you are unsure of the type of petroleum contamination that may be in your well. If the BTEX test indicates the presence of petroleum hydrocarbons, additional testing may be needed to determine if it is gasoline or diesel. If you suspect gasoline contamination, you could have your water tested for VOC's (volatile organic compounds). Again, it is best to discuss your suspected problem with a laboratory specialist to determine the best analysis of your water.

The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of total coliform bacteria indicates a possible health concern. Total coliforms are generally not harmful themselves. The presence of these bacteria in drinking water generally is a result of a problem with water treatment, or with the well or pipes that distribute the water, and indicates that the water may be contaminated with other bacteria, viruses, or protozoa that can cause diseases. Disease symptoms may include diarrhea, cramps, nausea, jaundice, and associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water.

Bacterial contamination can enter a well from inadequate pressure in the water lines resulting in backflow contamination from faucets, cracked well casings, waterline leakage, or infiltration of surface water into the well. For those cases, ADEC recommends the well be disinfected with chlorine bleach and the water be tested before consuming the water. See the ADEC handout titled "[Drink it Pure Disinfection Procedures](#)". During the disinfection procedure, the water will not be drinkable, therefore, a 24-hour supply of either bottled or boiled water (boiled for at least 2 minutes) should be on hand before the procedure is started. Plan to disinfect the well late at night or at other times when there is little need for water. After the disinfection procedure is completed, ADEC recommends that you have your water tested for total coliform bacteria, to ensure that it is safe to drink.

NOTE: Chlorine disinfection will not eliminate fuel contamination in your well water.

Water that is contaminated with coliform bacteria, or other contaminants, should not be used for potable (drinkable) purposes, until it has been adequately disinfected and re-tested to verify that it is free of contamination. For more information regarding water disinfection procedures, or where to have your water tested, call your local ADEC office.

If your house was damaged and important well documents lost, such as the well driller's log, you can check to see if it's available on DNR's online Well Log Tracking System (WELTS: <http://dnr.alaska.gov/mlw/welts>), or by contacting the water well contractor who drilled your well (if known). If not know, check with neighbors.