

Dedicated to protecting and improving the health and environment of the people of Colorado

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GUIDANCE FOR PROPERTY OWNERS IMPACTED BY WILDFIRES WITH HOMES SERVED BY WELLS AND ONSITE WASTEWATER TREATMENT SYSTEMS

Every year, wildfires have the potential to impact properties throughout Colorado. As residents return to their property after a wildfire, they may have questions regarding their on-site wastewater treatment systems (OWTS) and water wells. This document provides general guidance for these items.

On-site wastewater treatment systems

Since most components of an OWTS are underground, there is typically minimal direct impact from the wildfire. However, some at grade or above ground components could be affected, such as, cleanouts, tank risers, lids, inspection ports, or electrical junction boxes/control panels for pumps and mechanical systems. If you notice damage to any of these components, call your local OWTS permitting agency or a licensed OWTS professional for information and recommendations on how to address these items.

Even if your system has escaped fire damage it still may have been impacted by fire suppression activities on the property. If fire trucks were driven near your tanks or across any portion of the soil treatment area, they may have caused damage to system components or compaction of the soil. Each could have an effect on the function of your OWTS. If this appears to be the case, contact your local OWTS permitting agency or a licensed OWTS professional for additional information.

Wildfires will typically reduce the infiltration of rainwater into the soil. The greater the intensity of the heat, the more impermeable the soil surface will become. Although typically only ½" - 2" thick, this crust on the soil surface can significantly decrease the recovery of plants as well as promote serious erosion of the site. Look for signs of erosion such as loss of soil or gullying and take steps to divert drainage around your soil treatment area. Bales of straw will provide temporary relief, but lightly scarifying the soil and reseeding with grasses and wildflowers is ultimately necessary to help anchor the soil.

If your home has been destroyed and you wish to rebuild, it may be possible to use the existing OWTS provided it has not been damaged and it is in compliance with published county regulations. The following recommendations should be followed to assist in this process:



- The pipe between the house and the tank should be capped to prevent debris from the rebuilding process from entering your wastewater system.
- It is recommended that you have your septic tank pumped at this time. Pumping the septic tank will eliminate possible odors and allow for a more efficient system start-up when the system is again placed in use. Before pumping, check with your OWTS permitting agency or local OWTS professional to see if your tank was installed in an area with a high groundwater table. If this is the case, additional procedures may be required to prevent your tank from floating after pumping.
- The area around your septic tank and your soil treatment area must be protected from construction traffic and other associated activities to prevent damage to the system. Snow fence or yellow caution tape is suggested.

Again, contact your local permitting agency for information and guidance regarding any of these items.

Water Wells

Like an OWTS, most of the components of the well and water system are underground and should not be directly impacted by fire. However, you should closely examine the above ground components such as the well casing (the "well head") and electrical wiring for signs of fire damage. Specifically, you should verify that the electrical wiring to the well head has not been damaged. You should also check the sanitary seal on the well head for fire damage. If your well casing was constructed of PVC (Polyvinyl Chloride), it may have been totally melted away by the extreme heat of the wildfire. The casing could be melted as deep as 2' - 5' below grade. This is an item that should be addressed immediately by a licensed water well contractor, as the open hole is a direct conduit to the drinking water aquifer. All repairs to your well should be conducted by a licensed water well contractor. As with your OWTS, look for signs of erosion and take steps to divert drainage around your well.

Water Quality

Since water wells typically pull water from hundreds of feet below the surface, you should see little immediate impact from the fires relative to water quality. However, with the loss of surface vegetation and possible intermittent flooding of the general area, the ability of the soil to filter precipitation could potentially be compromised. Possible longer-term effects may include an increase in turbidity (cloudiness), poor taste and odor, and possibly an increase in bacteria. If your water quality does not improve in a relatively short period of time, consult a water treatment professional, local well contractor, or your local public health agency about the possible solutions.