

Sealing Unused Wells

Private Wells and Public Water Systems

Unused wells that are not properly abandoned, or decommissioned, can be a hazard. Along with potentially contaminating water supplies, unused wells that are not sealed can be dangerous to people and animals.

Wells can go unused for several reasons. The most common is that the well no longer provides water to the home or homes it was serving. Perhaps the well requires repairs that are not economically feasible, or it was used for a service, such as water monitoring, that is no longer needed.

Regardless of the reason for well abandonment, it is imperative that unused wells are sealed by a professional contractor. States have different procedures that govern sealing wells, and some areas have standards that vary regarding private and public water wells. Professional contractors will be able to answer all questions regarding the necessary action for your area.

How does it work?

When sealing the well, the contractor will first remove all of the equipment in the well, such as pumps and pipes, so the well can be filled and sealed properly. Usually, an attempt to also remove the casing, liners, and screens will be made, but sometimes this is impossible to do.

The required material used in the sealing process varies from state to state, but cement-bentonite or bentonite clay chips are used frequently. For the best results, the contractor will carefully seal the well from the bottom up, using a tremie pipe to assure there are no air pockets.

Once filled, homeowners in most states are required to provide abandoned well information to local environmental protection or water departments.

How can I find abandoned wells?

Here are several clues to look for when searching your property for unused wells.

- Pipes sticking out of the ground
- Depressions in the ground
- Small buildings that could have been a well house at one time
- A concrete pit in the ground
- Old, out-of-use windmills—they are often located near wells
- Additions to old homes—wells were often put in the basement or under porches to prevent pumps from freezing in the winter.

Why should I seal an old well?

Here are more detailed reasons for sealing unused wells.

Direct disposal of contamination

With rising disposal costs, some individuals or companies may be tempted to dispose of waste down unused wells, thinking, “The well isn’t used, so it won’t hurt anyone.” However, that is far from the truth, as the potential for harm is real. Having a properly sealed well doesn’t give those individuals that opportunity.

Physical hazards

One of the most obvious reasons for sealing an unused well is to prevent physical harm. There have been national news stories through the years where young children have fallen into abandoned wells that are 10 inches or less in diameter. Small animals can fall into unused wells too, leading to water contamination in nearby wells.

Water mixing between aquifers

It is necessary to seal a well when water contamination is discovered in an area where there are multiple-aquifer systems because the contaminated water can migrate between the aquifers. This often occurs when a second well is drilled to a lower aquifer after contamination is discovered in the original, shallower well that has not been decommissioned. The contamination from the first well can work its way downward to the lower aquifer and impact the second well. Contaminated water can also move between aquifers when a well is improperly sealed. This is why it is important to always have the work done by a professional contractor.

Where can I get more information?

For more information on your private water well, contact your local contractor. Also, visit the Web site of the National Ground Water Association, www.ngwa.org, and its site just for well owners, www.wellowner.org.