The Water Well Standards Act Protects You and Your Ground-Water

The Georgia Water Well Standards Act (WWSA) was passed in 1985 to protect you. All water wells constructed in Georgia must comply with the act.

If you need a water supply well for your home in Georgia:

1. Only hire a water well contractor licensed in Georgia. Ask to see the contractor's current license. A copy of the license must be available at the well site during drilling.

A contractor from another state must have a current Georgia license.

Unlicensed contractors are subject to arrest. Unlicensed contractors often construct substandard wells that may endanger your family's health.

2. Permits are required for domestic water wells in some counties. Check with your county health department. Your contractor must file an intent to drill form with the County Sanitarian. This is to insure that the well is not located near known pollution sources.

3. Domestic water wells must be located upgradient of and not less than:

10 feet from a sewer line

50 feet from a septic tank

100 feet from a septic tank drain field

150 feet from a cesspool or seepage pit

100 feet from an animal or fowl enclosure.

These rules are to protect your water supply from fecal bacteria.

4. Only new materials manufactured specifically for use in water wells can be used to



Figure 1. Sand aquifer well used in south Georgia.

construct a water well. Your contractor must not cut holes or slots by hand in well casing. Such coarse holes often allow mud and sand into the well.

5. The contractor must grout your well. The open space between the well casing and the borehole must be filled with grout. Cement, neat-cement, or bentonite based grouts can be used as grout. Grouting from the surface to a minimum depth of 10 feet is required for all individual water wells and 20 feet for irrigation wells.

A well without grout is illegal and endangers your family's health.

6. Your water well contractor must also disinfect the well after drilling. This kills bacteria that get into the well during drilling. The well should be disinfected with chlorine at a concentration of 50 ppm for two hours before using the well.

Do not drink water from a well that has not been disinfected. It may endanger your family's health. Wells should be disinfected again after being serviced. Wells used only for irrigation need not be disinfected.

7. The contractor must give you written information on the construction of your well and the materials used in it along with his name and license number within 30 days of constructing the well. Keep this information. It will be valuable if there is a problem with the well or when you sell your property.

8. The law requires that the <u>well owner</u> place a concrete pad around the well. The pad must be at least 4 inches thick, extend at least two feet in all directions from the well casing and slope away from the casing. The casing must extend at least 8 inches above the pad and have a sanitary cover. In flood prone areas, the casing must be 2 feet higher than the highest flood of record. This is to prevent surface water from flowing into the well.



Typical Well Construction

Water wells are constructed differently depending on the natural conditions in your area. Diagrams of wells commonly used in Georgia are shown in Figures 1-3. Ask your contractor to explain how he intends to construct your well before signing a contract.

Shallow bored wells may be constructed in Georgia. Bored wells produce water from the shallow soil horizons. They are prone to pollution and are the first to go dry in a drought. Drilled wells are more likely to provide a reliable, safe source of water.

Protect Your Well

Wells located in northern Georgia, all bored wells, and many shallow drilled wells in southern Georgia obtain water from the unconfined surface aquifer. The water you get from these wells falls as rain, generally within a few hundred feet of the well. It usually takes this water only weeks to months to percolate through the soil to your well.

Disposing of or spilling motor fuel and oil, solvents, agricultural or any other chemicals, trash, and animal waste in the recharge zone around the well can contaminate your water supply. **Protect your well's recharge zone** from contamination.

Abandoned Wells Must Be Plugged

The law makes the well owner responsible for plugging abandoned wells. An abandoned well is any well that the owner no longer intends to use or has not used for three years. A licensed water well contractor must do the plugging. They will generally remove the casing, if possible, and then fill in the hole with grout.

Properly covering active wells and plugging abandoned wells, particularly all abandoned dug or bored wells, will protect the ground water



Figure 3. Bored well used throughout Georgia.

from contamination and prevent animals and small children from falling into them.

Trash or waste materials must never be thrown into an abandoned well. If you know of an abandoned well which is creating a hazard, notify your county health officials.

Typical Water Well Problems

A water well contractor is required to properly construct your well. If the well is producing muddy water or sand, it is usually because it was not properly constructed. The problem is often due to no grout or a poor grouting job at the top of the well. Use of hand slotted or punctured casing as a well screen can also allow mud and sand into the well. Failure to case the well properly may also cause muddy water. Use of too fine a sand to pack the outside of the well or too coarse a well screen can result in sand getting into a well in south Georgia.

Sometimes well water appears brownish and muddy because of the growth of iron bacteria caused by the high dissolved iron content of the water. Ground water in many places in Georgia contains high natural levels of iron which promote growth of the harmless iron bacteria and stain fixtures. The water well contractor is not responsible for problems caused by iron or natural substances in the water. Water treatment systems are available for such problems.

Summary

Ground-water quality in Georgia is good, but all ground water is subject to pollution by man's activities. Well construction techniques required by WWSA help protect your water supply and Georgia's future.

If you have a question or complaint about your water well drilled by a licensed Georgia water well contractor, please call them first to get an answer or resolve the problem. These contractors are business people who want your return business and will work with you to correct any defect in your well. If the defect is uncorrected, contact the:

Water Well Standards Administrator Georgia Geologic Survey Environmental Protection Division Department of Natural Resources Room 400 19 Martin Luther King, Jr. Dr. SW Atlanta, GA 30334

or phone (404) 656-3214.

This brochure was published in conjunction with a grant from the U.S. Environmental Protection Agency and the State of Georgia.

WHAT YOU NEED TO KNOW ABOUT WATER WELLS IN GEORGIA

Georgia Department of Natural Resources Environmental Protection Division