Abandoned Wells

An estimated 400,000 private water wells in Illinois provide drinking water to approximately 1.3 million people. Each year, many of these wells are abandoned when they are replaced with new wells or when homes are connected to community water systems. A large number of these abandoned wells are large diameter dug wells constructed with brick or stone casings, and range in depth from 20 to 50 feet. An abandoned well can pose a health and safety hazard if it is improperly sealed or not sealed at all.

Abandoned Wells as Safety Hazards

When abandoned wells are left open, children, animals or even adults can fall into them, causing injury or death. To prevent such accidents, all abandoned wells must be properly sealed.

Abandoned Wells as Sources of Pollution

An abandoned well can serve as a route for contaminating groundwater. Contaminated surface water, agricultural runoff and effluent from private sewage disposal systems can enter the groundwater through such wells and cause pollution of other wells in the area used for drinking water.

Legal Requirements

The Illinois Water Well Construction Code requires the owner of a water well, boring or monitoring well to properly seal the well within 30 days after it is abandoned and no longer used to supply water. If a well or boring is in such a state of disrepair that it has the potential for transmitting contaminants into the groundwater or otherwise threatens the public health or safety, it also must be sealed.

The Groundwater Protection Act mandates that where an abandoned well is found to contaminate another potable water well, the owner of the abandoned well is responsible for providing a safe and sufficient supply of water to the owner of the well that has been contaminated.

Sealing Abandoned Wells

The basic concept in sealing an abandoned well is restoring the geological conditions that existed before the well was drilled. Therefore, the particular method for sealing a well depends on the type of water well and the local geological features.

A licensed water well driller must seal an abandoned well. A homeowner may seal his or her own well if a written request is made to the local health department or to the Illinois Department of Public Health describing procedures and materials, all of which must comply with the well code. The local health department or the Department's nearest regional office must be notified at least 48 hours prior to the start of the work to seal such wells and, after the sealing is finished, a completed sealing form must be submitted to the local health department or the Department's central office in Springfield.

Most dug or bored wells can be sealed by filling them with clean clay. Drilled wells are somewhat more complex to seal and require pea gravel or limestone chips (fill material) and neat cement grout, or any bentonite product manufactured for water well sealing (sealing material). The depth, geology and construction of the particular abandoned well to be sealed determine the appropriate levels at which these materials must be placed. For all types of wells, the well casing must be removed at least two feet below the final grade.

For More Information

More detailed information can be found in the Illinois Water Well Construction Code, available on the internet at http://www.ilga.gov/commission/jcar/admincode/077/07700920sections.html. A hard copy can be obtained from the local health departments or from one of the regional offices listed below.

Regional Offices

ROCKFORD REGION

4302 N. Main St. Rockford, IL 61103-1209 815-987-7511

PEORIA REGION

5415 N. University St. Peoria, IL 61614-4784

MARION REGION

2309 W. Main St., Suite 106 Marion, IL 62959-1195 618-993-7010

EDWARDSVILLE REGION

#22 Kettle River Drive Glen Carbon, IL 62034 309-693-5360

618-656-6680

CHAMPAIGN REGION

WEST CHICAGO REGION

2125 S. First St.

245 W. Roosevelt Road, Building 5 West Chicago, IL 6018-4803

Champaign, IL 61820-7944 217-278-5900

630-293-6800

Illinois Department of Public Health, Division of Environmental Health, 525 W. Jefferson St., Springfield, IL 62761, 217-782-5830, TTY (hearing impaired use only) 800-547-0466. Questions may be directed to your local health department, to one of the Illinois Department of Public Health regional offices or to the Department's central office in Springfield.

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