

NATURAL RESOURCES CONSERVATION SERVICE
ILLINOIS URBAN MANUAL
PRACTICE STANDARD

Well Decommissioning

(no.)

Code 996



Source: IL Department of Natural Resources

Definition

The sealing and permanent closure of a water well, boring, or monitoring well.

Purpose

The purposes of this practice are to:

1. Prevent entry of contaminated surface water into the well and migration of contaminants into the unsaturated (vadose) zone or saturated zone
2. Prevent entry of vermin, debris, or other foreign substances into the well or well bore hole
3. Eliminate the physical hazard of an open hole to people, animals and vehicles
4. Prevent the commingling of chemically or physically different ground waters between separate water bearing zones

Conditions Where Practice Applies

This standard applies to sealing and permanent closure of a water well, boring, or monitoring well that is no longer in use, or is in such a state of disrepair that it has the potential for transmitting contaminants into an aquifer or otherwise threatens the public health or safety.

This practice does not apply to wells that were used for waste disposal, or if evidence of contamination in the well exists. This practice does not apply to wells that contain contaminant levels that exceed state or federal water quality standards. Treatment of contamination source(s) is required before a well is decommissioned.

Criteria

All planned work shall comply with regulations as set forth in the Illinois Water Well Construction Code (Section 920.120 - Abandoned Wells and Section 920.130 - Permit Requirements) and any applicable local law.

Considerations

The decommissioning of water wells, borings, and monitoring wells are regulated by the Illinois Water Well Construction Code and local health department ordinances. If there is any disagreement between this standard and the current state/local codes, the state/local codes have primacy.

This practice may be part of a ground water protection system that includes water and chemical management practices.

To the extent practicable, an abandoned well should be decommissioned in a manner that restores the original hydrogeological conditions of the well site and does not preclude the use of the site from future land management practices.

Decommissioning requires special consideration of specific geological, biological, physical, and climatic conditions, the chemical composition of the surrounding soil, rock, and ground water at the well site, and the well's construction. The proximity of the abandoned well to other planned or existing wells and the hydrologic conditions of the area should be considered when decommissioning abandoned wells.

Plans and Specifications

Plans and specifications for decommissioning abandoned water wells shall be consistent with this standard and shall describe the requirements for applying the practice to achieve its intended purposes.

Minimum documentation of a well decommissioning shall consist of an approved (by Illinois State Department of Health or local health department) plan or permit and a well sealing form (IL 482-0631, or local health department provided form).

Operation and Maintenance

The decommissioned well site shall be maintained in such a manner as to be consistent with adjacent land use(s). If general subsidence of the area overlaying the sealed well occurs, sufficient soil material shall be added to maintain a positive slope away from the abandoned well.

References

Illinois Department of Public Health, 1998. Illinois Water Well Construction Code, Section 920.120-Abandoned Wells and Section 920-130-Permit Requirements. Springfield, IL