

**SECTION 02693
WELL ABANDONMENT PROCEDURES**

PART 1-GENERAL

1.01 SECTION DESCRIPTION

A. The Work of This Section Includes:

1. Proper well abandonment accomplishes the following:
 - a. Eliminates the physical hazard of the well (the hole in the ground)
 - b. Eliminates the pathway for migration of contamination
 - c. Prevents hydrologic changes in the aquifer system

1.02 QUALITY ASSURANCE

A. Reference Standards: The most current requirements of the following Standards shall govern.

1. American Water Works Association (AWWA) Standards A-100.
2. Pennsylvania Department of Environmental Protection (PA DEP) Groundwater Monitoring Guidance Manual
3. Water Well Drillers License Act (Act 610)

1.03 JOB CONDITTONS

A. A well will be abandoned when anyone of the following conditions is encountered:

1. The well is causing the spread of contamination from one aquifer horizon to another.
2. The well has been out of use for more than one year and has no future plans of being used or its water level monitored.
3. Within 30 days of date when AUTHORITY provides public water service to the property.

PART 2 - SEALING OF WELLS

2.01 PROCEDURE AND MATERIALS

A. The CONTRACTOR shall submit a "Well Abandonment Form" to PA DEP and Water-Well Drillers Licensing Service of the PA Geological Survey, at least 10 days prior to the well being sealed or filled and prior to site grading activities. A

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copy of the completed form shall be provided to the AUTHORITY and its ENGINEER.

- B. The casing and any liner piping within the well shall be left in place. Under no conditions will be outer casing be removed unless it is shown that the casing or grout is leaking. Casing can be cut flush with the ground surface.
- C. All equipment within the well such as pumps, supply pipes and wires, shall be removed before sealing the well.
- D. The total depth of the well will be measured and recorded on the Well Abandonment application. Using the well diameter and depth, the anticipated volume of sealing material will be prepared.
- E. The sealing material, being a concrete, cement grout or neat cement, shall be used as the primary sealing material. Under no conditions shall well cuttings, soil or stone be dumped into a well. The sealant shall be placed into the well in a "tremie" manner. This will be accomplished by pumping a premixed sealant under pressure, from the bottom of the hole through a pipe located at the base of the well. Pumping of sealant will continue until it flows to the surface.
- F. Accurate records of the abandonment work shall be recorded and submitted on the Well Abandonment application.
- G. Under no circumstances will a hole or void of any kind be left remaining in the ground that could risk future collapse or improper entry nor allow the vertical movement of water.

END OF SECTION