



DPS

**Montgomery County
Department of Permitting Services**

255 Rockville Pike, 2nd Floor
Rockville, MD 20850-4166
Phone: 311 in Montgomery County or (240)777-0311
Fax: (240)777-6262
<http://www.montgomerycountymd.gov/dps>



Well and Septic Well Abandonment Procedures

ADVISORIES

Building permits to raze or demolish structures shall not be approved by this office until any well(s) on the property have been properly abandoned and sealed with abandonment reports submitted to this office.

If the well to be abandoned is located in the extreme southeastern portion of Montgomery County (Burtonsville, Calverton areas), please call the Well and Septic office for specific instructions.

******If you have any questions or problems with any of the following procedures, you should contact this office at (240) 777-0311 prior to the start of the well abandonment.******

A. REQUIREMENTS

- I. “Abandon” means to permanently discontinue the use of a well. Any well shall be deemed abandoned when it is in such a state of disrepair that continued use for the purpose of obtaining ground water is impracticable, or when it has been permanently disconnected from any water supply system or irrigation system. (Code of Maryland Regulation 26.04.04.11B)
- II. This Department (or Approving Authority) may require the well owner to have a well abandoned and sealed if it:
 - (1) Is causing or is a potential source of pollution of waters of the State;
 - (2) Is producing water that is polluted; or
 - (3) Does not have a certificate of potability, if required.

B. OBJECTIVES

- I. The objective of the standards described in COMAR 26,04.04.11 is to restore as nearly as possible those subsurface conditions which existed before the well was constructed, taking into account changes, if any, which have occurred since the time of construction.
- II. An abandoned well shall be filled and sealed in such a way that it will not:
 - (1) Act as a channel for the interchange of waters of undesirable quality with those whose quality is desirable; or
 - (2) Present a hazard to the safety and well-being of humans or animals.

C. INSPECTION CONDITIONS

- I. Well abandonments must be performed either:

- (1) by a well driller licensed by the Maryland State Board of Well drillers, or
 - (2) under the direct supervision of a Sanitarian from the Department of Permitting Services (or under the direct supervision of a master well driller, with prior approval from the Department)
- II. If the abandoned drilled well is sealed by a licensed well driller, then he will perform the actual well abandonment and submit the abandonment report to the Department of Permitting Services.
 - III. If you wish to have the abandoned drilled well sealed by someone other than a licensed well driller, you must contact this office so that we may search our files for information on the well.
 - (1) If this office has a well completion report for the well, then please refer to the abandonment procedures that follow in Section 'E'.
 - (2) If this office has no documentation of the well, then the well must be filled with sealing material for the entire depth of the well.**
 - IV. If the well is a hand dug well, then it may be abandoned and sealed by either a licensed well driller or by another individual under direct supervision, following the procedures outlined in Section 'F'.

D. MATERIALS FOR FILLING AND SEALING WELLS

- I. *Fill materials*
 - (1) "Fill materials" refers to any of the following approved materials to be used to properly fill the open portion of the water well from the bottom to the start of the well casing.
 - (2) Clean gravel (up to ½ inch diameter), crushed stone, or a mixture of these materials may be used to fill the portion of the well from the bottom to the start of the casing.
 - (3) Fill material must be free of organic matter.
 - (4) Topsoil may not be used as fill material since it cannot be guaranteed 'clean' or free of organic matter.
 - (5) Subsoil (clay, silt, loam) may not be used as fill material due to its susceptibility to settle and prevent proper well abandonment.
 - (6) Under no circumstances can the fill material extend above a point 20 feet from the ground surface.**
- II. *Sealing materials*
 - (1) "Sealing materials" refers to any of the following approved materials to be used to properly seal the entire depth of the well casing (or entire well, if applicable).
 - (2) Bentonite chips, concrete, Portland cement grout or a combination of these materials (mixed with the appropriate amount of water) may be used as sealing material.
 - (3) All drilled water wells must have a minimum of 20 feet of sealing material.**

E. ABANDONMENT PROCEDURES FOR DRILLED WELLS

- I. *Before filling and sealing the well*
 - (1) The well should be investigated to determine its condition and to assess details of construction.
 - (2) Any obstructions shall be removed, if possible, by cleaning the hole or re-drilling.
 - (3) The pipe and submersible pump shall be removed.
- II. *Filling and sealing the well*
 - (1) The well should be filled with sealing material for the entire depth of the well; or

- (2) The well may be filled with fill materials (clean gravel, crushed stone, or a mixture of these materials) from the bottom of the well up to the bottom of the casing and then sealed with sealing material for the entire depth of casing
- (3) The well shall be filled with the appropriate material placed from the bottom of the well upward, to a depth no less than 20 feet from the ground surface.
- (4) Sealing material shall be placed in the well at intervals to prevent free fall, dilution, and/or separation of aggregates from cementing materials.
- (5) Bentonite chips may be used to fill and seal a well.
 - (a) Bentonite chips must be no smaller than 3/8" in diameter – bentonite powder is *not* acceptable.
 - (b) Bentonite chips should be screened of any appreciable fines and poured slowly (2-3 minutes per 50 lb. bag) down the well casing.
 - (c) When chips are installed in the unsaturated zone, water should be added at 2 foot intervals to adequately hydrate the bentonite.
- (6) When Portland cement grout or concrete is used to fill and seal a well, it shall be placed in one continuous operation.***

F. ABANDONMENT PROCEDURES FOR HAND DUG WELLS

- I. A dug well exceeding 24 inches in diameter shall be filled and sealed by placing fill material (**excluding clay or silt**) in the well to a level approximately 5 feet below ground level.
- II. A 3 foot plug of sealing material shall be placed above the fill.
- III. The remainder of the well shall be backfilled with soil material.

G. FILING REPORTS

Well abandonment reports must be submitted to the Department of Permitting Services not later than 30 days after abandonment of the well.

H. ENFORCEMENT

This Department has the authority to require a well be abandoned if it is determined that standards of COMAR Well Regulations have been violated and cannot be corrected. A person aggrieved by a final decision has the right to have the decision reviewed. Violations under COMAR are subject to enforcement action. *(For further details, please contact this office.)*