

### Information and Standards

Conditions of approval of a replacement well permit generally require that the old well be plugged and sealed according to the Water Well Construction Rules. A blank report form is provided to the well owner when a replacement permit is issued. This report is also used to affirm that other types of wells and holes have been plugged and sealed. These reports must be completed and submitted to the Division of Water Resources, usually within 90 days of plugging and sealing the well/hole.

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[dwrpermitsonline@state.co.us](mailto:dwrpermitsonline@state.co.us)

### **RULE 16 STANDARDS FOR PLUGGING, SEALING, AND ABANDONING WELLS AND BOREHOLES**

**16.1 General** - The plugging, sealing and abandonment of all wells, monitoring and observation wells, monitoring and observation holes and test holes that are no longer intended for use, and the plugging, sealing, and abandonment of dry holes, collapsed or unusable boreholes, and other incomplete wells or excavations is necessary to prevent contamination of ground water and the migration of water through the borehole. It is the ultimate responsibility of the well owner to have an existing well properly plugged, sealed and abandoned. The well construction contractor or authorized individual is responsible for notifying the well owner in writing of these plugging requirements.

**16.1.1** In the event a borehole(s) is not completed for the intended purpose, the contractor will notify the well owner of the well owner's responsibility for the proper abandonment of the borehole(s) according to Rule 16.1. If the well owner does not agree to allow the contractor to abandon the borehole(s), the contractor shall notify the Board of Examiners, in writing, of the existence of the borehole(s) and the contractor's effort to notify the well owner of the well owner's abandonment responsibilities under Rule 16.1

**16.1.2** Persons authorized to install pumping equipment may plug, seal and abandon wells that do not require the removal of casing that penetrates more than one aquifer or the ripping or perforating of casing opposite confining layers.

**16.1.3** Materials used for backfilling shall be clean, inert, and free from contaminants. The well casing may be cut off below land surface so that it will not interfere with the anticipated use of the land. If the casing is cut off below land surface, the uppermost five (5) feet of the remaining casing shall be filled with grout or a watertight cover shall be permanently attached to the remaining casing and the excavation shall be filled with materials that are not more permeable than the surrounding soils and adequately compacted to prevent settling.

**16.2 Wells or Boreholes in Type II and Type III Aquifers** - Wells completed into unconfined aquifers and unconsolidated aquifers shall be plugged, sealed and abandoned by filling the well to the static water level with drill cuttings, clean sand or clean gravel, then with clean native clays, cement or high solid bentonite grout to the ground surface. The uppermost five (5) feet of casing shall be filled with grout or a permanent watertight cover shall be installed at the top of the casing. If casing is removed, the hole shall be filled as described above to within five (5) feet of the ground surface. The top five (5) feet of the hole shall be filled with materials less permeable than the surrounding soils that are adequately compacted to prevent settling.

**16.2.1** Dewatering wells, horizontal drains, monitoring and observation holes, percolation holes, piezometer holes, sumps, test holes and dry holes shall be plugged, sealed, and abandoned either pursuant to Rule 16.2 or by removing all casing that was installed and by filling the hole(s) with drill cuttings, clean native clays, cement or high solid bentonite grout to within five (5) feet of the ground surface. The top five (5) feet of the hole shall be filled with materials less permeable than the surrounding soils that are adequately compacted to prevent settling.

**16.3 Wells or Boreholes in Type I Aquifers** - Wells which were constructed through more than one aquifer shall be plugged and sealed by placing a cement grout plug at the confining layer above each aquifer. If records do not show that the casing opposite each confining layer has been grouted when originally installed, the casing shall be either completely removed from the hole, or perforated or ripped opposite such layer prior to placing the grout plug. Plugs shall be no less than forty (40) feet in length and shall be designed to withstand the maximum potential hydrostatic pressure differential between the aquifers. The well casing, except for the grout plug intervals, shall be completely filled to the land surface with clean native clays, cement or high solid bentonite grout. A watertight cover shall be permanently welded or attached to the top of the casing.

**If you have questions, contact the Denver or the Division Office where your well is located.**

Division 1 810 9 <sup>th</sup> St. 2 <sup>nd</sup> Floor Greeley, CO 80631 (970) 352-8712 Fax (970) 392-1816	Division 2 310 E. Abriendo Ave Ste B Pueblo, CO 81004 (719) 542-3368 Fax (719) 544-0800	Division 3 301 Murphy Drive Alamosa, CO 81101 (719) 589-6683 Fax (719) 589-6685	Division 4 1871 East Main St. Montrose, CO 81401 (970) 249-6622 Fax (970) 249-8728
Division 5 Direct mail to Box 396 202 Center Drive Glenwood Spgs., CO 81601 (970) 945-5665 Fax (970) 945-8741	Division 6 Direct mail to Box 773450 505 Anglers Dr. Suite 101 Steamboat Spgs, CO 80477 (970) 879-0272 Fax (970) 879-1070	Division 7 160 Rock Point Dr., STE. E Durango, CO 81301 (970) 247-1845 Fax (970) 259-0944	Denver Office 1313 Sherman St. Rm. 821 Denver, CO 80203 (303) 866-3581 Fax (303) 866-3589

Form No. GWS-09 4/2012	<b>STATE OF COLORADO, OFFICE OF THE STATE ENGINEER</b> 821 Centennial Bldg., 1313 Sherman St., Denver, CO 80203 (303) 866-3581 Fax (303) 866-3589 <a href="mailto:dwpermitsonline@state.co.us">dwpermitsonline@state.co.us</a>	For Office Use Only															
<b>WELL ABANDONMENT REPORT</b> Use to report plugging and sealing of permitted wells, monitoring and other holes. This form can be computer generated, typed or printed in black or blue ink. Instructions and plugging standards are on reverse side of form.																	
<b>Well Permit Number of the well being plugged _____ or          MH File Number MH- _____ Hole ID #/Name _____</b>																	
<u>Individual/Company responsible for plugging and sealing the well:</u> Name(s) _____ Mailing Address _____ City, St., Zip _____ Phone (area code & no.) _____ Email: _____																	
<u>Well (Hole) Owner:</u> NAME(S) _____ Phone (include area code) _____ Mailing Address, City, St., Zip _____																	
<u>ACTUAL WELL LOCATION:</u> County _____ Property Address, City, St, Zip _____ _____ 1/4 of the _____ 1/4, Sec. _____, Twp. _____ <input type="checkbox"/> N. or <input type="checkbox"/> S., Range _____ <input type="checkbox"/> E. or <input type="checkbox"/> W., _____ P.M. Distance from Section Lines _____ Ft. from <input type="checkbox"/> N. or <input type="checkbox"/> S., _____ Ft. from <input type="checkbox"/> E. or <input type="checkbox"/> W. Line. Subdivision Name _____ Lot _____, Block _____, Filing/Unit _____ Optional: GPS well location information in UTM format. You must check GPS unit for required settings as follows: Format must be UTM, zone 12 <input type="checkbox"/> or zone 13 <input type="checkbox"/> ; Units must be meters; Datum must be NAD83; Unit must be set to true north. <b>Easting</b> _____ <b>Northing</b> _____																	
I (we) report the existing well (hole) was plugged and sealed on the date of _____ for the following reason(s): <input type="checkbox"/> The well was plugged and sealed as required under Well Permit Number _____. <input type="checkbox"/> The well was not in use and was plugged and sealed. <input type="checkbox"/> Other (please explain) _____																	
The well was plugged with the following materials placed at the indicated intervals: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Amount and Type of Material</th> <th style="text-align: left;">Method of Placement</th> <th style="text-align: left;">Interval</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> <td>from _____ feet to _____ feet</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>from _____ feet to _____ feet</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>from _____ feet to _____ feet</td> </tr> <tr> <td colspan="2"><b>Intervals of casing removed/ripped in feet</b></td> <td>from _____ feet to _____ feet</td> </tr> </tbody> </table>			Amount and Type of Material	Method of Placement	Interval	_____	_____	from _____ feet to _____ feet	_____	_____	from _____ feet to _____ feet	_____	_____	from _____ feet to _____ feet	<b>Intervals of casing removed/ripped in feet</b>		from _____ feet to _____ feet
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Report <u>must</u> be signed or name entered by person who performed the well plugging work or by the well owner if this person is unknown or not reachable. I (we) have read the statements made herein, know the contents thereof, and that they are true to my (our) knowledge.																	
Sign or enter full name  _____	If signing print name & title  _____	Date (mm/dd/yyyy)  _____															
It is the responsibility of the well owner to have the well/hole properly plugged and sealed. The Well Construction Contractor is responsible for notifying the owner of this requirement.																	