



ADMINISTRATIVE RULES OF MONTANA



36.21.654 SEALING OF CASING - GENERAL

- (1) In constructing, developing, redeveloping, or conditioning a well, care shall be taken to preserve the natural barriers to groundwater movement between aquifers and to seal aquifers or strata penetrated during drilling operations which might impair water quality or result in cascading water.
 - (a) All sealing shall be permanent and prevent possible downward movement of surface waters in the annular space around the well casing.
 - (b) Sealing shall be accomplished to prevent the upward movement of artesian waters within the annular space around the well casing that could result in the waste of groundwater.
 - (c) The sealing shall restrict the movement of groundwater either upward or downward from zones that have been cased out of the well because of poor quality.
 - (d) When cement grout is used in sealing, it shall be set in place 72 hours before additional drilling takes place, unless special additives are mixed with the sealing material that will cause it to adequately set in a shorter period of time.
 - (e) All sealing shall be performed by adding the mixture from the bottom of the space to be sealed toward the surface in one continuous operation. The minimum sealing material thickness shall be three inches. A minimum thickness of 1.5 inches of sealing material shall be applied around the outside of the casing.
- (2) When casing diameter is reduced, a minimum of four feet of overlap shall be required, except when a deleterious case may occur.
- (3) All new wells shall be sealed to a minimum depth of 25 feet with appropriate sealing material with the exception of those wells addressed in (4) of this rule.
- (4) For wells drilled with a cable tool or other driven methods through unconsolidated formations, when the drilling and driving is a continuous operation, bentonite shall be fed continuously along the outside of the casing as the well is being driven. However, it is required that fresh, clean, pure bentonite be used.
- (5) For wells drilled through formations that need special sealing techniques to protect aquifers, ARM 36.21.655 through 36.21.660 suggest alternative procedures that may be required and are intended as examples that can be modified to protect the aquifer.

Implementing statute(s): 37-43-202(3), MCA

History: NEW, 1986 MAR p. 1699, Eff. 10/17/86; AMD, 1989 MAR p. 229, Eff. 1/27/89; AMD, 1991 MAR p. 913, Eff. 6/14/91; AMD, 1997 MAR p. 65, Eff. 1/17/97; AMD, 2010 MAR p. 1614, Eff. 7/16/10.