**Section 240.710 Surface and Production Casing Requirements for Newly Drilled Class II UIC Wells**

a) Surface Casing

1) Steel surface casing shall be set to a depth of at least 100 feet, or 50 feet below the base of the freshwater zone, whichever is deeper, unless an alternative surface casing procedure is used as outlined in subsection (b).

2) Surface casing shall be set in the presence of a representative of the Department and the permittee shall give at least 24 hours notice to the District Office prior to setting the surface casing. The District Office may approve the setting of surface casing without a Department representative being present. If the District Office approves the setting of surface casing without a Department representative being present, the permittee is required to submit cement and casing records verifying the setting of surface casing. If cement and casing records are required, the permittee shall provide the records to the District Office within 24 hours after completion of the work.

3) Surface casing shall be cemented in place by circulating cement behind the surface casing from the setting depth of the casing to the surface.

4) The cement shall be allowed to set in place until it has developed sufficient strength to allow drilling to resume, but no less than 4 hours.

b) Alternative Surface Casing Procedures

1) Prior to the commencement of drilling, the permittee shall notify the District Office for the county where the well will be located of the permittee's intent to use an alternative surface casing procedure.

2) Notice shall be given on a form prescribed by the Department and received in the District Office at least 24 hours prior to the commencement of drilling.

3) The following alternative surface casing procedure may be used unless the well is located over a coal mined out area or a gas storage field:

A) If the unconsolidated material is less than 25 feet thick, no surface casing is required but a cement basket shall be set 50 feet below the base of the fresh water and the production casing either cemented to surface from total depth, or cemented from the cement basket to surface.

B) If the unconsolidated material is greater than 25 feet thick, surface casing is required to be set, and cemented in accordance with subsection (a), to the top of the bedrock, and the production casing shall be either cemented to surface from total depth or cemented from the cement basket (placed 50 feet below the base of the fresh water) to surface.

C) For wells in which the total depth is less than 500 feet below the base of the fresh water, no surface casing or cement basket is required, but the production casing shall be cemented from total depth to surface.

4) For wells located over a coal mined out area or a gas storage field:

A) at least 100 feet of surface casing and cement shall be set before drilling to the depth of the mined out area, into the mined out area or to the depth of the gas storage zone; and

B) a cement basket shall be set 50 feet below the base of the fresh water and the production casing shall be cemented from the basket to the surface or, if required under Section 240.1360, a mine string shall be set in accordance with Section 240.1360(b).

c) Production Casing

Production casing shall be set and cemented in place by circulating cement behind the production casing from the setting depth of the casing to a minimum of 250 feet above the shallowest permitted injection interval. The casing shall be set no higher than 50 feet above the top of the uppermost permitted injection interval in an open hole completion.

(Source: Amended at 35 Ill. Reg. 13281, effective July 26, 2011)