**Section 730.171 Closure**

a) Closure Plan. The owner or operator of a Class I hazardous waste injection well must prepare, maintain, and comply with a plan for closure of the well that meets the requirements of subsection (d) and is specified by permit condition. The obligation to implement the closure plan survives the termination of a permit or the cessation of injection activities. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

1) The owner or operator must submit the plan as a part of the permit application and, upon approval by the Agency, such plan must be a condition of any permit issued.

2) The owner or operator must submit any proposed significant revision to the method of closure reflected in the plan for approval by the Agency no later than the date on which notice of closure is required to be submitted to the Agency pursuant to subsection (b).

3) The plan must assure financial responsibility, as required in 35 Ill. Adm. Code 704.189.

4) The plan must include the following information:

A) The type and number of plugs to be used;

B) The placement of each plug including the evaluation of the top and bottom of each plug;

C) The type and grade and quantity of material to be used in plugging;

D) The method of placement of the plugs;

E) Any proposed test or measure to be made;

F) The amount, size, and location (by depth) of casing and any other materials to be left in the well;

G) The method and location where casing is to be parted, if applicable;

H) The procedure to be used to meet the requirements of subsection (d)(5); and

I) The estimated cost of closure.

5) The Agency must modify a closure plan following the procedures of Subpart C of 35 Ill. Adm. Code 702.

6) An owner or operator of a Class I hazardous waste injection well who stops injection temporarily may keep the well open if the following conditions are fulfilled:

A) The owner or operator has received authorization from the Agency; and

B) The owner or operator has described actions or procedures, satisfactory to the Agency, that the owner or operator will take actions to ensure that the well will not endanger USDWs during the period of temporary disuse. These actions and procedures must include compliance with the technical requirements applicable to active injection wells unless otherwise waived by permit condition.

BOARD NOTE: An Agency determination on authorizing keeping the well open is in the nature of a permit determination, and the owner or operator may appeal the Agency's determination to the Board.

7) The owner or operator of a well that has ceased operations for more than two years must notify the Agency at least 30 days prior to resuming operation of the well.

b) Notice of Intent to Close. The owner or operator must notify the Agency at least 60 days before closure of a well.

c) Closure Report. Within 60 days after closure, or at the time of the next quarterly report (whichever is less), the owner or operator must submit a closure report to the Agency. If the quarterly report is due less than 15 days after completion of closure, then the report must be submitted within 60 days after closure. The report must be certified as accurate by the owner or operator and by the person who performed the closure operation (if other than the owner or operator). Such report must consist of either of the following documents:

1) A statement that the well was closed in accordance with the closure plan previously submitted and approved by the Agency; or

2) Where actual closure differed from the plan previously submitted, a written statement specifying the differences between the previous plan and the actual closure.

d) Standards for Well Closure

1) Prior to closing the well, the owner or operator must observe and record the pressure decay for a time specified by permit condition. The Agency must analyze the pressure decay and the transient pressure observations conducted pursuant to Section 730.168(e)(1)(A) and determine whether the injection activity has conformed to predicted values.

2) Prior to well closure, appropriate mechanical integrity testing must be conducted to ensure the integrity of that portion of the long string casing and cement that will be left in the ground after closure. Testing methods may include the following:

A) Pressure tests with liquid or gas;

B) Radioactive tracer surveys;

C) Noise, temperature, pipe evaluation, or cement bond logs; and

D) Any other test required by permit condition.

3) Prior to well closure, the well must be flushed with a buffer fluid.

4) Upon closure, a Class I hazardous waste injection well must be plugged with cement in a manner that will not allow the movement of fluids into or between USDWs.

5) Placement of the cement plugs must be accomplished by one of the following means:

A) The Balance Method;

B) The Dump Bailer Method;

C) The Two-Plug Method; or

D) An alternative method, specified by permit condition, that will reliably provide a comparable level of protection.

6) Each plug used must be appropriately tagged and tested for seal and stability before closure is completed.

7) The well to be closed must be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by permit condition, prior to the placement of the cement plugs.

BOARD NOTE: Derived from 40 CFR 146.71 (2017).

(Source: Amended at 42 Ill. Reg. 24145, effective November 19, 2018)