**Section 730.184 Area of Review and Corrective Action**

a) The area of review is the region surrounding the geologic sequestration project where the injection activity may endanger a USDW. The area of review is delineated using computational modeling that accounts for the physical and chemical properties of all phases of the injected carbon dioxide stream and which is based on available site characterization, monitoring, and operational data.

b) The owner or operator of a Class VI injection well must prepare, maintain, and comply with a plan to delineate the area of review for a proposed geologic sequestration project; must periodically reevaluate the delineation; and must perform corrective action that meets the requirements of this Section and which is sufficient to support an Agency determination that the corrective action is acceptable. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit. As a part of the permit application to the Agency, the owner or operator must submit an area of review and corrective action plan that includes the following information:

1) The method that the owner or operator will use for delineating the area of review which meets the requirements of subsection (c), including the model that the owner or operator will use, assumptions that the owner or operator will make, and the site characterization data on which the owner or operator will base the model;

2) A description of each of the following:

A) The minimum fixed frequency, not to exceed five years, at which the owner or operator proposes to reevaluate the area of review;

B) The monitoring and operational conditions that would warrant a reevaluation of the area of review prior to the next scheduled reevaluation as determined by the minimum fixed frequency established pursuant to subsection (b)(2)(A);

C) How monitoring and operational data (e.g., injection rate, pressure, etc.) will be used to inform an area of review reevaluation; and

D) How the owner or operator will conduct corrective action to meet the requirements of subsection (d), including the following information:

i) What corrective action the owner or operator will perform prior to injection;

ii) What, if any, portions of the area of review the owner or operator will address with corrective action on a phased basis and how that phasing will be determined;

iii) How the owner or operator will adjust corrective action if there are changes in the area of review; and

iv) How the owner or operator will guarantee site access for future corrective action.

c) The owner or operator of a Class VI injection well must perform the following actions to delineate the area of review and identify all wells that require corrective action:

1) The owner or operator must predict, using existing site characterization, monitoring and operational data, and computational modeling, the projected lateral and vertical migration of the carbon dioxide plume and formation fluids in the subsurface from the commencement of injection activities until the plume movement ceases, until pressure differentials sufficient to cause the movement of injected fluids or formation fluids into a USDW are no longer present, or until the end of a fixed time period determined by the Agency. The model must fulfill the following requirements:

A) The model must be based on detailed geologic data collected to characterize the injection zones, confining zones and any additional zones; and anticipated operating data, including injection pressures, rates, and total volumes over the proposed life of the geologic sequestration project;

B) The model must take into account any geologic heterogeneities, other discontinuities, data quality, and their possible impact on model predictions; and

C) The model must consider potential migration through faults, fractures, and artificial penetrations;

2) Using methods approved by the Agency, the owner or operator must identify all penetrations, including active and abandoned wells and underground mines, in the area of review that may penetrate the confining zones and must provide a description of each well's type, construction, date drilled, location, depth, record of plugging and/or completion, and any additional information the Agency may require; and

3) The owner or operator must determine which abandoned wells in the area of review have been plugged in a manner that prevents the movement of carbon dioxide or other fluids that may endanger USDWs, including use of materials compatible with the carbon dioxide stream.

d) The owner or operator of a Class VI injection well must perform corrective action on all wells in the area of review that are determined to need corrective action, using methods designed to prevent the movement of fluid into or between USDWs, including use of materials compatible with the carbon dioxide stream, where appropriate.

e) At the minimum fixed frequency, not to exceed five years, as specified in the area of review and corrective action plan, or when monitoring and operational conditions warrant, the owner or operator of a Class VI injection well must fulfill each of the following requirements:

1) The owner or operator must reevaluate the area of review in the same manner specified in subsection (c)(1);

2) The owner or operator must identify all wells in the reevaluated area of review that require corrective action in the same manner specified in subsection (c);

3) The owner or operator must perform corrective action on wells requiring corrective action in the reevaluated area of review in the same manner specified in subsection (d); and

4) The owner or operator must submit an amended area of review and corrective action plan or demonstrate through monitoring data and modeling results sufficiently to support an Agency finding that no amendment to the area of review and corrective action plan is needed. Any amendments to the area of review and corrective action plan must be approved by the Agency, must be incorporated into the permit, and are subject to the permit modification requirements set forth in 35 Ill. Adm. Code 704.262 or 704.264, as appropriate.

f) The emergency and remedial response plan (as required by Section 730.194) and the demonstration of financial responsibility (as described by Section 730.185) must account for the area of review delineated as specified in subsection (c)(1) or the most recently evaluated area of review delineated pursuant to subsection (e), regardless of whether corrective action in the area of review is phased.

g) The owner or operator must retain all modeling inputs and data used to support area of review reevaluations under subsection (e) for 10 years.

BOARD NOTE: This Section corresponds with 40 CFR 146.84 (2017).

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