**Section 730.162 Minimum Criteria for Siting**

a) All Class I hazardous waste injection wells must be sited such that they inject into a formation that is beneath the lowermost formation containing, within 402 meters (one-quarter mile) of the well bore, a USDW.

b) The siting of a Class I hazardous waste injection well must be limited to an area that is geologically suitable. The Agency must determine geologic suitability based upon its consideration of the following:

1) An analysis of the structural and stratigraphic geology, the hydrogeology, and the seismicity of the region;

2) An analysis of the local geology and hydrogeology of the well site, including, at a minimum, detailed information regarding stratigraphy, structure, and rock properties; aquifer hydrodynamics; and mineral resources; and

3) A determination that the geology of the area can be described confidently and that limits of waste fate and transport can be accurately predicted through the use of models.

c) Class I hazardous waste injection wells must be sited such that the following is true:

1) The injection zone has sufficient permeability, porosity, thickness, and area extent to prevent migration of fluids into USDWs; and

2) The confining zone is as follows:

A) It is laterally continuous and free of transecting, transmissive faults, or fractures over an area sufficient to prevent the movement of fluids into a USDW; and

B) It contains at least one formation of sufficient thickness and with lithologic and stress characteristics capable of preventing vertical propagation of fractures.

d) Alternative Injection Zone Demonstrations

1) The owner or operator must demonstrate one of the following alternatives:

A) That the confining zone is separated from the base of the lowermost USDW by at least one sequence of permeable and less permeable strata that will provide an added layer of protection for the USDW in the event of fluid movement in an unlocated borehole or transmissive fault;

B) That, within the area of review, the piezometric surface of the fluid in the injection zone is less than the piezometric surface of the lowermost USDW, considering density effects, injection pressures, and any significant pumping in the overlying USDW; or

C) There is no USDW present.

2) The owner or operator of a site that does not meet the requirements in subsection (d)(1), (d)(2), or (d)(3) may petition the Board for an adjusted standard pursuant to Subpart D of 35 Ill. Adm. Code104. The Board may grant an adjusted standard approving such a site if it determines that because of site geology, nature of the wastes involved, or other considerations; abandoned boreholes; or other conduits would not cause an endangerment of USDWs. A petition for an adjusted standard pursuant to this subsection (d)(4) must include the following components:

A) Those portions of a permit application for the particular injection activities and site that are relevant to the Board's determination; and

B) Such other relevant information that the Board may by order require pursuant to 35 Ill. Adm. Code 104.228.

BOARD NOTE: Derived from 40 CFR 146.62 (2017).

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