# Ohio Administrative Code

## Rule 3745-34-51 Minimum criteria for siting class I hazardous waste injection wells.

Effective: December 12, 2024

(A) All class I hazardous waste injection wells shall be sited such that they inject into a formation that is beneath the lowermost formation containing, within one quarter mile of the well bore, an underground source of drinking water.

(B) Upon a finding by the director, the siting of class I hazardous waste injection wells shall be limited to areas that are geologically suitable. The director shall determine geologic suitability based upon information submitted by the applicant including 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.

(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 shall be sited such as follows:

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

(2) The confining zone:

(a) Is laterally continuous and free of transecting, transmissive faults or fractures over an area sufficient to prevent the movement of fluids into USDW.

(b) Contains at least one formation of sufficient thickness and with lithologic and stress characteristics capable of preventing vertical propagation of fractures.

(D) The owner or operator shall submit information to the director adequate to demonstrate one of the following:

(1) 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 bore hole or transmissive fault.

(2) 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.

(3) There is no USDW present.

(E) All new class I injection wells and wells converted to a class I injection well permitted after the effective date of these rules shall comply with the location restrictions in paragraph (F) of this rule unless the new class I injection well is located at a commercial complex, or industrial complex, or site, or location, or tract of land with an existing class I injection well initially permitted prior to the effective date of this rule. Existing class I injection wells initially permitted prior to the effective date of this rule are not required to meet the location restrictions in paragraph (F) of this rule.

(F) On and after the effective date of this rule, all of the following apply to a new class I injection well, and a well proposed to be converted to a class I injection well. A new class I injection well, and a well proposed to be converted to a class I injection well shall not be located:

(1) Within the boundary of a flood hazard area as delineated on the "National Flood Insurance Rate Map".

(2) Nearer than five hundred feet from the boundary of the facility or property the Class I well is to be located on. This requirement does not apply if the class I injection well is proposed to be on a site that is zoned industrial.

(3) Within one thousand feet of and within any of the following:

(a) The five-year time of travel associated with a public drinking water supply, as delineated or endorsed under the "Source Water Assessment and Protection Program"; and

(b) The emergency management zone of a public water system intake.

(4) Within seven-hundred fifty feet of an occupied private dwelling or a public building that may be used as a place of assembly, education, entertainment, lodging, or occupancy by the public. However, the owner or the person with legal authority for the private dwelling or public building may consent in writing to a location of the class I injection well to a distance less than seven hundred fifty feet if the applicant for the class I injection well submits the written consent with the application.

(5) In or within one hundred feet of a wetland or any surface waters that are waters of the state as defined in section 6111.01 of the Revised Code.

(6) Within one hundred feet of ponds, developed springs, and water wells. However, the owner or the person with legal authority for the ponds, developed springs, and water wells may consent in writing to a location of the class I injection well to a distance less than one hundred feet if the applicant for the class I injection well submits the written consent with the application.