**Section 704.123 Identification of USDWs and Exempted Aquifers**

a) The Agency may identify (by narrative description, illustrations, maps, or other means) and must protect as a USDW, any aquifer or part of an aquifer that meets the definition of a USDW set forth in 35 Ill. Adm. Code 702.110, except as one of the exceptions of subsections (a)(1) and (a)(2) applies. Other than Agency-approved aquifer exemption expansions that meet the criteria set forth in 35 Ill. Adm. Code 730.104, a new aquifer exemption must not be issued for a Class VI injection well. Even if an aquifer has not been specifically identified by the Agency, it is a USDW if it meets the definition in 35 Ill. Adm. Code 702.110. Identification of USDWs must be made according to criteria adopted by the Agency pursuant to 35 Ill. Adm. Code 702.106.

1) The Agency may not identify an aquifer or part of an aquifer as a USDW to the extent that there is an applicable aquifer exemption under subsection (b).

2) The Agency may not identify an aquifer or part of an aquifer as a USDW to the extent that the aquifer or part of an aquifer is an expansion to the areal extent of an existing Class II enhanced oil recovery or is subject to an enhanced gas recovery aquifer exemption for the exclusive purpose of Class VI injection for geologic sequestration under subsection (d).

b) Identification of an Exempted Aquifer.

1) The Agency may identify (by narrative description, illustrations, maps, or other means) and describe in geographic or geometric terms (such as vertical and lateral limits and gradient) that are clear and definite, any aquifer or part of an aquifer that the Agency desires the Board to designate as an exempted aquifer using the criteria in 35 Ill. Adm. Code 730.104, as described in this subsection (b).

2) No designation of an exempted aquifer may be final until approved by USEPA as part of the State program.

3) Subsequent to program approval, the Board may identify additional exempted aquifers.

4) Identification of exempted aquifers must be by rulemaking pursuant to 35 Ill. Adm. Code 102 and 702.105 and Sections 27 and 28 of the Act, considering the criteria set forth in 35 Ill. Adm. Code 730.104.

c) For a Class III injection well, an applicant for a permit that necessitates an aquifer exemption under 35 Ill. Adm. Code 730.104(b)(1) must furnish the data necessary to demonstrate that the aquifer is expected to be mineral or hydrocarbon producing. Information contained in the mining plan for the proposed project, such as a map and general description of the mining zone, general information on the mineralogy and geochemistry of the mining zone, analysis of the amenability of the mining zone to the proposed mining method, and a timetable of planned development of the mining zone must be considered by the Board in addition to the information required by Section 704.161(c). Approval of the exempted aquifer must be by rulemaking pursuant to 35 Ill. Adm. Code 102 and 702.105 and Sections 27 and 28 of the Act. Rules will not become final until approved by USEPA as a program revision.

d) Expansion to the Areal Extent of Existing Class II Aquifer Exemptions for Class VI Wells. The owner or operator of a Class II enhanced oil recovery or enhanced gas recovery well may request that the Agency approve an expansion to the areal extent of an aquifer exemption already in place for a Class II enhanced oil recovery or enhanced gas recovery well for the exclusive purpose of Class VI injection for geologic sequestration. A request for areal expansion must be treated as a revision to the applicable federal UIC program under 40 CFR 147 or as a substantial program revision to an approved state UIC program under 40 CFR 145.32 and will not be final until approved by USEPA.

1) The request for an expansion of the areal extent of an existing aquifer exemption for the exclusive purpose of Class VI injection for geologic sequestration must define (by narrative description, illustrations, maps, or other means) and describe in geographic or geometric terms (such as vertical and lateral limits and gradient) that are clear and definite, all aquifers or parts of aquifers that are requested to be designated as exempted using the criteria in 35 Ill. Adm. Code 730.104.

2) In making a determination to expand the areal extent of an aquifer exemption of a Class II enhanced oil recovery or enhanced gas recovery well for the purpose of Class VI injection, the Agency must determine that the request meets the criteria for exemptions in 35 Ill. Adm. Code 730.104. In evaluating a request, the Agency must consider:

A) Any current and potential future use of the USDWs to be exempted as drinking water resources;

B) The predicted extent of the injected carbon dioxide plume, and any mobilized fluids that may result in degradation of water quality, over the lifetime of the geologic sequestration project, as informed by computational modeling performed pursuant to 35 Ill. Adm. Code 730.184(c)(1), in order to ensure that the proposed injection operation will not at any time endanger USDWs including non-exempted portions of the injection formation;

C) Whether the areal extent of the expanded aquifer exemption is of sufficient size to account for any possible revisions to the computational model during reevaluation of the area of review, pursuant to 35 Ill. Adm. Code 730.184(e); and

D) Any information submitted to support a request by the owner or operator for a permit that includes alternative injection well depth requirements pursuant to 35 Ill. Adm. Code 730.195, if appropriate.

BOARD NOTE: Derived from 40 CFR 144.7 (2017).

(Source: Amended at 42 Ill. Reg. 21095, effective November 19, 2018)