**Section 730.170 Information to be Evaluated**

This Section sets forth the information that must be evaluated by the Agency in authorizing a Class I hazardous waste injection well. For a new Class I hazardous waste injection well, the owner or operator must submit all the information listed below as part of the permit application. For an existing or converted Class I hazardous waste injection well, the owner or operator must submit all information listed below as part of the permit application except for those items of information that are current, accurate, and available in the existing permit file. For either an existing or a new Class I hazardous waste injection well, certain maps, cross-sections, tabulations of wells within the area of review, and other data may be included in the application by reference, provided they are current, readily available to the Agency (for example, in the permitting Agency's file), and sufficiently identifiable to be retrieved.

a) Before issuing a permit for an existing Class I hazardous waste injection well to operate, or the construction or conversion of a new Class I hazardous waste injection well, the Agency must review the following to assure that the requirements of this Part and 35 Ill. Adm. Code 702 and 704 are met:

1) Information required in 35 Ill. Adm. Code 704.161;

2) A map showing the injection well for which a permit is sought and the applicable area of review. Within the area of review, the map must show the number or name and location of all producing wells, injection wells, abandoned wells, dry holes, surface bodies of water, springs, mines (surface and subsurface), quarries, water wells, and other pertinent surface features, including residences and roads. The map must also show faults, if known or suspected;

3) A tabulation of all wells within the area of review that penetrate the proposed injection zone or confining zone. Such data must include a description of each well's type, construction, date drilled, location, depth, record of plugging or completion, and any additional information the Agency may require;

4) The protocol followed to identify, locate and ascertain the condition of abandoned wells within the area of review that penetrate the injection or the confining zones;

5) Maps and cross-sections indicating the general vertical and lateral limits of all underground sources of drinking water within the area of review, their position relative to the injection formation, and the direction of water movement, where known, in each underground source of drinking water that may be affected by the proposed injection;

6) Maps and cross-sections detailing the geologic structure of the local area;

7) Maps and cross-sections illustrating the regional geologic setting;

8) Proposed operating data, as follows:

A) The average and maximum daily rate and volume of the fluid to be injected; and

B) The average and maximum injection pressure;

9) The proposed formation testing program to obtain an analysis of the chemical, physical, and radiological characteristics of and other information on the injection formation and the confining zone;

10) The proposed stimulation program;

11) The proposed injection procedure;

12) Schematic or other appropriate drawings of the surface and subsurface construction details of the well;

13) The contingency plan to cope with all shut-ins or well failures so as to prevent migration of fluids into any USDW;

14) The plans (including maps) for meeting monitoring requirements of Section 730.168;

15) For wells within the area of review that penetrate the injection zone or the confining zone but are not properly completed or plugged, the corrective action to be taken pursuant to Section 730.164;

16) The construction procedures including a cementing and casing program, well materials specification and their life expectancy; logging procedures; deviation checks; and a drilling, testing, and coring program; and

17) A demonstration, pursuant to Subpart G of 35 Ill. Adm. Code 704, that the applicant has the resources necessary to close, plug, or abandon the well and for post-closure care.

b) Before the Agency grants approval for the operation of a Class I hazardous waste injection well, the owner or operator must submit, and the Agency must review, the following information, which must be included in the completion report:

1) All available logging and testing program data on the well;

2) A demonstration of mechanical integrity pursuant to Section 730.168;

3) The anticipated maximum pressure and flow rate at which the permittee will operate;

4) The results of the injection zone and confining zone testing program as required in Section 730.170(a)(9);

5) The actual injection procedure;

6) The compatibility of injected waste with fluids in the injection zone and minerals in both the injection zone and the confining zone and with the materials used to construct the well;

7) The calculated area of review based on data obtained during logging and testing of the well and the formation and, where necessary, revisions to the information submitted pursuant to Section 730.170(a)(2) and (a)(3); and

8) The status of corrective action on wells identified in Section 730.170(a)(15).

c) Prior to granting approval for the plugging and abandonment (i.e., closure) of a Class I hazardous waste injection well, the Agency must review the information required in Sections 730.171(a)(4) and 730.172(a).

d) Any permit issued for a Class I hazardous waste injection well for disposal on the premises where the waste is generated must contain a certification by the owner or operator that the following facts are true:

1) The generator of the hazardous waste has a program to reduce the volume or quantity and toxicity of such waste to the degree determined by the generator to be economically practicable; and

2) Injection of the waste is that practicable method of disposal currently available to the generator that minimizes the present and future threat to human health and the environment.

BOARD NOTE: Derived from 40 CFR 146.70 (2005).

(Source: Amended at 31 Ill. Reg. 1281, effective December 20, 2006)