

**Information to be considered by the director in authorizing class I wells.**

This rule sets forth the information which must be considered by the director in authorizing class I wells. For an existing or converted new class I well, the director may rely on the existing permit file for those items of information listed below which are current and accurate in the file. For a newly drilled class I well, the director shall require the submission of all the information listed below. For both existing and new class I wells, 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 director (for example in the permitting agency's files) and sufficiently identified to be retrieved.

- (A) Prior to the issuance of a permit for an existing class I well to operate or the construction or conversion of a new class I well, the director shall consider the following:
- (1) Information required in rules 3745-34-12, 3745-34-13, and 3745-34-14 of the Administrative Code;
  - (2) A map showing the injection well(s) 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 should also show faults, if known or suspected. Only information of public record is required to be included on this map;
  - (3) A tabulation of data on all wells within the area of review which penetrate into the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of plugging and/or completion, and any additional information the director may require;
  - (4) 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 which may be affected by the proposed injection;
  - (5) Maps and cross sections detailing the geologic structure of the local area;
  - (6) Generalized maps and cross sections illustrating the regional geologic setting;

- (7) Proposed operating data:
  - (a) Average and maximum daily rate and volume of the fluid to be injected;
  - (b) Average and maximum injection pressure; and
  - (c) Source and an analysis of the chemical, physical, radiological and biological characteristics of injection fluids.
- (8) Proposed formation testing program to obtain an analysis of the chemical, physical and radiological characteristics of and other information on the receiving formation;
- (9) Proposed stimulation program;
- (10) Proposed injection procedure;
- (11) Schematic or other appropriate drawings of the surface and subsurface construction details of the well;
- (12) Contingency plans to cope with all shut-ins or well failures so as to prevent migration of fluids into any underground source or drinking water;
- (13) Plans (including maps) for meeting the monitoring requirements in paragraph (B) of rule 3745-34-38 of the Administrative Code;
- (14) For wells within the area of review which penetrate the injection zone but are not properly completed or plugged, the corrective action proposed to be taken under rule 3745-34-30 of the Administrative Code;
- (15) Construction procedures including a cementing and casing program, logging procedures, deviation checks, and a drilling, testing, and coring program;
- (16) A certificate that the applicant has assured, through a performance bond or other appropriate means, the resources necessary to close, plug or abandon the well as required by paragraph (B)(6) of rule 3745-34-27 of the Administrative Code;
- (17) Location, including, but not limited to, seismic areas, wetlands, flood hazard areas, carbonate formations that result in caverns, and underground mines,

both active and abandoned; and

- (18) The means to dispose of any sludges, solid wastes, or semi-solids or liquids generated in the treatment of any wastes received.
- (B) Prior to granting approval for the operation of a class I well, the director shall consider the following information:
- (1) All available logging and testing program data on the well;
  - (2) A demonstration of mechanical integrity pursuant to rule 3745-34-34 of the Administrative Code;
  - (3) The anticipated maximum pressure and flow rate at which the permittee will operate;
  - (4) The results of the formation testing program;
  - (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
  - (7) The status of corrective action on defective wells in the area of review.
- (C) Prior to granting approval for the plugging and abandonment of a class I well, the director shall consider the following information:
- (1) The type and number of plugs to be used;
  - (2) The placement of each plug including the elevation of the top and bottom;
  - (3) The type and grade and quantity of cement to be used;
  - (4) The method for placement of the plugs; and
  - (5) The procedure to be used to meet the requirements of rule 3745-34-36 of the Administrative Code.

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