# ARTICLE 33-25 UNDERGROUND INJECTION CONTROL

Chapter

33-25-01 Underground Injection Control Program

# CHAPTER 33-25-01 UNDERGROUND INJECTION CONTROL PROGRAM

Section	
33-25-01-01	Definitions
33-25-01-02	Classification of Injection Wells
33-25-01-03	Prohibition of Unauthorized Injection
33-25-01-04	Prohibition of Movement of Fluid Into Underground Sources of Drinking Water
33-25-01-05	Identification of Underground Sources of Drinking Water and Exempted Aquifers
33-25-01-06	Permitting
33-25-01-07	Area Permits
33-25-01-08	Draft Permits and Fact Sheets
33-25-01-09	Public Notice and Comment - Requests for Hearings - Public Hearings - Response to
	Comments
33-25-01-10	Conditions Applicable to All Permits
33-25-01-11	Technical Requirements
33-25-01-12	Plugging and Abandonment
33-25-01-13	Mechanical Integrity
33-25-01-14	Area of Review
33-25-01-15	Schedules of Compliance
33-25-01-16	Authorization of Class V Underground Injection Wells
33-25-01-17	Requirements for Hazardous Waste Injection Wells
33-25-01-18	Class IV Wells

#### 33-25-01-01. Definitions.

- "Abandoned well" means a well whose use has been permanently discontinued or which is in a state of disrepair such that it cannot be used for its intended purpose or for observation purposes.
- 2. "Area of review" means the area of review surrounding an injection well described according to the criteria under title 40 C.F.R. part 146, sections 146.6 and 146.63.
- 3. "Casing" means a pipe or tubing of appropriate material, of varying diameter and weight, lowered into a borehole during or after drilling in order to support the sides of the hole and thus prevent the walls from caving, to prevent loss of drilling mud into porous ground, or to prevent water, gas, or other fluid from entering or leaving the hole.
- 4. "Catastrophic collapse" means the sudden and utter failure of overlying strata caused by removal of underlying materials.
- 5. "Cesspool" means a drywell that receives untreated sanitary waste containing human excreta and which sometimes has an open bottom or perforated sides, or both.
- 6. "Director" means the director of the division of water quality of the state department of health.
- 7. "Drywell" means a well, other than an improved sinkhole or subsurface fluid distribution system, completed above the water table so that its bottom and sides are typically dry except when receiving fluids.

- 8. "Exempted aquifer" means an aquifer or its portion that meets the criteria in the definition of "underground source of drinking water" but which has been exempted according to the procedures of subsection 2 of section 33-25-01-05.
- 9. "Fluid" means material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state.
- 10. "Formation" means a body of rock characterized by a degree of lithologic homogeneity which is prevailing, but not necessarily, tabular and is mappable on the earth's surface or traceable in the subsurface.
- 11. "Hazardous waste" means a hazardous waste as defined under title 40 C.F.R. part 261, section 261.3.
- 12. "Improved sinkhole" means a naturally occurring karst depression or other natural crevice found in volcanic terrain and other geologic settings which have been modified by man for the purpose of directing and emplacing fluids into the subsurface.
- 13. "Injection zone" means a geological formation, group of formations, or part of a formation receiving fluids through a well.
- 14. "Packer" means a device lowered into a well to produce a fluidtight seal.
- 15. "Plugging" means the act or process of stopping the flow of water, oil, or gas into and out of a formation through a borehole or well penetrating that formation.
- 16. "Point of injection" means the last accessible sampling point prior to waste fluids being released into the subsurface environment through a class V injection well. For example, the point of injection of a class V septic system might be the distribution box--the last accessible sampling point before the waste fluids drain into the underlying soils. For a drywell, it is likely to be the well bore itself.
- 17. "Radioactive waste" means any waste which contains hazardous material in concentrations which exceed those listed under title 10 C.F.R. part 20, appendix B, table II, column 2.
- 18. "Sanitary waste" means liquid or solid wastes originating solely from humans and human activities, such as wastes collected from toilets, showers, wash basins, sinks used for cleaning domestic areas, sinks used for food preparation, clothes washing operations, and sinks or washing machines where food and beverage serving dishes, glasses, and utensils are cleaned. Sources of these wastes may include single or multiple residences, hotels and motels, restaurants, bunkhouses, schools, ranger stations, crew quarters, guard stations, campgrounds, picnic grounds, day-use recreation areas, other commercial facilities, and industrial facilities provided the waste is not mixed with industrial waste.
- 19. "Septic system" means a well that is used to emplace sanitary waste below the surface and is typically comprised of a septic tank and subsurface fluid distribution system or disposal system.
- 20. "Subsurface fluid distribution system" means an assemblage of perforated pipes, drain tiles, or other similar mechanisms intended to distribute fluids below the surface of the ground.
- 21. "Well" means a bored, drilled or driver shaft, or a dug hole, whose depth is greater than the largest surface dimension; or an improved sinkhole; or a subsurface fluid distribution system.
- 22. "Well injection" means the subsurface emplacement of fluids through a well.

History: Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001; October 1, 2018.

General Authority: NDCC 61-28-04 Law Implemented: NDCC 61-28-04

## 33-25-01-02. Classification of injection wells.

Injection wells are classified as follows:

- 1. **Class I.** Wells used to inject hazardous waste, radioactive waste, and other industrial and municipal disposal wells which inject fluids beneath the lowermost formation containing, within one quarter mile [402.34 meters] of the well bore, an underground source of drinking water.
- 2. Class II. Wells which inject fluids:
  - a. Which are brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production and may be commingled with wastewaters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection;
  - b. For enhanced recovery of oil or natural gas; and
  - c. For storage of hydrocarbons which are liquid at standard temperature and pressure.
- 3. Class III. Wells which inject for extraction of minerals or energy.
- 4. Class IV. Wells used to dispose of hazardous wastes or radioactive wastes into or above a formation which, within one quarter mile [402.34 meters] of the well, contains an underground source of drinking water and wells used to dispose of hazardous wastes which cannot be classified under class I wells, e.g., wells used to dispose of hazardous wastes into or above a formation which contains an exempted aguifer.
- 5. Class V. Injection wells not included in class I, II, III, IV, or VI.
- 6. Class VI. Wells that are not experimental in nature that are used for geologic sequestration of carbon dioxide beneath the lowermost formation containing an underground source of drinking water; or wells used for geologic sequestration of carbon dioxide that have been granted a waiver of the injection depth requirements pursuant to requirements at title 40 CFR part 146, section 146.95, or, wells used for geologic sequestration of carbon dioxide that have received an expansion to the areal extent of an existing Class II enhanced oil recovery or enhanced gas recovery aquifer exemptions pursuant to title 40 CFR part 146, section 146.4 and title 40 CFR part 144, section 144.7(d).

History: Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001; October 1, 2018.

**General Authority:** NDCC 23-20.3, 61-28-04, 61-28.1-03 **Law Implemented:** NDCC 23-20.3, 61-28-04, 61-28.1-03

#### 33-25-01-03. Prohibition of unauthorized injection.

Any underground injection (except class II, class III, and class VI) is prohibited except as authorized by permit or rule issued under this section. Also the construction of any well required to have a permit under this section is prohibited until the permit has been issued. These include the well types specifically identified in title 40 CFR part 144, section 144.1(g) and title 40 CFR part 144, section 144.81.

The following well types are not covered by these rules:

 Individual or single-family residential waste disposal systems such as domestic cesspools or septic systems.

- 2. Nonresidential cesspools, septic systems, or similar waste disposal systems if such systems are used solely for the disposal of sanitary waste and have the capacity to serve fewer than twenty persons a day.
- 3. Injection wells used for injection of hydrocarbons which are of pipeline quality and are gases at standard temperature and pressure for the purpose of storage.
- 4. Any dug hole, drilled hole, bored shaft, improved sinkhole, or subsurface fluid distribution system which is not used for emplacement of fluids underground.

History: Effective June 1, 1983; amended effective June 1, 2001; October 1, 2018.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04, 61-28-06

## 33-25-01-04. Prohibition of movement of fluid into underground sources of drinking water.

- 1. No owner or operator shall construct, operate, maintain, convert, plug, abandon, or conduct any underground injection activity in a manner which causes, or allows, movement of fluid containing any contaminant into an underground source of drinking water if the presence of that contaminant may cause a violation of any maximum contaminant level under chapter 33-17-01 or which may adversely affect the health of persons. The applicant for a permit shall have the burden of showing that the requirements of this section are met.
- The director shall prescribe additional requirements in accordance with title 40 CFR part 144, section 144.12(b) through (e) for all injection wells which may cause a violation of a maximum contaminant level under chapter 33-17-01 or which may adversely affect the health of persons.

History: Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001; October 1, 2018.

**General Authority:** NDCC 61-28-04, 61-28.1-03 **Law Implemented:** NDCC 61-28-04, 61-28.1-03

#### 33-25-01-05. Identification of underground sources of drinking water and exempted aguifers.

- 1. The director may identify and shall protect as an underground source of drinking water all aquifers or parts of aquifers which:
  - a. Supply any public water system; or
  - b. Contain a sufficient quantity of ground water to supply a public water system and:
    - (1) Currently supply drinking water for human consumption; or
    - (2) Contain fewer than ten thousand milligrams per liter total dissolved solids; and
    - (3) Are not exempted aguifers.
- After notice and opportunity for a public hearing the director may designate, identify, and describe in geographic or geometric terms, or both, which are clear and definite exempted aquifers or parts thereof using the following criteria:
  - a. It does not currently serve as a source of drinking water; and
  - b. (1) It cannot now and will not in the future serve as a source of drinking water for any of the following reasons:
    - (a) It produces mineral, hydrocarbon, or geothermal energy;

- (b) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical;
- (c) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or
- (d) It is located over a class III well mining area subject to subsidence or catastrophic collapse; or
- (2) The total dissolved solids content of the ground water is more than three thousand and less than ten thousand milligrams per liter and it is not reasonably expected to supply a public water system.

**History:** Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001.

**General Authority:** NDCC 61-28-04, 61-28.1-03 **Law Implemented:** NDCC 61-28-04. 61-28.1-03

## 33-25-01-06. Permitting.

# 1. Application for a permit.

- a. Any person who is required to have a permit shall complete, sign, and submit an application to the director.
- b. When the owner and operator are different, it is the operator's duty to obtain a permit.
- c. The application must be complete before the permit is issued.
- d. All applicants of class I wells shall provide information specified under title 40 C.F.R. parts 144 and 146, sections 144.31(e) and 146.14(a) and (c) (for class I nonhazardous waste injection wells) or title 40 C.F.R. part 146, sections 146.70(a), 146.71(a), and 146.72(a) (for class I hazardous waste injection wells).
- e. Applicants shall keep records of all data used to complete permit applications and supplemental information for at least three years from the date the application is signed.
- f. Operators of new injection wells, unless covered by an existing area permit, shall submit an application within a reasonable time before construction is expected to begin.

# 2. Signatories to permit applications.

- a. All permits shall be signed as follows:
  - (1) For a corporation: by a principal executive officer of at least the level of vice president.
  - (2) For a partnership or sole proprietor: by a general partner or proprietor.
  - (3) For a municipality, state, federal, or other public agency: by either a principal officer or authorized representative.
- b. A person is a duly authorized representative if the authorization:
  - (1) Is made in writing by the legal signatory;
  - (2) Specifies an individual or position having responsibility for the overall operation; and
  - (3) Is submitted to the director either prior to or along with documents signed by the authorized representative.

- c. Changes in authorization must be in writing and submitted to the director.
- 3. **Duration of permits.** Underground injection control permits for class I and class V wells shall be effective for a fixed term of not more than ten years.

## 4. Transfer of permits.

- a. Any class V permit may be automatically transferred to a new permittee if:
  - (1) The current permittee notifies the director at least thirty days prior to the proposed transfer date; and
  - (2) The notice includes a written agreement between the existing and new permittee containing:
    - (a) A specific date for transfer of permit responsibility, coverage, and liability; and
    - (b) A demonstration that the new permittee meets the financial responsibility requirements.
- b. Permits for class I wells may be transferred only if the permit has been modified or revoked and reissued.

## 5. Modification, revocation and reissuance, or termination of permits.

- a. Permits may be modified, revoked and reissued, or terminated at the request of any affected person or at the director's initiative if cause exists as specified under title 40 C.F.R. part 144, section 144.39. All requests shall be in writing and shall contain facts or reasons supporting the request.
- b. If the director tentatively decides to modify or revoke and reissue a permit, the director shall prepare a draft permit incorporating the proposed changes. The director may request additional information and, in the case of a modified permit, may require the submission of an updated permit application. In the case of revoked and reissued permits, the director shall require the submission of a new application.
- c. The following are causes for terminating a permit during its term or for denying a permit renewal application:
  - (1) Noncompliance by the permittee with any permit condition;
  - (2) Failure by the permittee to fully disclose all relevant facts or misrepresentation of relevant facts; or
  - (3) A determination that the permitted activity endangers human health or the environment.
- d. If the director tentatively decides to terminate a permit, the director shall issue notice of intent to terminate.

History: Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04, 61-28-06

## 33-25-01-07. Area permits.

1. The director may issue a permit on an area basis, rather than for each well individually; provided, that the permit is for injection wells:

- a. Described and identified by location in permit applications, if they are existing wells;
- b. Within the same well field, facility site, reservoir, project, or similar unit in the same state;
- c. Of similar construction;
- d. Of the same class;
- e. Operated by a single owner or operator; and
- f. Used to inject other than hazardous waste.
- 2. Area permits shall specify:
  - a. The area within which underground injections are authorized; and
  - b. The requirements for construction, monitoring, reporting, operation, and abandonment for all wells authorized by the permit.
- 3. The area permit may authorize the permittee to construct and operate, convert, or plug and abandon wells within the permit area, provided:
  - a. The permittee notifies the director at such time as the permit requires;
  - b. The additional well meets the area permit criteria; and
  - c. The cumulative effects of drilling and operation of additional injection wells are acceptable to the director.
- 4. If the director determines that any additional well does not meet the area permit requirements, the director may modify or terminate the permit or take enforcement action.
- 5. If the director determines the cumulative effects are unacceptable, the permit may be modified.

History: Effective June 1, 1983. General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04, 61-28-06

## 33-25-01-08. Draft permits and fact sheets.

#### 1. Draft permits.

- a. When the application is complete, the director shall tentatively decide to either prepare a draft permit or deny the application.
- b. If the director decides to prepare the draft permit, it shall contain the following information:
  - (1) All required permit conditions;
  - (2) All compliance schedule requirements;
  - (3) All monitoring requirements; and
  - (4) All specific requirements for construction, corrective action, operation, hazardous waste management, reporting, plugging and abandonment, financial responsibility, mechanical integrity, and any other conditions the director may impose.

#### 2. Fact sheets.

- a. A fact sheet shall be prepared for:
  - (1) Every draft permit for a major facility or activity.
  - (2) Every draft permit which the director finds is the subject of widespread public interest or raises major issues.
- b. If a fact sheet is required, it:
  - (1) Shall be sent to the applicant and, on request, to any other person.
  - (2) Shall include:
    - (a) A brief description of the type of facility or activity.
    - (b) The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being injected.
    - (c) A brief summary of the basis for the draft permit conditions.
    - (d) The reasons why any requested variances or alternatives to required standards do or do not appear justified.
    - (e) A description of the procedures for reaching a final decision, including:
      - [1] Beginning and ending dates of comment period;
      - [2] Address where comments will be received;
      - [3] Procedures for requesting a hearing and the nature of the hearing; and
      - [4] Any other procedures by which the public may participate.
    - (f) The name and telephone number of a person to contact for additional information.

**History:** Effective June 1, 1983; amended effective June 1, 2001.

General Authority: NDCC 61-28-04 Law Implemented: NDCC 61-28-04

33-25-01-09. Public notice and comment - Requests for hearings - Public hearings - Response to comments.

## 1. Public notice.

- a. The director shall give public notice that the following actions have occurred:
  - (1) A draft permit has been prepared.
  - (2) A hearing has been scheduled.
  - (3) Intent to deny a permit application.
- b. Public notice shall be given to allow thirty days for public comment on the draft permit.
- c. Public notice of a public hearing shall be given at least thirty days before the hearing.

- d. Public notice shall be given by the methods specified under title 40 C.F.R. part 124, section 124.10(c).
- e. Public notices and public notices for hearings shall at a minimum contain the information specified under title 40 C.F.R. part 124, section 124.10(d).

#### 2. Public comment.

- a. During the public comment period, any interested person may submit written or oral comments and, if no public hearing is scheduled, request a public hearing in writing, stating the nature of the issues.
- b. All comments shall be considered in making the final decision and shall be answered when the final permit decision is made.
- Public hearing. The director shall hold a public hearing whenever there is a significant degree of public interest in a draft permit. The director also may hold a public hearing at the director's discretion.

# 4. Response to comments.

- a. The director shall issue a response to comments when a final permit decision is made. The response shall:
  - (1) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and
  - (2) Briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any hearing.
- b. The response to comments shall be available to the public.

History: Effective June 1, 1983; amended effective June 1, 2001.

**General Authority:** NDCC 61-28-04 **Law Implemented:** NDCC 61-28-04

# 33-25-01-10. Conditions applicable to all permits.

- 1. The general conditions contained under title 40 C.F.R. part 144, section 144.51 apply to class I and class V underground injection control permits. All conditions shall be incorporated into the permits, either expressly or by reference.
- 2. A permittee may not commence injection into a new injection well until:
  - a. Construction is complete;
  - b. The permittee has submitted notice to the director that construction is complete; and
  - c. The director has inspected or reviewed the new injection well and finds it in compliance with the permit, or the permittee has not received notice from the director of intent to inspect within thirteen days of the permittee's completion notice.
- 3. The director shall impose on a case-by-case basis such additional conditions as are necessary to prevent the migration of fluids into underground sources of drinking water.
- 4. The permit shall require the permittee to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the director. The permittee must show evidence of financial responsibility to the director by the

submission of surety bond, or other adequate assurance, such as financial statements or other materials acceptable to the director. Operators of class I hazardous waste injection wells must maintain the resources to close, plug, or abandon the well and for postclosure care pursuant to title 40 C.F.R. part 144 subpart F and title 40 C.F.R. part 146, sections 146.71 and 146.72.

- 5. The permittee shall retain all records concerning the nature and composition of injected fluids until three years after completion of plugging and abandonment of the well.
- 6. The following information shall be reported within twenty-four hours:
  - a. Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.
  - b. Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.

History: Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001.

**General Authority:** NDCC 23-20.3-03, 61-28-04, 61-28.1-03 **Law Implemented:** NDCC 23-20.3-03, 61-28-04, 61-28.1-03

## 33-25-01-11. Technical requirements.

- 1. Construction requirements.
  - a. (1) Existing wells shall achieve compliance with construction requirements prior to permitting or according to a compliance schedule established as a permit condition.
    - (2) New injection wells shall submit plans for testing, drilling, and construction as part of the permit application.
    - (3) New injection wells shall be in compliance with construction requirements prior to commencing injection operations.
    - (4) Changes in construction plans require approval of the director.
  - b. Class I well construction shall conform to the requirements contained under title 40 C.F.R. part 146, section 146.12 (nonhazardous waste injection wells) or title 40 C.F.R. part 146, section 146.65 (hazardous waste injection wells).

# 2. Corrective action.

- a. Applicants for class I nonhazardous waste injection well permits shall identify all known wells which penetrate the injection zone within the area of review.
- b. Applicants for class I hazardous waste injection well permits are subject to the corrective action requirements of title 40 C.F.R. part 146, section 146.64 and shall as part of the permit application submit a plan to the director outlining the protocol used to:
  - (1) Identify all wells penetrating the confining zone or injection zone within the area of review; and
  - (2) Determine whether wells are adequately completed or plugged.
- c. All class I injection wells are subject to the following:
  - (1) For wells in the area of review which are improperly sealed, completed, or abandoned, the applicant shall also submit a corrective action plan consisting of

- such steps or modifications as are necessary to prevent movement of fluid into an underground source of drinking water.
- (2) The director's review of the corrective action plan shall consider all of the following criteria and factors:
  - (a) Toxicity and volume of the injected fluid.
  - (b) Toxicity of native fluids or byproducts of injection.
  - (c) Potentially affected population.
  - (d) Geology.
  - (e) Hydrology.
  - (f) History of the injection operation.
  - (g) Completion and plugging records.
  - (h) Abandonment procedures in effect at the time the well was abandoned.
  - (i) Hydraulic connections with an underground source of drinking water.
- (3) Where the corrective action plan is adequate, the director shall incorporate the plan into the permit as a condition.
- (4) Where the corrective action plan is inadequate, the director shall:
  - (a) Require the applicant to revise the plan;
  - (b) Prescribe a corrective action plan as a permit condition; or
  - (c) Deny the permit.
- (5) Permits for existing injection wells that require corrective action shall include a compliance schedule requiring corrective action as soon as possible.
- (6) New injection wells may not be permitted until all required corrective action has been taken.
- (7) The director may require as a permit condition that injection pressure be so limited that pressure in the injection zone does not exceed hydrostatic pressure at the site of an improperly completed or abandoned well within the area of review. This pressure limitation shall satisfy the corrective action requirement. Alternatively, such injection pressure limitation can be part of a compliance schedule and last until all other required corrective action has been taken.
- 3. All class I hazardous waste injection wells must be sited in accordance with title 40 C.F.R. part 146, section 146.62.
- 4. Operating, monitoring, and reporting requirements for class I wells shall at a minimum include the items contained under title 40 C.F.R. part 146, section 146.13 (for nonhazardous waste injection wells) or title 40 C.F.R. part 146, sections 146.67, 146.68, and 146.69 (for hazardous waste injection wells).
- 5. In authorizing a new class I well, the director shall require the submission of all the information specified under title 40 C.F.R. parts 144 and 146, sections 144.31 and 146.14 (for

nonhazardous waste injection wells) or title 40 C.F.R. parts 144 and 146, sections 144.31, 146.70(a), 146.71(a), and 146.72(a) (for hazardous waste injection wells).

6. Prior to granting approval for the operation of a class I well, the operator shall submit for review by the director information listed under title 40 C.F.R. part 146, section 146.14(b) (for nonhazardous waste injection wells) or title 40 C.F.R. part 146, sections 146.66 and 146.70(b) (for hazardous waste injection wells).

History: Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001.

**General Authority:** NDCC 23-20.3-03, 61-28-04, 61-28.1-03 **Law Implemented:** NDCC 23-20.3-03, 61-28-04, 61-28.1-03

## 33-25-01-12. Plugging and abandonment.

- 1. Any class I permit shall include, and any class V permit may include, a plan for plugging and abandonment which shall be incorporated into the permit as a condition to ensure that movement of fluids either into an underground source of drinking water or between underground sources of drinking water is not allowed.
- 2. Temporary intermittent cessation of injection operations is not abandonment.
- 3. The permittee shall notify the director at such times as the permit requires before conversion or abandonment of the well or in the case of area permits before closure of the project. Owners and operators of class V wells authorized by section 33-25-01-16 must notify the director at least thirty days prior to closure.
- 4. Prior to granting approval for plugging and abandonment of a class I well, the director shall consider the plan submitted by the operator which contains the information listed under title 40 C.F.R. part 146, section 146.14(c) (for nonhazardous waste injection wells) or title 40 C.F.R. part 146, sections 146.71(a)(4) and 146.72(a) (for hazardous waste injection wells).

**History:** Effective June 1, 1983; amended effective June 1, 2001. **General Authority:** NDCC 23-20.3-03, 61-28-04, 61-28.1-03 **Law Implemented:** NDCC 23-20.3-03, 61-28-04, 61-28.1-03

## 33-25-01-13. Mechanical integrity.

- 1. A permit for any class I well shall include, and for any class V well may include, a condition prohibiting injection operations until the permittee shows to the satisfaction of the director that the well has mechanical integrity.
- 2. An injection well has mechanical integrity if:
  - a. There is no significant leak in the casing, tubing, or packer; and
  - b. There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore.
- 3. The mechanical integrity of a class I nonhazardous waste well must be demonstrated using the methods listed under title 40 C.F.R. part 146, section 146.8(b), (c), (d), and (e). The director may also allow the use of a radioactive tracer survey (timed run method) for detecting leaks in the tubing, casing, or packer and for demonstrating the absence of fluid movement behind the casing (where the injection zone immediately underlies the lowermost underground source of drinking water on a case-by-case basis).

- The mechanical integrity of a class I hazardous waste injection as defined by title 40 C.F.R. part 146, section 146.8 must be demonstrated as established by title 40 C.F.R. part 146, section 146.68(d).
- 5. The mechanical integrity of a class I nonhazardous waste injection well must be demonstrated at least once every five years and whenever there has been a well workover.

History: Effective June 1, 1983; amended effective November 1, 1989; June 1,2001.

**General Authority:** NDCC 23-20.3-03, 61-28-04,61-28.1-03 **Law Implemented:** NDCC 23-20.3-03, 61-28-04,61-28.1-03

#### 33-25-01-14. Area of review.

The area of review for each injection well or each field, project, or area of the state shall be determined according to title 40 C.F.R. part 146, section 146.6 (for nonhazardous waste injection wells) or title 40 C.F.R. part 146, section 146.63 (for hazardous waste injection wells).

History: Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001.

**General Authority:** NDCC 23-20.3-03, 61-28-04 **Law Implemented:** NDCC 23-20.3-03, 61-28-04

# 33-25-01-15. Schedules of compliance.

- The compliance schedule of a class I nonhazardous waste injection well or aclass V injection well must require compliance as soon as possible, and not later than three years after the effective date of the permit.
- If the schedule of compliance is for more than one year, then interim requirements and completion dates (not to exceed one year) must be incorporated into the compliance schedule and permit.
- 3. No later than thirty days following each interim and final date, the permittee shall submit progress reports to the director.
- 4. No owner or operator of a class I hazardous waste injection well may begin injection until all corrective action as required under title 40 C.F.R. part 146, section 146.64 has been taken.

History: Effective June 1, 1983; amended effective November 1, 1989; June 1,2001.

**General Authority:** NDCC 23-20.3-03, 61-28-04, 61-28.1-03 **Law Implemented:** NDCC 23-20.3-03, 61-28-04, 61-28.1-03

## 33-25-01-16. Authorization of class V underground injection wells.

- 1. Authorization of injection into a class V well is authorized indefinitely, subject to the requirements of subsections 4, 5, and 6 of section 33-25-01-10 and subsection 3 of section 33-25-01-12, and title 40 CFR part 144, sections 144.84(b)(1) through (4).
- 2. The owner or operator of any existing class V well shall, within one year of the effective date of an underground injection control program, notify the director of the existence of any well meeting the definitions of class V under the owner's or operator's control, and submit the following inventory information:
  - a. Name of owner or operator of the well and legal contact;
  - b. Number of wells and location by township, range, and section;
  - c. Nature and volume of injected fluids;

- d. Construction features of the well, including well depth, screened interval, and casing size and type; and
- e. Any other information which the director requests.
- 3. All owners or operators of new class V wells shall be in compliance with article 43-35 and submit to the director a log of formations penetrated and the inventory information requested in subsection 2.
- 4. a. The director may require the operator of a class V well authorized by rule to apply for and obtain an individual or area permit. Cases where permits may be required include:
  - (1) The injection well is not in compliance with the applicable rule.
  - (2) The injection well is not or no longer is within the category of wells and types of well operations authorized by rule.
  - (3) Protection of an underground source of drinking water requires the injection operation be regulated by requirements not contained in the rules.
  - b. Any owner or operator authorized by rule may request and be granted a permit and hence be excluded from coverage by rule.
  - c. All injection wells regulated by rule shall submit inventory information to the director.
  - d. Upon program approval, the director shall notify owners or operators of injection wells of their duty to submit inventory information.
  - e. Failure to submit required inventory information for a class V well within one year of program approval will result in authorization removal for that well.
- 5. All owners or operators of class V wells shall be in compliance with title 40 CFR part 144, subpart G.
  - a. New large capacity cesspools that receive waste from multiple dwellings or have the capacity to receive waste from twenty or more persons per day are prohibited after April 5, 2000. Existing large capacity cesspools must be closed by April 5, 2005.
  - b. New motor vehicle waste disposal wells that receive waste fluids from vehicular repair or maintenance activities, such as auto body repair shops, automotive repair shops, new or used motor vehicle dealerships, specialty repair shops (e.g., transmission or muffler repair shops), or any vehicular repair works are prohibited after April 5, 2000.
  - c. Existing motor vehicle waste disposal wells in groundwater protection areas designated by the director must be closed or permitted within one year of completion of the groundwater protection area designation or one year after June 1, 2001, whichever is later. Existing motor vehicle waste disposal wells in sensitive groundwater areas designated by the director must be closed or permitted by January 1, 2007.
  - d. (1) Groundwater protection areas are geographic areas near or surrounding community and nontransient noncommunity water systems that use groundwater as a source of drinking water. They are equivalent to wellhead protection areas delineated by the director through the wellhead protection program, which is defined in section 1428 of the Safe Drinking Water Act.
    - (2) Sensitive groundwater areas are vulnerable hydrogeologic settings such as glacial outwash deposits or alluvial or aeolian sand deposits that are critical to protecting current or future underground sources of drinking water. Areas designated as

sensitive groundwater areas by the director are alluvial or aeolian sand deposits shown on Geologic Map of North Dakota (Clayton, 1980, North Dakota geological survey) and glacial drift aquifers listed in North Dakota Geographic Targeting System for Groundwater Monitoring (Radig, 1997, North Dakota department of health), or most recent editions of these publications, with DRASTIC scores greater than or equal to 100 based on methodology described in DRASTIC: A Standardized System For Evaluating Groundwater Pollution Potential (Aller et al, 1987, United States environmental protection agency).

- e. Location outside of a designated groundwater protection area or sensitive groundwater area does not relieve an owner or operator of a class V well from meeting all other requirements of this article and title 40 CFR part 144, subpart G.
- f. In limited cases, the underground injection control director may authorize the conversion (reclassification) of a motor vehicle waste disposal well to another type of class V well. Motor vehicle wells may only be converted if all motor vehicle fluids are segregated by physical barriers and are not allowed to enter the well; and, injection of motor vehicle waste is unlikely based on a facility's compliance history and records showing proper waste disposal. The use of a semipermanent plug as the means to segregate waste is not sufficient to convert a motor vehicle waste disposal well to another type of class V well.

History: Effective June 1, 1983; amended effective June 1, 2001; October 1, 2018.

**General Authority:** NDCC 61-28-04, 61-28.1-03 **Law Implemented:** NDCC 61-28-04, 61-28.1-03

## 33-25-01-17. Requirements for hazardous waste injection wells.

The owner or operator of all wells injecting hazardous waste shall comply with the requirements for hazardous waste management facilities as specified under title 40 C.F.R. parts 144, 146, including subpart G, part 148 and including specifically section 144.14.

**History:** Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001.

**General Authority:** NDCC 23-20.3-04, 23-20.3-05, 61-28-04 **Law Implemented:** NDCC 23-20.3-04, 23-20.3-05, 61-28-04

## 33-25-01-18. Class IV wells.

All class IV wells are prohibited except wells used to inject contaminated ground water that has been treated and is being injected into the same formation from which it was drawn if such injection is approved by the director in accordance with title 40 C.F.R. part 144, section 144.23(c).

**History:** Effective June 1, 1983; amended effective November 1, 1989; June 1, 2001.

General Authority: NDCC 61-28-04

Law Implemented: NDCC 61-28-04, 61-28-06