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Title 40 —Protection of Environment

Chapter I —Environmental Protection Agency

Subchapter D —Water Programs

Part 144 Underground Injection Control Program

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PART 144—UNDERGROUND INJECTION CONTROL PROGRAM

Authority: Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*; Resource Conservation and Recovery Act, 42 U.S.C. 6901 *et seq.*

Source: 48 FR 14189, Apr. 1, 1983, unless otherwise noted.

Subpart A—General Provisions

§ 144.1 Purpose and scope of part 144.

- (a) **Contents of part 144.** The regulations in this part set forth requirements for the Underground Injection Control (UIC) program promulgated under Part C of the Safe Drinking Water Act (SDWA) (Pub. L. 93-523, as amended; 42 U.S.C. 300f *et seq.*) and, to the extent that they deal with hazardous waste, the Resource Conservation and Recovery Act (RCRA) (Pub. L. 94-580 as amended; 42 U.S.C. 6901 *et seq.*).
- (b) **Applicability.**
 - (1) The regulations in this part establish minimum requirements for UIC programs. To the extent set forth in part 145, each State must meet these requirements in order to obtain primary enforcement authority for the UIC program in that State.
 - (2) In addition to serving as minimum requirements for UIC programs, the regulations in this part constitute a part of the UIC program for States listed in part 147 to be administered directly by EPA.
- (c) The information requirements located in the following sections have been cleared by the Office of Management and Budget: Sections 144.11, 144.28(c)(d)(i), 144.31, 14.33, 144.51(j)(m) (n), 144.52(a), 144.54, 144.55, 144.15, 144.23, 144.26, 144.27, 144.28(i)(k), 144.51(o), 146.52. The OMB clearance number is 2040-0042.
- (d) **Authority.**
 - (1) Section 1421 of SDWA requires the Administrator to promulgate regulations establishing minimum requirements for effective UIC programs.
 - (2) Section 1422 of SDWA requires the Administrator to list in the FEDERAL REGISTER “each State for which in his judgment a State underground injection control program may be necessary to assure that underground injection will not endanger drinking water sources” and to establish by regulation a program for EPA administration of UIC programs in the absence of an approved State program in a listed State.
 - (3) Section 1423 of SDWA provides procedures for EPA enforcement of UIC requirements.
 - (4) Section 1431 authorizes the Administrator to take action to protect the health of persons when a contaminant which is present in or may enter a public water system or underground source of drinking water may present an imminent and substantial endangerment to the health of persons.

- (5) Section 1445 of SDWA authorizes the promulgation of regulations for such recordkeeping, reporting, and monitoring requirements “as the Administrator may reasonably require * * * to assist him in establishing regulations under this title,” and a “right of entry and inspection to determine compliance with this title, including for this purpose, inspection, at reasonable time, or records, files, papers, processes, controls, and facilities * * *.”
- (6) Section 1450 of SDWA authorizes the Administrator “to prescribe such regulations as are necessary or appropriate to carry out his functions” under SDWA.
- (e) **Overview of the UIC program.** An UIC program is necessary in any State listed by EPA under section 1422 of the SDWA. Because all States have been listed, the SDWA requires all States to submit an UIC program within 270 days after July 24, 1980, the effective date of 40 CFR part 146, which was the final element of the UIC minimum requirements to be originally promulgated, unless the Administrator grants an extension, which can be for a period not to exceed an additional 270 days. If a State fails to submit an approvable program, EPA will establish a program for that State. Once a program is established, SDWA provides that all underground injections in listed States are unlawful and subject to penalties unless authorized by a permit or a rule. This part sets forth the requirements governing all UIC programs, authorizations by permit or rule and prohibits certain types of injection. The technical regulations governing these authorizations appear in 40 CFR part 146.
- (f) **Structure of the UIC program —**
 - (1) **Part 144.** This part sets forth the permitting and other program requirements that must be met by UIC Programs, whether run by a State or by EPA. It is divided into the following subparts:
 - (i) Subpart A describes general elements of the program, including definitions and classifications.
 - (ii) Subpart B sets forth the general program requirements, including the performance standards applicable to all injection activities, basic elements that all UIC programs must contain, and provisions for waiving permit of rule requirements under certain circumstances.
 - (iii) Subpart C sets forth requirements for wells authorized by rule.
 - (iv) Subpart D sets forth permitting procedures.
 - (v) Subpart E sets forth specific conditions, or types of conditions, that must at a minimum be included in all permits.
 - (vi) Subpart F sets forth the financial responsibility requirements for owners and operators of all existing and new Class I hazardous waste injection wells.
 - (vii) Subpart G of this part sets forth requirements for owners and operators of Class V injection wells.
 - (viii) Subpart H of part 146 sets forth requirements for owners or operators of Class VI injection wells.
 - (2) **Part 145.** While part 144 sets forth minimum requirements for all UIC Programs, these requirements are specifically identified as elements of a State application for primacy to administer an UIC Program in part 145. Part 145 also sets forth the necessary elements of a State submission and the procedural requirements for approval of State programs.

(3) **Part 124.** The public participation requirements that must be met by UIC Programs, whether administered by the State or by EPA, are set forth in part 124. EPA must comply with all part 124 requirements; State administered programs must comply with part 124 as required by part 145. These requirements carry out the purposes of the public participation requirement of 40 CFR part 25 (Public Participation), and supersede the requirements of that part as they apply to the UIC Program.

(4) **Part 146.** This part sets forth the technical criteria and standards that must be met in permits and authorizations by rule as required by part 144.

(g) **Scope of the permit or rule requirement.** The UIC permit program regulates underground injection by six classes of wells (see definition of “well injection,” § 144.3). The six classes of wells are set forth in § 144.6. All owners or operators of these injection wells must be authorized either by permit or rule by the Director. In carrying out the mandate of the SDWA, this subpart provides that no injection shall be authorized by permit or rule if it results in the movement of fluid containing any contaminant into underground sources of drinking water (USDWs—see § 144.3 for definition), if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 141 or may adversely affect the health of persons (§ 144.12). Existing Class IV wells which inject hazardous waste directly into an underground source of drinking water are to be eliminated over a period of six months and new such Class IV wells are to be prohibited (§ 144.13). For Class V wells, if remedial action appears necessary, a permit may be required (§ 144.25) or the Director must require remedial action or closure by order (§ 144.6(c)). During UIC program development, the Director may identify aquifers and portions of aquifers which are actual or potential sources of drinking water. This will provide an aid to the Director in carrying out his or her duty to protect all USDWs. An aquifer is a USDW if it fits the definition under § 144.3, even if it has not been “identified.” The Director may also designate “exempted aquifers” using the criteria in 40 CFR 146.4 of this chapter. Such aquifers are those which would otherwise qualify as “underground sources of drinking water” to be protected, but which have no real potential to be used as drinking water sources. Therefore, they are not USDWs. No aquifer is an exempted aquifer until it has been affirmatively designated under the procedures at § 144.7. Aquifers which do not fit the definition of “underground source of drinking water” are not “exempted aquifers.” They are simply not subject to the special protection afforded USDWs. During initial Class VI program development, the Director shall not expand the areal extent of an existing Class II enhanced oil recovery or enhanced gas recovery aquifer exemption for Class VI injection wells and EPA shall not approve a program that applies for aquifer exemption expansions of Class II-Class VI exemptions as part of the program description. All Class II to Class VI aquifer exemption expansions previously issued by EPA must be incorporated into the Class VI program descriptions pursuant to requirements at § 145.23(f)(9).

(1) **Specific inclusions.** The following wells are included among those types of injection activities which are covered by the UIC regulations. (This list is not intended to be exclusive but is for clarification only.)

(i) Any injection well located on a drilling platform inside the State's territorial waters.

(ii) Any dug hole or well that is deeper than its largest surface dimension, where the principal function of the hole is emplacement of fluids.

(iii) Any well used by generators of hazardous waste, or by owners or operators of hazardous waste management facilities, to dispose of fluids containing hazardous waste. This includes the disposal of hazardous waste into what would otherwise be septic systems and cesspools, regardless of their capacity.

- (iv) Any septic tank, cesspool, or other well used by a multiple dwelling, community, or Regional system for the injection of wastes.

(2) **Specific exclusions.** The following are not covered by these regulations:

- (i) Injection wells located on a drilling platform or other site that is beyond the State's territorial waters.
- (ii) Individual or single family residential waste disposal systems such as domestic cesspools or septic systems.
- (iii) Non-residential cesspools, septic systems or similar waste disposal systems if such systems
 - (A) Are used solely for the disposal of sanitary waste, and
 - (B) have the capacity to serve fewer than 20 persons a day.
- (iv) 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.
- (v) Any dug hole, drilled hole, or bored shaft which is not used for the subsurface emplacement of fluids.

(3) The prohibition applicable to Class IV wells under § 144.13 does not apply to injections of hazardous wastes into aquifers or portions thereof which have been exempted pursuant to § 146.04.

- (h) **Interim Status under RCRA for Class I Hazardous Waste Injection Wells.** The minimum national standards which define acceptable injection of hazardous waste during the period of interim status under RCRA are set out in the applicable provisions of this part, parts 146 and 147, and § 265.430 of this chapter. The issuance of a UIC permit does not automatically terminate RCRA interim status. A Class I well's interim status does, however, automatically terminate upon issuance to that well of a RCRA permit, or upon the well's receiving a RCRA permit-by-rule under § 270.60(b) of this chapter. Thus, until a Class I well injecting hazardous waste receives a RCRA permit or RCRA permit-by-rule, the well's interim status requirements are the applicable requirements imposed pursuant to this part and parts 146, 147, and 265 of this chapter, including any requirements imposed in the UIC permit.

[48 FR 14189, Apr. 1, 1983, as amended at 49 FR 20181, May 11, 1984; 52 FR 20676, June 2, 1987; 52 FR 45797, Dec. 1, 1987; 53 FR 28147, July 26, 1988; 64 FR 68565, Dec. 7, 1999; 67 FR 39592, June 7, 2002; 75 FR 77286, Dec. 10, 2010]

§ 144.2 Promulgation of Class II programs for Indian lands.

Notwithstanding the requirements of this part or parts 124 and 146 of this chapter, the Administrator may promulgate an alternate UIC Program for Class II wells on any Indian reservation or Indian lands. In promulgating such a program the Administrator shall consider the following factors:

- (a) The interest and preferences of the tribal government having responsibility for the given reservation or Indian lands;
- (b) The consistency between the alternate program and any program in effect in an adjoining jurisdiction; and
- (c) Such other factors as are necessary and appropriate to carry out the Safe Drinking Water Act.

§ 144.3 Definitions.

Terms not defined in this section have the meaning given by the appropriate Act. When a defined term appears in a definition, the defined term is sometimes placed within quotation marks as an aid to readers.

Administrator means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

Application means the EPA standard national forms for applying for a permit, including any additions, revisions or modifications to the forms; or forms approved by EPA for use in approved States, including any approved modifications or revisions.

Appropriate Act and regulations means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA); or Safe Drinking Water Act (SDWA), whichever is applicable; and applicable regulations promulgated under those statutes.

Approved State Program means a UIC program administered by the State or Indian Tribe that has been approved by EPA according to SDWA sections 1422 and/or 1425.

Aquifer means a geological "formation," group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

Area of review means the area surrounding an injection well described according to the criteria set forth in § 146.06 or in the case of an area permit, the project area plus a circumscribing area the width of which is either $\frac{1}{4}$ of a mile or a number calculated according to the criteria set forth in § 146.06.

Cesspool means a "drywell" that receives untreated sanitary waste containing human excreta, and which sometimes has an open bottom and/or perforated sides.

Contaminant means any physical, chemical, biological, or radiological substance or matter in water.

Director means the Regional Administrator, the State director or the Tribal director as the context requires, or an authorized representative. When there is no approved State or Tribal program, and there is an EPA administered program, "Director" means the Regional Administrator. When there is an approved State or Tribal program, "Director" normally means the State or Tribal director. In some circumstances, however, EPA retains the authority to take certain actions even when there is an approved State or Tribal program. In such cases, the term "Director" means the Regional Administrator and not the State or Tribal director.

Draft permit means a document prepared under § 124.6 indicating the Director's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a "permit." A notice of intent to terminate a permit, and a notice of intent to deny a permit, as discussed in § 124.5 are types of "draft permits." A denial of a request for modification, revocation and reissuance, or termination, as discussed in § 124.5 is not a "draft permit."

Drilling mud means a heavy suspension used in drilling an "injection well," introduced down the drill pipe and through the drill bit.

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.

Eligible Indian Tribe is a Tribe that meets the statutory requirements established at 42 U.S.C. 300j-11(b)(1).

Emergency permit means a UIC "permit" issued in accordance with § 144.34.

Environmental Protection Agency ("EPA") means the United States Environmental Protection Agency.

EPA means the United States "Environmental Protection Agency."

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 in § 144.7.

Existing injection well means an "injection well" other than a "new injection well."

Facility or activity means any UIC "injection well," or an other facility or activity that is subject to regulation under the UIC program.

Fluid means any material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state.

Formation means a body of consolidated or unconsolidated 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.

Formation fluid means "fluid" present in a "formation" under natural conditions as opposed to introduced fluids, such as "drilling mud."

Generator means any person, by site location, whose act or process produces hazardous waste identified or listed in 40 CFR part 261.

Geologic sequestration means the long-term containment of a gaseous, liquid, or supercritical carbon dioxide stream in subsurface geologic formations. This term does not apply to carbon dioxide capture or transport.

Ground water means water below the land surface in a zone of saturation.

Hazardous waste means a hazardous waste as defined in 40 CFR 261.3.

Hazardous waste management facility ("HWM facility") means all contiguous land, and structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (for example, one or more landfills, surface impoundments, or combination of them).

HWM facility means "Hazardous Waste Management facility"

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.

Indian lands means "Indian country" as defined in 18 U.S.C. 1151. That section defines Indian country as:

- (a) All land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
- (b) All dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State; and
- (c) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

Indian Tribe means any Indian Tribe having a Federally recognized governing body carrying out substantial governmental duties and powers over a defined area.

Injection well means a "well" into which "fluids" are being injected.

Injection zone means a geological "formation" group of formations, or part of a formation receiving fluids through a "well."

Interstate Agency means an agency of two or more States established by or under an agreement or compact approved by the Congress, or any other agency of two or more States or Indian Tribes having substantial powers or duties pertaining to the control of pollution as determined and approved by the Administrator under the "appropriate Act and regulations."

Major facility means any UIC "facility or activity" classified as such by the Regional Administrator, or, in the case of approved State programs, the Regional Administrator in conjunction with the State Director.

Manifest means the shipping document originated and signed by the "generator" which contains the information required by subpart B of 40 CFR part 262.

New injection wells means an "injection well" which began injection after a UIC program for the State applicable to the well is approved or prescribed.

Owner or operator means the owner or operator of any "facility or activity" subject to regulation under the UIC program.

Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of this part, parts 145, 146 and 124. "Permit" includes an area permit (§ 144.33) and an emergency permit (§ 144.34). Permit does not include UIC authorization by rule (§ 144.21), or any permit which has not yet been the subject of final agency action, such as a "draft permit."

Person means an individual, association, partnership, corporation, municipality, State, Federal, or Tribal agency, or an agency or employee thereof.

Plugging means the act or process of stopping the flow of water, oil or gas into or out of a formation through a borehole or well penetrating that formation.

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 dry well, it is likely to be the well bore itself.

Project means a group of wells in a single operation.

Radioactive Waste means any waste which contains radioactive material in concentrations which exceed those listed in 10 CFR part 20, appendix B, table II, column 2.

RCRA means the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 (Pub. L. 94-580, as amended by Pub. L. 95-609, Pub. L. 96-510, 42 U.S.C. 6901 *et seq.*).

Regional Administrator means the Regional Administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

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.

Schedule of compliance means a schedule of remedial measures included in a “permit,” including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the “appropriate Act and regulations.”

SDWA means the Safe Drinking Water Act (Pub. L. 93-523, as amended; 42 U.S.C. 300f *et seq.*).

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.

Site means the land or water area where any “facility or activity” is physically located or conducted, including adjacent land used in connection with the facility or activity.

State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, or an Indian Tribe treated as a State.

State Director means the chief administrative officer of any State, interstate, or Tribal agency operating an “approved program,” or the delegated representative of the State director. If the responsibility is divided among two or more States, interstate, or Tribal agencies, “State Director” means the chief administrative officer of the State, interstate, or Tribal agency authorized to perform the particular procedure or function to which reference is made.

State/EPA agreement means an agreement between the Regional Administrator and the State which coordinates EPA and State activities, responsibilities and programs.

Stratum (plural strata) means a single sedimentary bed or layer, regardless of thickness, that consists of generally the same kind of rock material.

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.

Total dissolved solids means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR part 136.

Transferee means the owner or operator receiving ownership and/or operational control of the well.

Transferor means the owner or operator transferring ownership and/or operational control of the well.

UIC means the Underground Injection Control program under Part C of the Safe Drinking Water Act, including an “approved State program.”

Underground injection means a “well injection.”

Underground source of drinking water (USDW) means an aquifer or its portion:

(a)

(1) Which supplies any public water system; or

(2) Which contains a sufficient quantity of ground water to supply a public water system; and

(i) Currently supplies drinking water for human consumption; or

(ii) Contains fewer than 10,000 mg/l total dissolved solids; and

(b) Which is not an exempted aquifer.

USDW means "underground source of drinking water."

Well means: A bored, drilled, or driven shaft whose depth is greater than the largest surface dimension; or, a dug hole whose depth is greater than the largest surface dimension; or, an improved sinkhole; or, a subsurface fluid distribution system.

Well injection means the subsurface emplacement of fluids through a well.

[48 FR 14189, Apr. 1, 1983, as amended at 49 FR 45305, Nov. 15, 1984; 52 FR 20676, June 2, 1987; 53 FR 37412, Sept. 26, 1988; 58 FR 63895, Dec. 3, 1993; 59 FR 64345, Dec. 14, 1994; 64 FR 68565, Dec. 7, 1999; 75 FR 77287, Dec. 10, 2010]

§ 144.4 Considerations under Federal law.

The following is a list of Federal laws that may apply to the issuance of permits under these rules. When any of these laws is applicable, its procedures must be followed. When the applicable law requires consideration or adoption of particular permit conditions or requires the denial of a permit, those requirements also must be followed.

- (a) The *Wild and Scenic Rivers Act*, 16 U.S.C. 1273 *et seq.* Section 7 of the Act prohibits the Regional Administrator from assisting by license or otherwise the construction of any water resources project that would have a direct, adverse effect on the values for which a national wild and scenic river was established.
- (b) *The National Historic Preservation Act of 1966*, 16 U.S.C. 470 *et seq.* Section 106 of the Act and implementing regulations (36 CFR part 800) require the Regional Administrator, before issuing a license, to adopt measures when feasible to mitigate potential adverse effects of the licensed activity and properties listed or eligible for listing in the National Register of Historic Places. The Act's requirements are to be implemented in cooperation with State Historic Preservation Officers and upon notice to, and when appropriate, in consultation with the Advisory Council on Historic Preservation.
- (c) The *Endangered Species Act*, 16 U.S.C. 1531 *et seq.* Section 7 of the Act and implementing regulations (50 CFR part 402) require the Regional Administrator to ensure, in consultation with the Secretary of the Interior or Commerce, that any action authorized by EPA is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.
- (d) *The Coastal Zone Management Act*, 16 U.S.C. 1451 *et seq.* Section 307(c) of the Act and implementing regulations (15 CFR part 930) prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management program, and the State or its designated agency concurs with the certification (or the Secretary of Commerce overrides the States nonconcurrence).
- (e) The *Fish and Wildlife Coordination Act*, 16 U.S.C. 661 *et seq.*, requires the Regional Administrator, before issuing a permit proposing or authorizing the impoundment (with certain exemptions), diversion, or other control or modification of any body of water, consult with the appropriate State agency exercising jurisdiction over wildlife resources to conserve these resources.
- (f) *Executive orders.* [Reserved]

(Clean Water Act (33 U.S.C. 1251 et seq.), Safe Drinking Water Act (42 U.S.C. 300f et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.))

[48 FR 14189, Apr. 1, 1983, as amended at 48 FR 39621, Sept. 1, 1983]

§ 144.5 Confidentiality of information.

- (a) In accordance with 40 CFR part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR part 2 (Public Information).
- (b) Claims of confidentiality for the following information will be denied:
 - (1) The name and address of any permit applicant or permittee;
 - (2) Information which deals with the existence, absence, or level of contaminants in drinking water.

§ 144.6 Classification of wells.

Injection wells are classified as follows:

- (a) **Class I.**
 - (1) Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to inject hazardous waste beneath the lowermost formation containing, within one-quarter mile of the well bore, an underground source of drinking water.
 - (2) Other industrial and municipal disposal wells which inject fluids beneath the lowermost formation containing, within one quarter mile of the well bore, an underground source of drinking water.
 - (3) Radioactive waste disposal wells which inject fluids below the lowermost formation containing an underground source of drinking water within one quarter mile of the well bore.
- (b) **Class II.** Wells which inject fluids:
 - (1) 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 waste waters from gas plants which are an intergral part of production operations, unless those waters are classified as a hazardous waste at the time of injection.
 - (2) For enhanced recovery of oil or natural gas; and
 - (3) For storage of hydrocarbons which are liquid at standard temperature and pressure.
- (c) **Class III.** Wells which inject for extraction of minerals including:
 - (1) Mining of sulfur by the Frasch process;
 - (2) In situ production of uranium or other metals; this category includes only in-situ production from ore bodies which have not been conventionally mined. Solution mining of conventional mines such as stopes leaching is included in Class V.

(3) Solution mining of salts or potash.

(d) **Class IV.**

(1) Wells used by generators of hazardous waste or of radioactive waste, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste into a formation which within one-quarter ($\frac{1}{4}$) mile of the well contains an underground source of drinking water.

(2) Wells used by generators of hazardous waste or of radioactive waste, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste above a formation which within one-quarter ($\frac{1}{4}$) mile of the well contains an underground source of drinking water.

(3) Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to dispose of hazardous waste, which cannot be classified under paragraph (a)(1) or (d) (1) and (2) of this section (e.g., wells used to dispose of hazardous waste into or above a formation which contains an aquifer which has been exempted pursuant to § 146.04).

(e) **Class V.** Injection wells not included in Class I, II, III, IV, or VI. Specific types of Class V injection wells are described in § 144.81.

(f) **Class VI.** Wells that are not experimental in nature that are used for geologic sequestration of carbon dioxide beneath the lowermost formation containing a USDW; or, wells used for geologic sequestration of carbon dioxide that have been granted a waiver of the injection depth requirements pursuant to requirements at § 146.95 of this chapter; 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 exemption pursuant to §§ 146.4 of this chapter and 144.7(d).

[48 FR 14189, Apr. 1, 1983, as amended at 52 FR 20676, June 2, 1987; 64 FR 68565, Dec. 7, 1999; 75 FR 77287, Dec. 10, 2010]

§ 144.7 Identification of underground sources of drinking water and exempted aquifers.

(a) The Director may identify (by narrative description, illustrations, maps, or other means) and shall protect as underground sources of drinking water, all aquifers and parts of aquifers which meet the definition of "underground source of drinking water" in § 144.3, except to the extent there is an applicable aquifer exemption under paragraph (b) of this section or an expansion to the areal extent of an existing Class II enhanced oil recovery or enhanced gas recovery aquifer exemption for the exclusive purpose of Class VI injection for geologic sequestration under paragraph (d) of this section. Other than EPA approved aquifer exemption expansions that meet the criteria set forth in § 146.4(d) of this chapter, new aquifer exemptions shall not be issued for Class VI injection wells. Even if an aquifer has not been specifically identified by the Director, it is an underground source of drinking water if it meets the definition in § 144.3.

(b)

(1) The Director may identify (by narrative description, illustrations, maps, or other means) and describe in geographic and/or geometric terms (such as vertical and lateral limits and gradient) which are clear and definite, all aquifers or parts thereof which the Director proposes to designate as exempted aquifers using the criteria in § 146.4 of this chapter.

- (2) No designation of an exempted aquifer submitted as part of a UIC program shall be final until approved by the Administrator as part of a UIC program. No designation of an expansion to the areal extent of a Class II enhanced oil recovery or enhanced gas recovery aquifer exemption for the exclusive purpose of Class VI injection for geologic sequestration shall be final until approved by the Administrator as a revision to the applicable Federal UIC program under part 147 or as a substantial revision of an approved State UIC program in accordance with § 145.32 of this chapter.
- (3) Subsequent to program approval or promulgation, the Director may, after notice and opportunity for a public hearing, identify additional exempted aquifers. For approved State programs exemption of aquifers identified
 - (i) under § 146.04(b) shall be treated as a program revision under § 145.32;
 - (ii) under § 146.04(c) shall become final if the State Director submits the exemption in writing to the Administrator and the Administrator has not disapproved the designation within 45 days. Any disapproval by the Administrator shall state the reasons and shall constitute final Agency action for purposes of judicial review.

(c)

- (1) For Class III wells, the Director shall require an applicant for a permit which necessitates an aquifer exemption under § 146.04(b)(1) to 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 time-table of planned development of the mining zone shall be considered by the Director in addition to the information required by § 144.31(g).
- (2) For Class II wells, a demonstration of commercial producibility shall be made as follows:
 - (i) For a Class II well to be used for enhanced oil recovery processes in a field or project containing aquifers from which hydrocarbons were previously produced, commercial producibility shall be presumed by the Director upon a demonstration by the applicant of historical production having occurred in the project area or field.
 - (ii) For Class II wells not located in a field or project containing aquifers from which hydrocarbons were previously produced, information such as logs, core data, formation description, formation depth, formation thickness and formation parameters such as permeability and porosity shall be considered by the Director, to the extent such information is available.

(d) **Expansion to the areal extent of existing Class II aquifer exemptions for Class VI wells.** Owners or operators of Class II enhanced oil recovery or enhanced gas recovery wells may request that the Director 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. Such requests must be treated as a revision to the applicable Federal UIC program under part 147 or as a substantial program revision to an approved State UIC program under § 145.32 of this chapter and will not be final until approved by EPA.

- (1) The owner or operator of a Class II enhanced oil recovery or enhanced gas recovery well that requests 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 and/or geometric terms (such as vertical and lateral limits and gradient) that are clear and definite, all aquifers or parts thereof that are requested to be designated as exempted using the criteria in § 146.4 of this chapter.

- (2) In evaluating a request 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 Director must determine that the request meets the criteria for exemptions in § 146.4. In making the determination, the Director shall consider:
 - (i) Current and potential future use of the USDWs to be exempted as drinking water resources;
 - (ii) 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 GS project, as informed by computational modeling performed pursuant to § 146.84(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;
 - (iii) 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 § 146.84(e); and
 - (iv) Any information submitted to support a waiver request made by the owner or operator under § 146.95, if appropriate.

[48 FR 14189, Apr. 1, 1983, as amended at 75 FR 77287, Dec. 10, 2010]

§ 144.8 Noncompliance and program reporting by the Director.

The Director shall prepare quarterly and annual reports as detailed below. When the State is the permit-issuing authority, the State Director shall submit any reports required under this section to the Regional Administrator. When EPA is the permit-issuing authority, the Regional Administrator shall submit any report required under this section to EPA Headquarters.

(a) **Quarterly reports.** The Director shall submit quarterly narrative reports for major facilities as follows:

(1) **Format.** The report shall use the following format:

- (i) Provide an alphabetized list of permittees. When two or more permittees have the same name, the lowest permit number shall be entered first.
- (ii) For each entry on the list, include the following information in the following order:
 - (A) Name, location, and permit number of the noncomplying permittees.
 - (B) A brief description and date of each instance of noncompliance for that permittee. Instances of noncompliance may include one or more the kinds set forth in paragraph (a)(2) of this section. When a permittee has noncompliance of more than one kind, combine the information into a single entry for each such permittee.
 - (C) The date(s) and a brief description of the action(s) taken by the Director to ensure compliance.
 - (D) Status of the instance(s) of noncompliance with the date of the review of the status or the date of resolution.

(E) Any details which tend to explain or mitigate the instance(s) of noncompliance.

(2) **Instances of noncompliance to be reported.** Any instances of noncompliance within the following categories shall be reported in successive reports until the noncompliance is reported as resolved. Once noncompliance is reported as resolved it need not appear in subsequent reports.

(i) **Failure to complete construction elements.** When the permittee has failed to complete, by the date specified in the permit, an element of a compliance schedule involving either planning for construction or a construction step (for example, begin construction, attain operation level); and the permittee has not returned to compliance by accomplishing the required elements of the schedule within 30 days from the date a compliance schedule report is due under the permit.

(ii) **Modifications to schedules of compliance.** When a schedule of compliance in the permit has been modified under §§ 144.39 or 144.41 because of the permittee's noncompliance.

(iii) **Failure to complete or provide compliance schedule or monitoring reports.** When the permittee has failed to complete or provide a report required in a permit compliance schedule (for example, progress report or notice of noncompliance or compliance) or a monitoring report; and the permittee has not submitted the complete report within 30 days from the date it is due under the permit for compliance schedules, or from the date specified in the permit for monitoring reports.

(iv) **Deficient reports.** When the required reports provided by the permittee are so deficient as to cause misunderstanding by the Director and thus impede the review of the status of compliance.

(v) **Noncompliance with other permit requirements.** Noncompliance shall be reported in the following circumstances:

(A) Whenever the permittee has violated a permit requirement (other than reported under paragraph (a)(2) (i) or (ii) of this section), and has not returned to compliance within 45 days from the date reporting of noncompliance was due under the permit; or

(B) When the Director determines that a pattern of noncompliance exists for a major facility permittee over the most recent four consecutive reporting periods. This pattern includes any violation of the same requirement in two consecutive reporting periods, and any violation of one or more requirements in each of four consecutive reporting periods; or

(C) When the Director determines significant permit noncompliance or other significant event has occurred, such as a migration of fluids into a USDW.

(vi) **All other.** Statistical information shall be reported quarterly on all other instances of noncompliance by major facilities with permit requirements not otherwise reported under paragraph (a) of this section.

(b) **Annual reports –**

(1) **Annual noncompliance report.** Statistical reports shall be submitted by the Director on nonmajor UIC permittees indicating the total number reviewed, the number of noncomplying nonmajor permittees, the number of enforcement actions, and number of permit modifications extending compliance deadlines. The statistical information shall be organized to follow the types of noncompliance listed in paragraph (a) of this section.

- (2) **For State-administered UIC Programs only.** In addition to the annual noncompliance report, the State Director shall:
- (i) Submit each year a program report to the Administrator (in a manner and form prescribed by the Administrator) consisting of:
 - (A) A detailed description of the State's implementation of its program;
 - (B) Suggested changes, if any to the program description (see § 145.23(f)) which are necessary to reflect more accurately the State's progress in issuing permits;
 - (C) An updated inventory of active underground injection operations in the State.
 - (ii) In addition to complying with the requirements of paragraph (b)(2)(i) of this section, the Director shall provide the Administrator, on February 28th and August 31st of each of the first two years of program operation, the information required in 40 CFR 146.15, 146.25, and 146.35.
 - (iii) All Class VI program reports shall be consistent with reporting requirements set forth in § 146.91 of this chapter.

(c) **Schedule.**

- (1) For all quarterly reports. On the last working day of May, August, November, and February, the State Director shall submit to the Regional Administrator information concerning noncompliance with permit requirements by major facilities in the State in accordance with the following schedule. The Regional Administrator shall prepare and submit information for EPA-issued permits to EPA Headquarters in accordance with the same schedule.

Quarters Covered by Reports on Noncompliance by Major Facilities

[Date for completion of reports]

January, February, and March	¹ May 31
April, May, and June	¹ Aug. 31
July, August, and September	¹ Nov. 30
October, November, and December	¹ Feb. 28

¹ Reports must be made available to the public for inspection and copying on this date.

- (2) **For all annual reports.** The period for annual reports shall be for the calendar year ending December 31, with reports completed and available to the public no more than 60 days later.

[48 FR 14189, Apr. 1, 1983, as amended at 75 FR 77287, Dec. 10, 2010]

Subpart B—General Program Requirements

§ 144.11 Prohibition of unauthorized injection.

Any underground injection, except into a well authorized by rule or except as authorized by permit issued under the UIC program, is prohibited. The construction of any well required to have a permit is prohibited until the permit has been issued.

[48 FR 14189, Apr. 1, 1983, as amended at 58 FR 63895, Dec. 3, 1993]

§ 144.12 Prohibition of movement of fluid into underground sources of drinking water.

- (a) No owner or operator shall construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 142 or may otherwise adversely affect the health of persons. The applicant for a permit shall have the burden of showing that the requirements of this paragraph are met.
- (b) For Class I, II, III, and VI wells, if any water quality monitoring of an underground source of drinking water indicates the movement of any contaminant into the underground source of drinking water, except as authorized under part 146, the Director shall prescribe such additional requirements for construction, corrective action, operation, monitoring, or reporting (including closure of the injection well) as are necessary to prevent such movement. In the case of wells authorized by permit, these additional requirements shall be imposed by modifying the permit in accordance with § 144.39, or the permit may be terminated under § 144.40 if cause exists, or appropriate enforcement action may be taken if the permit has been violated. In the case of wells authorized by rule, see §§ 144.21 through 144.24. For EPA administered programs, such enforcement action shall be taken in accordance with appropriate sections of the SDWA.
- (c) For Class V wells, if at any time the Director learns that a Class V well may cause a violation of primary drinking water regulations under 40 CFR part 142, he or she shall:
 - (1) Require the injector to obtain an individual permit;
 - (2) Order the injector to take such actions (including, where required, closure of the injection well) as may be necessary to prevent the violation. For EPA administered programs, such orders shall be issued in accordance with the appropriate provisions of the SDWA; or
 - (3) Take enforcement action.
- (d) Whenever the Director learns that a Class V well may be otherwise adversely affecting the health of persons, he or she may prescribe such actions as may be necessary to prevent the adverse effect, including any action authorized under paragraph (c) of this section.
- (e) Notwithstanding any other provision of this section, the Director may take emergency action upon receipt of information that a contaminant which is present in or likely to enter a public water system or underground source of drinking water may present an imminent and substantial endangerment to the health of persons. If the Director is an EPA official, he must first determine that the appropriate State and local authorities have not taken appropriate action to protect the health of such persons, before taking emergency action.

[48 FR 14189, Apr. 1, 1983, as amended at 52 FR 20676, June 2, 1987; 75 FR 77288, Dec. 10, 2010]

§ 144.13 Prohibition of Class IV wells.

- (a) The following are prohibited, except as provided in paragraph (c) of this section:
 - (1) The construction of any Class IV well.
 - (2) The operation or maintenance of any Class IV well not in operation prior to July 18, 1980.

- (3) The operation or maintenance of any Class IV well that was in operation prior to July 18, 1980, after six months following the effective date of a UIC program approved or promulgated for the state.
- (4) Any increase in the amount of hazardous waste or change in the type of hazardous waste injected into a Class IV well.
- (b) The owner or operator of a Class IV well shall comply with the requirements of § 144.14, and with the requirements of § 144.23 regarding closure of Class IV wells.
- (c) Wells used to inject contaminated ground water that has been treated and is being reinjected into the same formation from which it was drawn are not prohibited by this section if such injection is approved by EPA, or a State, pursuant to provisions for cleanup of releases under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601-9657, or pursuant to requirements and provisions under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901 through 6987.
- (d) **Clarification.** The following wells are not prohibited by this action:
 - (1) Wells used to inject hazardous waste into aquifers or portions thereof that have been exempted pursuant to § 146.4, if the exempted aquifer into which waste is injected underlies the lowermost formation containing a USDW. Such wells are Class I wells as specified in § 144.6(a)(1), and the owner or operator must comply with the requirements applicable to Class I wells.
 - (2) Wells used to inject hazardous waste where no USDW exists within one quarter mile of the well bore in any underground formation, provided that the Director determines that such injection is into a formation sufficiently isolated to ensure that injected fluids do not migrate from the injection zone. Such wells are Class I wells as specified in § 144.6(a)(1), and the owner or operator must comply with the requirements applicable to Class I wells.

[49 FR 20181, May 11, 1984, as amended at 67 FR 39593, June 7, 2002]

§ 144.14 Requirements for wells injecting hazardous waste.

- (a) **Applicability.** The regulations in this section apply to all generators of hazardous waste, and to the owners or operators of all hazardous waste management facilities, using any class of well to inject hazardous wastes accompanied by a manifest. (See also § 144.13.)
- (b) **Authorization.** The owner or operator of any well that is used to inject hazardous waste required to be accompanied by a manifest or delivery document shall apply for authorization to inject as specified in § 144.31 within 6 months after the approval or promulgation of the State UIC program.
- (c) **Requirements.** In addition to complying with the applicable requirements of this part and 40 CFR part 146, the owner or operator of each facility meeting the requirements of paragraph (b) of this section, shall comply with the following:
 - (1) **Notification.** The owner or operator shall comply with the notification requirements of section 3010 of Public Law 94-580.
 - (2) **Identification number.** The owner or operator shall comply with the requirements of 40 CFR 264.11.
 - (3) **Manifest system.** The owner or operator shall comply with the applicable recordkeeping and reporting requirements for manifested wastes in 40 CFR 264.71.
 - (4) **Manifest discrepancies.** The owner or operator shall comply with 40 CFR 264.72.

- (5) **Operating record.** The owner or operator shall comply with 40 CFR 264.73(a), (b)(1), and (b)(2).
 - (6) **Annual report.** The owner or operator shall comply with 40 CFR 264.75.
 - (7) **Unmanifested waste report.** The owner or operator shall comply with 40 CFR 264.75.
 - (8) **Personnel training.** The owner or operator shall comply with the applicable personnel training requirements of 40 CFR 264.16.
 - (9) **Certification of closure.** When abandonment is completed, the owner or operator must submit to the Director certification by the owner or operator and certification by an independent registered professional engineer that the facility has been closed in accordance with the specifications in § 144.52(a)(6).
- (d) **Additional requirements for Class IV wells.** [Reserved]

§ 144.15 Prohibition of non-experimental Class V wells for geologic sequestration.

The construction, operation or maintenance of any non-experimental Class V geologic sequestration well is prohibited.

[75 FR 77288, Dec. 10, 2010]

§ 144.16 Waiver of requirement by Director.

- (a) **When injection does not occur into, through or above an underground source of drinking water,** the Director may authorize a well or project with less stringent requirements for area of review, construction, mechanical integrity, operation, monitoring, and reporting than required in 40 CFR part 146 or § 144.52 to the extent that the reduction in requirements will not result in an increased risk of movement of fluids into an underground source of drinking water.
- (b) When injection occurs through or above an underground source of drinking water, but the radius of endangering influence when computed under § 146.06(a) is smaller or equal to the radius of the well, the Director may authorize a well or project with less stringent requirements for operation, monitoring, and reporting than required in 40 CFR part 146 or § 144.52 to the extent that the reduction in requirements will not result in an increased risk of movement of fluids into an underground source of drinking water.
- (c) When reducing requirements under paragraph (a) or (b) of this section, the Director shall prepare a fact sheet under § 124.8 explaining the reasons for the action.

§ 144.17 Records.

The Director or the Administrator may require, by written notice on a selective well-by-well basis, an owner or operator of an injection well to establish and maintain records, make reports, conduct monitoring, and provide other information as is deemed necessary to determine whether the owner or operator has acted or is acting in compliance with Part C of the SDWA or its implementing regulations.

[58 FR 63895, Dec. 3, 1993]

§ 144.18 Requirements for Class VI wells.

Owners or operators of Class VI wells must obtain a permit. Class VI wells cannot be authorized by rule to inject carbon dioxide.

[75 FR 77288, Dec. 10, 2010]

§ 144.19 Transitioning from Class II to Class VI.

- (a) Owners or operators that are injecting carbon dioxide for the primary purpose of long-term storage into an oil and gas reservoir must apply for and obtain a Class VI geologic sequestration permit when there is an increased risk to USDWs compared to Class II operations. In determining if there is an increased risk to USDWs, the owner or operator must consider the factors specified in § 144.19(b).
- (b) The Director shall determine when there is an increased risk to USDWs compared to Class II operations and a Class VI permit is required. In order to make this determination the Director must consider the following:
 - (1) Increase in reservoir pressure within the injection zone(s);
 - (2) Increase in carbon dioxide injection rates;
 - (3) Decrease in reservoir production rates;
 - (4) Distance between the injection zone(s) and USDWs;
 - (5) Suitability of the Class II area of review delineation;
 - (6) Quality of abandoned well plugs within the area of review;
 - (7) The owner's or operator's plan for recovery of carbon dioxide at the cessation of injection;
 - (8) The source and properties of injected carbon dioxide; and
 - (9) Any additional site-specific factors as determined by the Director.

[75 FR 77288, Dec. 10, 2010]

Subpart C—Authorization of Underground Injection by Rule

§ 144.21 Existing Class I, II (except enhanced recovery and hydrocarbon storage) and III wells.

- (a) An existing Class I, II (except enhanced recovery and hydrocarbon storage) and III injection well is authorized by rule if the owner or operator injects into the existing well within one year after the date at which a UIC program authorized under the SDWA becomes effective for the first time or inventories the well pursuant to the requirements of § 144.26. An owner or operator of a well which is authorized by rule pursuant to this section shall rework, operate, maintain, convert, plug, abandon or inject into the well in compliance with applicable regulations.
- (b) **Duration of well authorization by rule.** Well authorization under this section expires upon the effective date of a permit issued pursuant to §§ 144.25, 144.31, 144.33 or 144.34; after plugging and abandonment in accordance with an approved plugging and abandonment plan pursuant to §§ 144.28(c) and 146.10, and upon submission of a plugging and abandonment report pursuant to § 144.28(k); or upon conversion in compliance with § 144.28(j).
- (c) **Prohibitions on injection.** An owner or operator of a well authorized by rule pursuant to this section is prohibited from injecting into the well:
 - (1) Upon the effective date of an applicable permit denial;

- (2) Upon failure to submit a permit application in a timely manner pursuant to §§ 144.25 or 144.31;
 - (3) Upon failure to submit inventory information in a timely manner pursuant to § 144.26;
 - (4) Upon failure to comply with a request for information in a timely manner pursuant to § 144.27;
 - (5) Upon failure to provide alternative financial assurance pursuant to § 144.28(d)(7);
 - (6) Forty-eight hours after receipt of a determination by the Director pursuant to § 144.28(f)(3) that the well lacks mechanical integrity, unless the Director requires immediate cessation;
 - (7) Upon receipt of notification from the Director pursuant to § 144.28(l) that the transferee has not demonstrated financial responsibility pursuant to § 144.28(d);
 - (8) For Class I and III wells:
 - (i) In States with approved programs, five years after the effective date of the UIC program unless a timely and complete permit application is pending the Director's decision; or
 - (ii) In States with programs administered by EPA, one year after the effective date of the UIC program unless a timely and complete permit application is pending the Director's decision; or
 - (9) For Class II wells (except enhanced recovery and hydrocarbon storage), five years after the effective date of the UIC program unless a timely and complete permit application is pending the Director's decision.
- (d) **Class II and III wells in existing fields or projects.** Notwithstanding the prohibition in § 144.11, this section authorizes Class II and Class III wells or projects in existing fields or projects to continue normal operations until permitted, including construction, operation, and plugging and abandonment of wells as part of the operation, provided the owner or operator maintains compliance with all applicable requirements.
- (e) **Requirements.** The owner or operator of a well authorized under this section shall comply with the applicable requirements of § 144.28 and part 147 of this chapter no later than one year after authorization.

[48 FR 14189, Apr. 1, 1983, as amended at 49 FR 20181, May 11, 1984; 58 FR 63895, Dec. 3, 1993]

§ 144.22 Existing Class II enhanced recovery and hydrocarbon storage wells.

- (a) An existing Class II enhanced recovery or hydrocarbon storage injection well is authorized by rule for the life of the well or project, if the owner or operator injects into the existing well within one year after the date which a UIC program authorized under the SDWA becomes effective for the first time or inventories the well pursuant to the requirements of § 144.26. An owner or operator of a well which is authorized by rule pursuant to this section shall rework, operate, maintain, convert, plug, abandon or inject into the well in compliance with applicable regulations.
- (b) **Duration of well authorization by rule.** Well authorization under this section expires upon the effective date of a permit issued pursuant to § 144.19, § 144.25, § 144.31, § 144.33 or § 144.34; after plugging and abandonment in accordance with an approved plugging and abandonment plan pursuant to §§ 144.28(c) and 146.10 of this chapter; and upon submission of a plugging and abandonment report pursuant to § 144.28(k); or upon conversion in compliance with § 144.28(j).

- (c) **Prohibitions on injection.** An owner or operator of a well authorized by rule pursuant to this section is prohibited from injecting into the well:
- (1) Upon the effective date of an applicable permit denial;
 - (2) Upon failure to submit a permit application in a timely manner pursuant to § 144.25 or § 144.31;
 - (3) Upon failure to submit inventory information in a timely manner pursuant to § 144.26;
 - (4) Upon failure to comply with a request for information in a timely manner pursuant to § 144.27;
 - (5) Upon failure to provide alternative financial assurance pursuant to § 144.28(d)(7);
 - (6) Forty-eight hours after receipt of a determination by the Director pursuant to § 144.28(f)(3) that the well lacks mechanical integrity, unless the Director requires immediate cessation; or
 - (7) Upon receipt of notification from the Director pursuant to § 144.28(l) that the transferee has not demonstrated financial responsibility pursuant to § 144.28(d).
- (d) **Requirements.** The owner or operator of a well authorized under this section shall comply with the applicable requirements of § 144.28 and part 147 of this chapter. Such owner or operator shall comply with the casing and cementing requirements no later than 3 years and other requirements no later than 1 year after authorization.

[49 FR 20181, May 11, 1984, as amended at 58 FR 63896, Dec. 3, 1993; 75 FR 77288, Dec. 10, 2010]

§ 144.23 Class IV wells.

- (a) Injection into existing Class IV wells is authorized for up to six months after approval or promulgation of the UIC Program. Such wells are subject to the requirements of §§ 144.13 and 144.14(c).
- (b) **Closure.** For EPA administered programs only,
- (1) Prior to abandoning any Class IV well, the owner or operator shall plug or otherwise close the well in a manner acceptable to the Regional Administrator.
 - (2) [Reserved]
 - (3) The owner or operator of a Class IV well must notify the Regional Administrator of intent to abandon the well at least thirty days prior to abandonment.
- (c) Notwithstanding the requirements of paragraphs (a) and (b) of this section, injection wells used to inject contaminated ground water that has been treated and is being injected into the same formation from which it was drawn are authorized by rule for the life of the well if such subsurface emplacement of fluids is approved by EPA, or a State, pursuant to provisions for cleanup of releases under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601-9675, or pursuant to requirements and provisions under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901-6992k.

[49 FR 20181, May 11, 1984, as amended at 60 FR 33932, June 29, 1995; 64 FR 68566, Dec. 7, 1999]

§ 144.24 Class V wells.

- (a) A Class V injection well is authorized by rule, subject to the conditions in § 144.84

- (b) **Duration of well authorization by rule.** Well authorization under this section expires upon the effective date of a permit issued pursuant to §§ 144.25, 144.31, 144.33 or 144.34, or upon proper closure of the well.
- (c) **Prohibition of injection.** An owner or operator of a well which is authorized by rule pursuant to this section is prohibited from injecting into the well:
 - (1) Upon the effective date of an applicable permit denial;
 - (2) Upon failure to submit a permit application in a timely manner pursuant to §§ 144.25 or 144.31;
 - (3) Upon failure to submit inventory information in a timely manner pursuant to § 144.26; or
 - (4) Upon failure to comply with a request for information in a timely manner pursuant to § 144.27.

[58 FR 63896, Dec. 3, 1993, as amended at 64 FR 68566, Dec. 7, 1999]

§ 144.25 Requiring a permit.

- (a) The Director may require the owner or operator of any Class I, II, III or V injection well which is authorized by rule under this subpart to apply for and obtain an individual or area UIC permit. Cases where individual or area UIC permits may be required include:
 - (1) The injection well is not in compliance with any requirement of the rule;

Note: Any underground injection which violates any authorization by rule is subject to appropriate enforcement action.
 - (2) The injection well is not or no longer is within the category of wells and types of well operations authorized in the rule;
 - (3) The protection of USDWs requires that the injection operation be regulated by requirements, such as for corrective action, monitoring and reporting, or operation, which are not contained in the rule.
 - (4) When the injection well is a Class I, II (except existing enhanced recovery and hydrocarbon storage) or III well, in accordance with a schedule established by the Director pursuant to § 144.31(c).
- (b) For EPA-administered programs, the Regional Administrator may require an owner or operator of any well which is authorized by rule under this subpart to apply for an individual or area UIC permit under this paragraph only if the owner or operator has been notified in writing that a permit application is required. The owner or operator of a well which is authorized by rule under this subpart is prohibited from injecting into the well upon the effective date of permit denial, or upon failure by the owner or operator to submit an application in a timely manner as specified in the notice. The notice shall include: a brief statement of the reasons for requiring a permit; an application form; a statement setting a time for the owner or operator to file the application; and a statement of the consequences of denial or issuance of the permit, or failure to submit an application, as described in this paragraph.
- (c) An owner or operator of a well authorized by rule may request to be excluded from the coverage of this subpart by applying for an individual or area UIC permit. The owner or operator shall submit an application under § 144.31 with reasons supporting the request, to the Director. The Director may grant any such requests.

[48 FR 14189, Apr. 1, 1983, as amended at 49 FR 20182, May 11, 1984; 58 FR 63896, Dec. 3, 1993]

§ 144.26 Inventory requirements.

The owner or operator of an injection well which is authorized by rule under this subpart shall submit inventory information to the Director. Such an owner or operator is prohibited from injecting into the well upon failure to submit inventory information for the well within the time frame specified in paragraph (d) of this section.

(a) **Contents.** As part of the inventory, the Director shall require and the owner/operator shall provide at least the following information:

- (1) Facility name and location;
- (2) Name and address of legal contact;
- (3) Ownership of facility;
- (4) Nature and type of injection wells; and
- (5) Operating status of injection wells.

Note: This information is requested on national form "Inventory of Injection Wells," OMB No. 158-R0170.

(b) **Additional contents.** For EPA administered programs only, the owner or operator of a well listed in paragraph (b)(1) of this section shall provide the information listed in paragraph (b)(2) of this section.

(1) This section applies to the following wells:

- (i) Class II enhanced recovery wells;
- (ii) Class IV wells;
- (iii) The following Class V wells:

- (A) Sand or other backfill wells [§ 146.5(e)(8)];
- (B) Radioactive waste disposal wells that are not Class I wells (40 CFR 146.5 (e)(11));
- (C) Geothermal energy recovery wells [§ 146.5(e)(12)];
- (D) Brine return flow wells [§ 146.5(e)(14)];
- (E) Wells used in experimental technologies [§ 146.5(e)(15)];
- (F) Municipal and industrial disposal wells other than Class I; and
- (G) Any other Class V wells at the discretion of the Regional Administrator.

(2) The owner or operator of a well listed in paragraph (b)(1) shall provide a listing of all wells owned or operated setting forth the following information for each well. (A single description of wells at a single facility with substantially the same characteristics is acceptable).

- (i) For Class II only, the field name(s);
- (ii) Location of each well or project given by Township, Range, Section, and Quarter-Section, or by latitude and longitude to the nearest second, according to the conventional practice in the State;

- (iii) Date of completion of each well;
 - (iv) Identification and depth of the formation(s) into which each well is injecting;
 - (v) Total depth of each well;
 - (vi) Casing and cementing record, tubing size, and depth of packer;
 - (vii) Nature of the injected fluids;
 - (viii) Average and maximum injection pressure at the wellhead;
 - (ix) Average and maximum injection rate; and
 - (x) Date of the last mechanical integrity test, if any.
- (c) **Notice.** Upon approval of the UIC Program in a State, the Director shall notify owners or operators of injection wells of their duty to submit inventory information. The method of notification selected by the Director must assure that the owners or operators will be made aware of the inventory requirement.
- (d) **Deadlines.**
- (1) The owner or operator of an injection well shall submit inventory information no later than one year after the date of approval or effective date of the UIC program for the State. The Director need not require inventory information from any facility with interim status under RCRA.
 - (2) For EPA administered programs the information need not be submitted if a complete permit application is submitted within one year of the effective data of the UIC program. The owner or operator of Class IV well shall submit inventory information no later than 60 days after the effective date of the program.

[48 FR 14189, Apr. 1, 1983, as amended at 49 FR 20182, May 11, 1984; 58 FR 63896, Dec. 3, 1993; 64 FR 68566, Dec. 7, 1999; 67 FR 39593, June 7, 2002]

§ 144.27 Requiring other information.

- (a) For EPA administered programs only, in addition to the inventory requirements of § 144.26, the Regional Administrator may require the owner or operator of any well authorized by rule under this subpart to submit information as deemed necessary by the Regional Administrator to determine whether a well may be endangering an underground source of drinking water in violation of § 144.12 of this part.
- (b) Such information requirements may include, but are not limited to:
 - (1) Performance of ground-water monitoring and the periodic submission of reports of such monitoring;
 - (2) An analysis of injected fluids, including periodic submission of such analyses; and
 - (3) A description of the geologic strata through and into which injection is taking place.
- (c) Any request for information under this section shall be made in writing, and include a brief statement of the reasons for requiring the information. An owner or operator shall submit the information within the time period(s) provided in the notice.

- (d) An owner or operator of an injection well authorized by rule under this subpart is prohibited from injecting into the well upon failure of the owner or operator to comply with a request for information within the time period(s) specified by the Director pursuant to paragraph (c) of this section. An owner or operator of a well prohibited from injection under this section shall not resume injection except under a permit issued pursuant to §§ 144.25, 144.31, 144.33 or 144.34.

[49 FR 20182, May 11, 1984, as amended at 58 FR 63896, Dec. 3, 1993]

§ 144.28 Requirements for Class I, II, and III wells authorized by rule.

The following requirements apply to the owner or operator of a Class I, II or III well authorized by rule under this subpart, as provided by §§ 144.21(e) and 144.22(d).

- (a) The owner or operator shall comply with all applicable requirements of this subpart and subpart B of this part. Any noncompliance with these requirements constitutes a violation of the Safe Drinking Water Act and is grounds for enforcement action, except that the owner or operator need not comply with these requirements to the extent and for the duration such noncompliance is authorized by an emergency permit under § 144.34.
- (b) **Twenty-four hour reporting.** The owner or operator shall report any noncompliance which may endanger health or the environment, including:
 - (1) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW; or
 - (2) Any noncompliance or malfunction of the injection system which may cause fluid migration into or between USDWs.

Any information shall be provided orally within 24 hours from the time the owner or operator becomes aware of the circumstances. A written submission shall also be provided within five days of the time the owner or operator becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- (c) **Plugging and abandonment plan.**
 - (1) The owner or operator shall prepare, maintain, and comply with a plan for plugging and abandonment of the well or project that meets the requirements of § 146.10 of this chapter and is acceptable to the Director. For purposes of this paragraph, temporary intermittent cessation of injection operations is not abandonment.
 - (2) For EPA administered programs:
 - (i) The owner or operator shall submit the plan, on a form provided by the Regional Administrator, no later than one year after the effective date of the UIC program in the state.
 - (ii) The owner or operator shall submit any proposed significant revision to the method of plugging reflected in the plan no later than the notice of plugging required by § 144.28(j)(2) (i.e., 45 days prior to plugging unless shorter notice is approved).
 - (iii) The plan shall include the following information:

- (A) The nature and quantity and material to be used in plugging;
 - (B) The location and extent (by depth) of the plugs;
 - (C) Any proposed test or measurement to be made;
 - (D) The amount, size, and location (by depth) of casing to be left in the well;
 - (E) The method and location where casing is to be parted; and
 - (F) [Reserved]
 - (G) The estimated cost of plugging the well.
- (iv) After a cessation of operations of two years the owner or operator shall plug and abandon the well in accordance with the plan unless he:
- (A) Provides notice to the Regional Administrator;
 - (B) Describe actions or procedures, satisfactory to the Regional Administrator, that the owner or operator will take to ensure that the well will not endanger USDWs during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived by the Regional Administrator.
- (v) The owner or operator of any well that has been temporarily abandoned [ceased operations for more than two years and has met the requirements of paragraphs (c)(2) (A) and (B) of this section] shall notify the Regional Administrator prior to resuming operation of the well.

(d) **Financial responsibility.**

- (1) The owner, operator and/or, for EPA-administered programs, the transferor of a Class I, II or III well, is required to demonstrate and maintain financial responsibility and resources to close, plug and abandon the underground injection operation in a manner prescribed by the Director until:
- (i) The well has been plugged and abandoned in accordance with an approved plugging and abandonment plan pursuant to §§ 144.28(c) and 146.10 and submission of a plugging and abandonment report has been made pursuant to § 144.28(k);
 - (ii) The well has been converted in compliance with the requirements of § 144.28(j); or
 - (iii) For EPA-administered programs, the transferor has received notice from the Director that the transferee has demonstrated financial responsibility for the well. The owner or operator shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance, such as a financial statement.
- (2) For EPA-administered programs, the owner or operator shall submit such evidence no later than one year after the effective date of the UIC program in the State. Where the ownership or operational control of the well is transferred more than one year after the effective date of the UIC program, the transferee shall submit such evidence no later than the date specified in the notice required pursuant to § 144.28(l)(2).
- (3) For EPA administered programs the Regional Administrator may require the owner or operator to submit a revised demonstration of financial responsibility if the Regional Administrator has reason to believe that the original demonstration is no longer adequate to cover the cost of closing, plugging and abandoning the well.

- (4) For EPA administered programs the owner or operator of a well injecting hazardous waste must comply with the financial responsibility requirements of subpart F of this part.
- (5) For EPA-administered programs, an owner or operator must notify the Regional Administrator by certified mail of the commencement of any voluntary or involuntary proceeding under Title 11 (Bankruptcy) of the United States Code which names the owner or operator as debtor, within 10 business days after the commencement of the proceeding. Any party acting as guarantor for the owner or operator for the purpose of financial responsibility must so notify the Regional Administrator, if the guarantor is named as debtor in any such proceeding.
- (6) In the event of commencement of a proceeding specified in paragraph (d)(5) of this section, an owner or operator who has furnished a financial statement for the purpose of demonstrating financial responsibility under this section shall be deemed to be in violation of this paragraph until an alternative financial assurance demonstration acceptable to the Regional Administrator is provided either by the owner or operator or by its trustee in bankruptcy, receiver, or other authorized party. All parties shall be prohibited from injecting into the well until such alternate financial assurance is provided.

(e) **Casing and cementing requirements.** For enhanced recovery and hydrocarbon storage wells:

- (1) The owner or operator shall case and cement the well to prevent movement of fluids into or between underground sources of drinking water. In determining and specifying casing and cementing requirements, the following factors shall be considered:
 - (i) Depth to the injection zone;
 - (ii) Depth to the bottom of all USDWs; and
 - (iii) Estimated maximum and average injection pressures.
- (2) In addition, in determining and specifying casing and cementing requirements the Director may consider information on:
 - (i) Nature of formation fluids;
 - (ii) Lithology of injection and confining zones;
 - (iii) External pressure, internal pressure, and axial loading;
 - (iv) Hole size;
 - (v) Size and grade of all casing strings; and
 - (vi) Class of cement.
- (3) The requirements in paragraphs (e) (1) and (2) of this section need not apply if:
 - (i) Regulatory controls for casing and cementing existed at the time of drilling of the well and the well is in compliance with those controls; and
 - (ii) Well injection will not result in the movement of fluids into an underground source of drinking water so as to create a significant risk to the health of persons.

- (4) When a State did not have regulatory controls for casing and cementing prior to the time of the submission of the State program to the Administrator, the Director need not apply the casing and cementing requirements in paragraph (e)(1) of this section if he submits as a part of his application for primacy, an appropriate plan for casing and cementing of existing, newly converted, and newly drilled wells in existing fields, and the Administrator approves the plan.

(f) *Operating requirements.*

- (1) Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited.
- (2) The owner or operator of a Class I, II or III injection well authorized by rule shall establish and maintain mechanical integrity as defined in § 146.8 of this chapter until the well is properly plugged in accordance with an approved plugging and abandonment plan pursuant to §§ 144.28(c) and 146.10, and a plugging and abandonment report pursuant to § 144.28(k) is submitted, or until the well is converted in compliance with § 144.28(j). For EPA-administered programs, the Regional Administrator may require by written notice that the owner or operator comply with a schedule describing when mechanical integrity demonstrations shall be made.
- (3) When the Director determines that a Class I (non-hazardous), II or III injection well lacks mechanical integrity pursuant to § 146.8 of this chapter, the Director shall give written notice of his determination to the owner or operator. Unless the Director requires immediate cessation, the owner or operator shall cease injection into the well within 48 hours of receipt of the Director's determination. The Director may allow plugging of the well in accordance with the requirements of § 146.10 of this chapter, or require the owner or operator to perform such additional construction, operation, monitoring, reporting and corrective action as is necessary to prevent the movement of fluid into or between USDWs caused by the lack of mechanical integrity. The owner or operator may resume injection upon receipt of written notification from the Director that the owner or operator has demonstrated mechanical integrity pursuant to § 146.8 of this chapter.
- (4) The Director may allow the owner or operator of a well which lacks mechanical integrity pursuant to § 146.8(a)(1) of this chapter to continue or resume injection if the owner or operator has made a satisfactory demonstration that there is no movement of fluid into or between USDWs.
- (5) For Class I wells, unless an alternative to a packer has been approved under § 146.12(c) of this chapter, the owner or operator shall fill the annulus between the tubing and the long string of casings with a fluid approved by the Director and maintain a pressure, also approved by the Director, on the annulus. For EPA administered programs, the owner or operator of a Class I well completed with tubing and packer shall fill the annulus between tubing and casing with a noncorrosive fluid and maintain a positive pressure on the annulus. For other Class I wells, the owner or operator shall insure that the alternative completion method will reliably provide a comparable level of protection to underground sources of drinking water.
- (6) Injection pressure.
 - (i) For Class I and III wells:
 - (A) Except during stimulation, the owner or operator shall not exceed an injection pressure at the wellhead which shall be calculated so as to assure that the pressure during injection does not initiate new fractures or propagate existing fractures in the injection zone; and

- (B) The owner or operator shall not inject at a pressure which will initiate fractures in the confining zone or cause the movement of injection or formation fluids into an underground source of drinking water.
- (ii) For Class II wells:
 - (A) The owner or operator shall not exceed a maximum injection pressure at the wellhead which shall be calculated so as to assure that the pressure during injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to the USDWs; and
 - (B) The owner or operator shall not inject at a pressure which will cause the movement of injection or formation fluids into an underground source of drinking water.
- (g) **Monitoring requirements.** The owner or operator shall perform the monitoring as described in this paragraph. For EPA administered programs, monitoring of the nature of the injected fluids shall comply with applicable analytical methods cited and described in table I of 40 CFR 136.3 or in appendix III of 40 CFR part 261 or by other methods that have been approved by the Regional Administrator.
 - (1) The owner or operator of a Class I well shall:
 - (i) Analyze the nature of the injected fluids with sufficient frequency to yield data representative of their characteristics;
 - (ii) Install and use continuous recording devices to monitor injection pressure, flow rate and volume, and the pressure on the annulus between the tubing and the long string of casing;
 - (iii) Install and use monitoring wells within the area of review if required by the Director, to monitor any migration of fluids into and pressure in the underground sources of drinking water. The type, number and location of the wells, the parameters to be measured, and the frequency of monitoring must be approved by the Director.
 - (2) For Class II wells:
 - (i) The owner or operator shall monitor the nature of the injected fluids with sufficient frequency to yield data representative of their characteristics. For EPA administered programs, this frequency shall be at least once within the first year of the authorization and thereafter when changes are made to the fluid.
 - (ii) The owner or operator shall observe the injection pressure, flow rate, and cumulative volume at least with the following frequencies:
 - (A) Weekly for produced fluid disposal operations;
 - (B) Monthly for enhanced recovery operations;
 - (C) Daily during the injection of liquid hydrocarbons and injection for withdrawal of stored hydrocarbons; and
 - (D) Daily during the injection phase of cyclic steam operations.
 - (iii) The owner or operator shall record one observation of injection pressure, flow rate and cumulative volume at reasonable intervals no greater than thirty days.
 - (iv) For enhanced recovery and hydrocarbon storage wells:

- (A) The owner or operator shall demonstrate mechanical integrity pursuant to § 146.8 of this chapter at least once every five years during the life of the injection well.
- (B) For EPA administered programs, the Regional Administrator by written notice may require the owner or operator to comply with a schedule describing when such demonstrations shall be made.
- (C) For EPA administered programs, the owner or operator of any well required to be tested for mechanical integrity shall notify the Regional Administrator at least 30 days prior to any required mechanical integrity test. The Regional Administrator may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity testing if it chose. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.
- (v) The owner or operator of a hydrocarbon storage or enhanced recovery wells may monitor them by manifold monitoring on a field or project basis rather than on an individual well basis if such facilities consist of more than one injection well, operate with a common manifold, and provided the owner or operator demonstrates to the Director that manifold monitoring is comparable to individual well monitoring.

(3)

- (i) For Class III wells the owner or operator shall provide to the Director a qualitative analysis and ranges in concentrations of all constituents of injected fluids at least once within the first year of authorization and thereafter whenever the injection fluid is modified to the extent that the initial data are incorrect or incomplete. The owner or operator may request Federal confidentiality as specified in 40 CFR part 2. If the information is proprietary the owner or operator may in lieu of the ranges in concentrations choose to submit maximum concentrations which shall not be exceeded. In such a case the owner or operator shall retain records of the undisclosed concentrations and provide them upon request to the Regional Administrator as part of any enforcement investigation; and
- (ii) Monitor injection pressure and either flow rate or volume semi-monthly, or meter and record daily injected and produced fluid volumes as appropriate;
- (iii) Monitor the fluid level in the injection zone semi-monthly, where appropriate;
- (iv) All Class III wells may be monitored on a field or project basis rather than an individual well basis by manifold monitoring. Manifold monitoring may be used in cases of facilities consisting of more than one injection well, operating with a common manifold. Separate monitoring systems for each well are not required provided the owner or operator demonstrates to the Director that manifold monitoring is comparable to individual well monitoring.

(h) **Reporting requirements.** The owner or operator shall submit reports to the Director as follows:

(1) For Class I wells, quarterly reports on:

- (i) The physical, chemical, and other relevant characteristics of the injection fluids;
- (ii) Monthly average, maximum, and minimum values for injection pressure, flow rate and volume, and annular pressure;
- (iii) The results from ground-water monitoring wells prescribed in paragraph (g)(1)(iii) of this section;

- (iv) The results of any test of the injection well conducted by the owner or operator during the reported quarter if required by the Director; and
 - (v) Any well work over performed during the reported quarter.
- (2) For Class II wells:
 - (i) An annual report to the Director summarizing the results of all monitoring, as required in paragraph (g)(2) of this section. Such summary shall include monthly records of injected fluids, and any major changes in characteristics or sources of injected fluids. Previously submitted information may be included by reference.
 - (ii) The owner or operator of hydrocarbon storage and enhanced recovery projects may report on a field or project basis rather than on an individual well basis where manifold monitoring is used.
- (3) For Class III wells:
 - (i) Quarterly reporting on all monitoring, as required in paragraph (g)(3) of this section;
 - (ii) Quarterly reporting of the results of any periodic tests required by the Director that are performed during the reported quarter;
 - (iii) Monitoring may be reported on a project or field basis rather than an individual well basis where manifold monitoring is used.
- (i) **Retention of records.** The owner or operator shall retain records of all monitoring information, including the following:
 - (1) Calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this section, for a period of at least three years from the date of the sample, measurement, or report. This period may be extended by request of the Director at any time; and
 - (2) The nature and composition of all injected fluids until three years after the completion of any plugging and abandonment procedures specified under § 144.52(l)(6). The Director may require the owner or operator to deliver the records to the Director at the conclusion of the retention period. For EPA administered programs, the owner or operator shall continue to retain the records after the three year retention period unless he delivers the records to the Regional Administrator or obtains written approval from the Regional Administrator to discard the records.
- (j) **Notice of abandonment.**
 - (1) The owner or operator shall notify the Director, according to a time period required by the Director, before conversion or abandonment of the well.
 - (2) For EPA-administered programs, the owner or operator shall notify the Regional Administrator at least 45 days before plugging and abandonment. The Regional Administrator, at his discretion, may allow a shorter notice period.
- (k) **Plugging and abandonment report.** For EPA-administered programs, within 60 days after plugging a well or at the time of the next quarterly report (whichever is less) the owner or operator shall submit a report to the Regional Administrator. If the quarterly report is due less than 15 days before completion of plugging, then the report shall be submitted within 60 days. The report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

- (1) A statement that the well was plugged in accordance with the plan previously submitted to the Regional Administrator; or
 - (2) Where actual plugging differed from the plan previously submitted, an updated version of the plan, on the form supplied by the Regional Administrator, specifying the different procedures used.
- (l) **Change of ownership or operational control.** For EPA-administered programs:
- (1) The transferor of a Class I, II or III well authorized by rule shall notify the Regional Administrator of a transfer of ownership or operational control of the well at least 30 days in advance of the proposed transfer.
 - (2) The notice shall include a written agreement between the transferor and the transferee containing a specific date for transfer of ownership or operational control of the well; and a specific date when the financial responsibility demonstration of § 144.28(d) will be met by the transferee.
 - (3) The transferee is authorized to inject unless he receives notification from the Director that the transferee has not demonstrated financial responsibility pursuant to § 144.28(d).
- (m) **Requirements for Class I hazardous waste wells.** The owner or operator of any Class I well injecting hazardous waste shall comply with § 144.14(c). In addition, for EPA-administered programs the owner or operator shall properly dispose of, or decontaminate by removing all hazardous waste residues, all injection well equipment.

[49 FR 20182, May 11, 1984, as amended at 58 FR 63897, Dec. 3, 1993]

Subpart D—Authorization by Permit

§ 144.31 Application for a permit; authorization by permit.

- (a) **Permit application.** Unless an underground injection well is authorized by rule under subpart C of this part, all injection activities including construction of an injection well are prohibited until the owner or operator is authorized by permit. An owner or operator of a well currently authorized by rule must apply for a permit under this section unless well authorization by rule was for the life of the well or project. Authorization by rule for a well or project for which a permit application has been submitted terminates for the well or project upon the effective date of the permit. Procedures for applications, issuance and administration of emergency permits are found exclusively in § 144.34. A RCRA permit applying the standards of part 264, subpart C of this chapter will constitute a UIC permit for hazardous waste injection wells for which the technical standards in part 146 of this chapter are not generally appropriate.
- (b) **Who applies?** When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit.
- (c) **Time to apply.** Any person who performs or proposes an underground injection for which a permit is or will be required shall submit an application to the Director in accordance with the UIC program as follows:
 - (1) For existing wells, as expeditiously as practicable and in accordance with the schedule in any program description under § 145.23(f) or (for EPA administered programs) on a schedule established by the Regional Administrator, but no later than 4 years from the approval or promulgation of the UIC program, or as required under § 144.14(b) for wells injecting hazardous waste. For EPA administered programs the owner or operator of Class I or III wells shall submit a complete permit application no later than 1 year after the effective date of the program.

(2) For new injection wells, except new wells in projects authorized under § 144.21(d) or authorized by an existing area permit under § 144.33(c), a reasonable time before construction is expected to begin.

(d) **Completeness.** The Director shall not issue a permit before receiving a complete application for a permit except for emergency permits. An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to his or her satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity. For EPA-administered programs, an application which is reviewed under § 124.3 is complete when the Director receives either a complete application or the information listed in a notice of deficiency.

(e) **Information requirements.** All applicants for Class I, II, III, and V permits shall provide the following information to the Director, using the application form provided by the Director. Applicants for Class VI permits shall follow the criteria provided in § 146.82 of this chapter.

(1) The activities conducted by the applicant which require it to obtain permits under RCRA, UIC, the National Pollution Discharge Elimination system (NPDES) program under the Clean Water Act, or the Prevention of Significant Deterioration (PSD) program under the Clean Air Act.

(2) Name, mailing address, and location of the facility for which the application is submitted.

(3) Up to four SIC codes which best reflect the principal products or services provided by the facility.

(4) The operator's name, address, telephone number, ownership status, and status as Federal, State, private, public, or other entity.

(5) Whether the facility is located on Indian lands.

(6) A listing of all permits or construction approvals received or applied for under any of the following programs:

(i) Hazardous Waste Management program under RCRA.

(ii) UIC program under SDWA.

(iii) NPDES program under CWA.

(iv) Prevention of Significant Deterioration (PSD) program under the Clean Air Act.

(v) Nonattainment program under the Clean Air Act.

(vi) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act.

(vii) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act.

(viii) Dredge and fill permits under section 404 of CWA.

(ix) Other relevant environmental permits, including State permits.

(7) A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where

fluids from the facility are injected underground; and those wells, springs, and other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within a quarter mile of the facility property boundary.

(8) A brief description of the nature of the business.

(9) For EPA-administered programs, the applicant shall identify and submit on a list with the permit application the names and addresses of all owners of record of land within one-quarter mile of the facility boundary. This requirement may be waived by the Regional Administrator where the site is located in a populous area and the Regional Administrator determines that the requirement would be impracticable.

(10) A plugging and abandonment plan that meets the requirements of § 146.10 of this chapter and is acceptable to the Director.

(f) **Recordkeeping.** Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under § 144.31 for a period of at least 3 years from the date the application is signed.

(g) **Information Requirements for Class I Hazardous Waste Injection Wells Permits.**

(1) The following information is required for each active Class I hazardous waste injection well at a facility seeking a UIC permit:

(i) Dates well was operated.

(ii) Specification of all wastes which have been injected in the well, if available.

(2) The owner or operator of any facility containing one or more active hazardous waste injection wells must submit all available information pertaining to any release of hazardous waste or constituents from any active hazardous waste injection well at the facility.

(3) The owner or operator of any facility containing one or more active Class I hazardous waste injection wells must conduct such preliminary site investigations as are necessary to determine whether a release is occurring, has occurred, or is likely to have occurred.

[48 FR 14189, Apr. 1, 1983, as amended at 49 FR 20185, May 11, 1984; 52 FR 45797, Dec. 1, 1987; 52 FR 46963, Dec. 10, 1987; 58 FR 63897, Dec. 3, 1993; 75 FR 77288, Dec. 10, 2010]

§ 144.32 Signatories to permit applications and reports.

(a) **Applications.** All permit applications, except those submitted for Class II wells (see paragraph (b) of this section), shall be signed as follows:

(1) **For a corporation:** by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means;

(i) A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decisionmaking functions for the corporation, or

- (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in § 144.32(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under § 144.32(a)(1)(ii) rather than to specific individuals.

- (2) **For a partnership or sole proprietorship:** by a general partner or the proprietor, respectively; or
- (3) **For a municipality, State, Federal, or other public agency:** by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (i) The chief executive officer of the agency, or
 - (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

- (b) **Reports.** All reports required by permits, other information requested by the Director, and all permit applications submitted for Class II wells under § 144.31 shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described in paragraph (a) of this section;
- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- (3) The written authorization is submitted to the Director.

- (c) **Changes to authorization.** If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

- (d) **Certification.** Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or

those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(Clean Water Act (33 U.S.C. 1251 *et seq.*), Safe Drinking Water Act (42 U.S.C. 300f *et seq.*), Clean Air Act (42 U.S.C. 7401 *et seq.*), Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*)

[48 FR 14189, Apr. 1, 1983, as amended at 48 FR 39621, Sept. 1, 1983]

§ 144.33 Area permits.

- (a) The Director may issue a permit on an area basis, rather than for each well individually, provided that the permit is for injection wells:
 - (1) Described and identified by location in permit application(s) if they are existing wells, except that the Director may accept a single description of wells with substantially the same characteristics;
 - (2) Within the same well field, facility site, reservoir, project, or similar unit in the same State;
 - (3) Operated by a single owner or operator; and
 - (4) Used to inject other than hazardous waste; and
 - (5) Other than Class VI wells.
- (b) Area permits shall specify:
 - (1) The area within which underground injections are authorized, and
 - (2) The requirements for construction, monitoring, reporting, operation, and abandonment, for all wells authorized by the permit.
- (c) The area permit may authorize the permittee to construct and operate, convert, or plug and abandon wells within the permit area provided:
 - (1) The permittee notifies the Director at such time as the permit requires;
 - (2) The additional well satisfies the criteria in paragraph (a) of this section and meets the requirements specified in the permit under paragraph (b) of this section; and
 - (3) The cumulative effects of drilling and operation of additional injection wells are considered by the Director during evaluation of the area permit application and are acceptable to the Director.
- (d) If the Director determines that any well constructed pursuant to paragraph (c) of this section does not satisfy any of the requirements of paragraphs (c) (1) and (2) of this section the Director may modify the permit under § 144.39, terminate under § 144.40, or take enforcement action. If the Director determines that cumulative effects are unacceptable, the permit may be modified under § 144.39.

[48 FR 14189, Apr. 1, 1983, as amended at 75 FR 77288, Dec. 10, 2010]

§ 144.34 Emergency permits.

- (a) **Coverage.** Notwithstanding any other provision of this part or part 124, the Director may temporarily permit a specific underground injection if:

- (1) An imminent and substantial endangerment to the health of persons will result unless a temporary emergency permit is granted; or
- (2) A substantial and irretrievable loss of oil or gas resources will occur unless a temporary emergency permit is granted to a Class II well; and
 - (i) Timely application for a permit could not practicably have been made; and
 - (ii) The injection will not result in the movement of fluids into underground sources of drinking water; or
- (3) A substantial delay in production of oil or gas resources will occur unless a temporary emergency permit is granted to a new Class II well and the temporary authorization will not result in the movement of fluids into an underground source of drinking water.

(b) **Requirements for issuance.**

- (1) Any temporary permit under paragraph (a)(1) of this section shall be for no longer term than required to prevent the hazard.
- (2) Any temporary permit under paragraph (a)(2) of this section shall be for no longer than 90 days, except that if a permit application has been submitted prior to the expiration of the 90-day period, the Director may extend the temporary permit until final action on the application.
- (3) Any temporary permit under paragraph (a)(3) of this section shall be issued only after a complete permit application has been submitted and shall be effective until final action on the application.
- (4) Notice of any temporary permit under this paragraph shall be published in accordance with § 124.11 within 10 days of the issuance of the permit.
- (5) The temporary permit under this section may be either oral or written. If oral, it must be followed within 5 calendar days by a written temporary emergency permit.
- (6) The Director shall condition the temporary permit in any manner he or she determines is necessary to ensure that the injection will not result in the movement of fluids into an underground source of drinking water.

[48 FR 14189, Apr. 1, 1983, as amended at 49 FR 20185, May 11, 1984]

§ 144.35 Effect of a permit.

- (a) Except for Class II and III wells, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Part C of the SDWA. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in §§ 144.39 and 144.40.
- (b) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.
- (c) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

§ 144.36 Duration of permits.

- (a) Permits for Class I and V wells shall be effective for a fixed term not to exceed 10 years. UIC permits for Class II and III wells shall be issued for a period up to the operating life of the facility. UIC permits for Class VI wells shall be issued for the operating life of the facility and the post-injection site care period.

The Director shall review each issued Class II, III, and VI well UIC permit at least once every 5 years to determine whether it should be modified, revoked and reissued, terminated or a minor modification made as provided in § 144.39, § 144.40, or § 144.41.

- (b) Except as provided in § 144.37, the term of a permit shall not be extended by modification beyond the maximum duration specified in this section.
- (c) The Director may issue any permit for a duration that is less than the full allowable term under this section.

[48 FR 14189, Apr. 1, 1983, as amended at 75 FR 77288, Dec. 10, 2010]

§ 144.37 Continuation of expiring permits.

- (a) **EPA permits.** When EPA is the permit-issuing authority, the conditions of an expired permit continue in force under 5 U.S.C. 558(c) until the effective date of a new permit if:
 - (1) The permittee has submitted a timely application which is a complete application for a new permit; and
 - (2) The Regional Administrator, through no fault of the permittee does not issue a new permit with an effective date on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resource constraints).
- (b) **Effect.** Permits continued under this section remain fully effective and enforceable.
- (c) **Enforcement.** When the permittee is not in compliance with the conditions of the expiring or expired permit the Regional Administrator may choose to do any or all of the following:
 - (1) Initiate enforcement action based upon the permit which has been continued;
 - (2) Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
 - (3) Issue a new permit under part 124 with appropriate conditions; or
 - (4) Take other actions authorized by these regulations.
- (d) **State continuation.** An EPA issued permit does not continue in force beyond its time expiration date under Federal law if at that time a State is the permitting authority. A State authorized to administer the UIC program may continue either EPA or State-issued permits until the effective date of the new permits, if State law allows. Otherwise, the facility or activity is operating without a permit from the time of expiration of the old permit to the effective date of the State-issued new permit.

§ 144.38 Transfer of permits.

- (a) **Transfers by modification.** Except as provided in paragraph (b) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under § 144.39(b)(2)), or a minor modification made (under § 144.41(d)), to identify the new permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act.
- (b) **Automatic transfers.** As an alternative to transfers under paragraph (a) of this section, any UIC permit for a well not injecting hazardous waste or injecting carbon dioxide for geologic sequestration may be automatically transferred to a new permittee if:

- (1) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date referred to in paragraph (b)(2) of this section;
- (2) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer or permit responsibility, coverage, and liability between them, and the notice demonstrates that the financial responsibility requirements of § 144.52(a)(7) will be met by the new permittee; and
- (3) The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this paragraph may also be a minor modification under § 144.41. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b)(2) of this section.

[48 FR 14189, Apr. 1, 1983, as amended at 75 FR 77288, Dec. 10, 2010]

§ 144.39 Modification or revocation and reissuance of permits.

When the Director receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit (see § 144.51 of this chapter), receives a request for modification or revocation and reissuance under § 124.5, or conducts a review of the permit file) he or she may determine whether or not one or more of the causes listed in paragraphs (a) and (b) of this section for modification or revocation and reissuance or both exist. If cause exists, the Director may modify or revoke and reissue the permit accordingly, subject to the limitations of paragraph (c) of this section, and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. See § 124.5(c)(2) of this chapter. If cause does not exist under this section or § 144.41 of this chapter, the Director shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in § 144.41 for “minor modifications” the permit may be modified without a draft permit or public review. Otherwise, a draft permit must be prepared and other procedures in part 124 must be followed.

- (a) **Causes for modification.** The following are causes for modification. For Class I hazardous waste injection wells, Class II, Class III or Class VI wells the following may be causes for revocation and reissuance as well as modification; and for all other wells the following may be cause for revocation or reissuance as well as modification when the permittee requests or agrees.
 - (1) **Alterations.** There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.
 - (2) **Information.** The Director has received information. Permits other than for Class II and III wells may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance. For UIC area permits (§ 144.33), this cause shall include any information indicating that cumulative effects on the environment are unacceptable.
 - (3) **New regulations.** The standards or regulations on which the permit was based have been changed by promulgation of new or amended standards or regulations or by judicial decision after the permit was issued. Permits other than for Class I hazardous waste injection wells, Class II, Class III or Class VI wells may be modified during their permit terms for this cause only as follows:

(i) For promulgation of amended standards or regulations, when:

(A) The permit condition requested to be modified was based on a promulgated part 146 regulation; and

(B) EPA has revised, withdrawn, or modified that portion of the regulation on which the permit condition was based, and

(C) A permittee requests modification in accordance with § 124.5 within ninety (90) days after FEDERAL REGISTER notice of the action on which the request is based.

(ii) For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA promulgated regulations if the remand and stay concern that portion of the regulations on which the permit condition was based and a request is filed by the permittee in accordance with § 124.5 within ninety (90) days of judicial remand.

(4) **Compliance schedules.** The Director determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy. See also § 144.41(c) (minor modifications).

(5) **Basis for modification of Class VI permits.** Additionally, for Class VI wells, whenever the Director determines that permit changes are necessary based on:

(i) Area of review reevaluations under § 146.84(e)(1) of this chapter;

(ii) Any amendments to the testing and monitoring plan under § 146.90(j) of this chapter;

(iii) Any amendments to the injection well plugging plan under § 146.92(c) of this chapter;

(iv) Any amendments to the post-injection site care and site closure plan under § 146.93(a)(3) of this chapter;

(v) Any amendments to the emergency and remedial response plan under § 146.94(d) of this chapter; or

(vi) A review of monitoring and/or testing results conducted in accordance with permit requirements.

(b) **Causes for modification or revocation and reissuance.** The following are causes to modify or, alternatively, revoke and reissue a permit:

(1) Cause exists for termination under § 144.40, and the Director determines that modification or revocation and reissuance is appropriate.

(2) The Director has received notification (as required in the permit, see § 144.41(d)) of a proposed transfer of the permit. A permit also may be modified to reflect a transfer after the effective date of an automatic transfer (§ 144.38(b)) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

(3) A determination that the waste being injected is a hazardous waste as defined in § 261.3 either because the definition has been revised, or because a previous determination has been changed.

(c) **Facility siting.** Suitability of the facility location will not be considered at the time of permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time of permit issuance.

[48 FR 14189, Apr. 1, 1983, as amended at 53 FR 28147, July 26, 1988; 75 FR 77288, Dec. 10, 2010]

§ 144.40 Termination of permits.

- (a) The Director may terminate a permit during its term, or deny a permit renewal application for the following causes:
 - (1) Noncompliance by the permittee with any condition of the permit;
 - (2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or
 - (3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;
- (b) The Director shall follow the applicable procedures in part 124 in terminating any permit under this section.

§ 144.41 Minor modifications of permits.

Upon the consent of the permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of part 124. Any permit modification not processed as a minor modification under this section must be made for cause and with part 124 draft permit and public notice as required in § 144.39. Minor modifications may only:

- (a) Correct typographical errors;
- (b) Require more frequent monitoring or reporting by the permittee;
- (c) Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or
- (d) Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director.
- (e) Change quantities or types of fluids injected which are within the capacity of the facility as permitted and, in the judgment of the Director, would not interfere with the operation of the facility or its ability to meet conditions described in the permit and would not change its classification.
- (f) Change construction requirements approved by the Director pursuant to § 144.52(a)(1) (establishing UIC permit conditions), provided that any such alteration shall comply with the requirements of this part and part 146.
- (g) Amend a plugging and abandonment plan which has been updated under § 144.52(a)(6).
- (h) Amend a Class VI injection well testing and monitoring plan, plugging plan, post-injection site care and site closure plan, or emergency and remedial response plan where the modifications merely clarify or correct the plan, as determined by the Director.

[48 FR 14189, Apr. 1, 1983, as amended at 75 FR 77289, Dec. 10, 2010]

Subpart E—Permit Conditions

§ 144.51 Conditions applicable to all permits.

The following conditions apply to all UIC permits. All conditions applicable to all permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit.

- (a) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Safe Drinking Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the permittee need not comply with the provisions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit under § 144.34.
- (b) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- (c) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
- (e) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.
- (f) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (g) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.
- (h) **Duty to provide information.** The permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- (i) **Inspection and entry.** The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 - (1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

- (4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

(j) **Monitoring and records.**

- (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (2) The permittee shall retain records of all monitoring information, including the following:
 - (i) Calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time; and
 - (ii) The nature and composition of all injected fluids until three years after the completion of any plugging and abandonment procedures specified under § 144.52(a)(6), or under part 146 subpart G as appropriate. The Director may require the owner or operator to deliver the records to the Director at the conclusion of the retention period. For EPA administered programs, the owner or operator shall continue to retain the records after the three year retention period unless he delivers the records to the Regional Administrator or obtains written approval from the Regional Administrator to discard the records.
- (3) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- (4) Owners or operators of Class VI wells shall retain records as specified in subpart H of part 146, including §§ 146.84(g), 146.91(f), 146.92(d), 146.93(f), and 146.93(h) of this chapter.

- (k) **Signatory requirement.** All applications, reports, or information submitted to the Administrator shall be signed and certified. (See § 144.32.)

(l) **Reporting requirements —**

- (1) **Planned changes.** The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.
- (2) **Anticipated noncompliance.** The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

- (3) **Transfers.** This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act. (See § 144.38; in some cases, modification or revocation and reissuance is mandatory.)
- (4) **Monitoring reports.** Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- (5) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each schedule date.
- (6) **Twenty-four hour reporting.** The permittee shall report any noncompliance which may endanger health or the environment, including:
 - (i) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW; or
 - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- (7) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (l) (4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.
- (8) **Other information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.
- (m) **Requirements prior to commencing injection.** Except for all new wells authorized by an area permit under § 144.33(c), a new injection well may not commence injection until construction is complete, and
 - (1) The permittee has submitted notice of completion of construction to the Director; and
 - (2)
 - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the permit; or
 - (ii) The permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in paragraph (m)(1) of this section, in which case prior inspection or review is waived and the permittee may commence injection. The Director shall include in his notice a reasonable time period in which he shall inspect the well.
- (n) 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.

- (o) A Class I, II or III permit shall include and a Class V permit may include conditions which meet the applicable requirements of § 146.10 of this chapter to ensure that plugging and abandonment of the well will not allow the movement of fluids into or between USDWs. Where the plan meets the requirements of § 146.10 of this chapter, the Director shall incorporate the plan into the permit as a permit condition. Where the Director's review of an application indicates that the permittee's plan is inadequate, the Director may require the applicant to revise the plan, prescribe conditions meeting the requirements of this paragraph, or deny the permit. A Class VI permit shall include conditions which meet the requirements set forth in § 146.92 of this chapter. Where the plan meets the requirements of § 146.92 of this chapter, the Director shall incorporate it into the permit as a permit condition. For purposes of this paragraph, temporary or intermittent cessation of injection operations is not abandonment.
- (p) **Plugging and abandonment report.** For EPA-administered programs, within 60 days after plugging a well or at the time of the next quarterly report (whichever is less) the owner or operator shall submit a report to the Regional Administrator. If the quarterly report is due less than 15 days before completion of plugging, then the report shall be submitted within 60 days. The report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:
 - (1) A statement that the well was plugged in accordance with the plan previously submitted to the Regional Administrator; or
 - (2) Where actual plugging differed from the plan previously submitted, and updated version of the plan on the form supplied by the regional administrator, specifying the differences.
- (q) **Duty to establish and maintain mechanical integrity.**
 - (1) The owner or operator of a Class I, II, III or VI well permitted under this part shall establish mechanical integrity prior to commencing injection or on a schedule determined by the Director. Thereafter the owner or operator of Class I, II, and III wells must maintain mechanical integrity as defined in § 146.8 of this chapter and the owner or operator of Class VI wells must maintain mechanical integrity as defined in § 146.89 of this chapter. For EPA-administered programs, the Regional Administrator may require by written notice that the owner or operator comply with a schedule describing when mechanical integrity demonstrations shall be made.
 - (2) When the Director determines that a Class I, II, III or VI well lacks mechanical integrity pursuant to § 146.8 or § 146.89 of this chapter for Class VI of this chapter, he/she shall give written notice of his/her determination to the owner or operator. Unless the Director requires immediate cessation, the owner or operator shall cease injection into the well within 48 hours of receipt of the Director's determination. The Director may allow plugging of the well pursuant to the requirements of § 146.10 of this chapter or require the permittee to perform such additional construction, operation, monitoring, reporting and corrective action as is necessary to prevent the movement of fluid into or between USDWs caused by the lack of mechanical integrity. The owner or operator may resume injection upon written notification from the Director that the owner or operator has demonstrated mechanical integrity pursuant to § 146.8 of this chapter.
 - (3) The Director may allow the owner or operator of a well which lacks mechanical integrity pursuant to § 146.8(a)(1) of this chapter to continue or resume injection, if the owner or operator has made a satisfactory demonstration that there is no movement of fluid into or between USDWs.

[48 FR 14189, Apr. 1, 1983, as amended at 49 FR 20185, May 11, 1984; 53 FR 28147, July 26, 1988; 58 FR 63898, Dec. 3, 1993; 75 FR 77289, Dec. 10, 2010]

§ 144.52 Establishing permit conditions.

- (a) In addition to conditions required in § 144.51, the Director shall establish conditions, as required on a case-by-case basis under § 144.36 (duration of permits), § 144.53(a) (schedules of compliance), § 144.54 (monitoring), and for EPA permits only § 144.53(b) (alternate schedules of compliance), and § 144.4 (considerations under Federal law). Permits for owners or operators of hazardous waste injection wells shall include conditions meeting the requirements of § 144.14 (requirements for wells injecting hazardous waste), paragraphs (a)(7) and (a)(9) of this section, and subpart G of part 146. Permits for owners or operators of Class VI injection wells shall include conditions meeting the requirements of subpart H of part 146. Permits for other wells shall contain the following requirements, when applicable.
- (1) **Construction requirements** as set forth in part 146. Existing wells shall achieve compliance with such requirements according to a compliance schedule established as a permit condition. The owner or operator of a proposed new injection well shall submit plans for testing, drilling, and construction as part of the permit application. Except as authorized by an area permit, no construction may commence until a permit has been issued containing construction requirements (see § 144.11). New wells shall be in compliance with these requirements prior to commencing injection operations. Changes in construction plans during construction may be approved by the Administrator as minor modifications (§ 144.41). No such changes may be physically incorporated into construction of the well prior to approval of the modification by the Director.
 - (2) Corrective action as set forth in §§ 144.55, 146.7, and 146.84 of this chapter.
 - (3) **Operation requirements** as set forth in 40 CFR part 146; the permit shall establish any maximum injection volumes and/or pressures necessary to assure that fractures are not initiated in the confining zone, that injected fluids do not migrate into any underground source of drinking water, that formation fluids are not displaced into any underground source of drinking water, and to assure compliance with the part 146 operating requirements.
 - (4) **Requirements for wells managing hazardous waste**, as set forth in § 144.14.
 - (5) Monitoring and reporting requirements as set forth in 40 CFR part 146. The permittee shall be required to identify types of tests and methods used to generate the monitoring data. For EPA administered programs, monitoring of the nature of injected fluids shall comply with applicable analytical methods cited and described in table I of 40 CFR 136.3 or in appendix III of 40 CFR part 261 or in certain circumstances by other methods that have been approved by the Regional Administrator.
 - (6) After a cessation of operations of two years the owner or operator shall plug and abandon the well in accordance with the plan unless he:
 - (i) Provides notice to the Regional Administrator;
 - (ii) Describes actions or procedures, satisfactory to the Regional Administrator, that the owner or operator will take to ensure that the well will not endanger USDWs during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived by the Regional Administrator.
 - (7) **Financial responsibility.**

- (i) The permittee, including the transferor of a permit, is required to demonstrate and maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director until:
 - (A) The well has been plugged and abandoned in accordance with an approved plugging and abandonment plan pursuant to §§ 144.51(o), 146.10, and 146.92 of this chapter, and submitted a plugging and abandonment report pursuant to § 144.51(p); or
 - (B) The well has been converted in compliance with the requirements of § 144.51(n); or
 - (C) The transferor of a permit has received notice from the Director that the owner or operator receiving transfer of the permit, the new permittee, has demonstrated financial responsibility for the well.
- (ii) The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance, such as a financial statement or other materials acceptable to the Director. For EPA administered programs, the Regional Administrator may on a periodic basis require the holder of a lifetime permit to submit an estimate of the resources needed to plug and abandon the well revised to reflect inflation of such costs, and a revised demonstration of financial responsibility, if necessary. The owner or operator of a well injecting hazardous waste must comply with the financial responsibility requirements of subpart F of this part. For Class VI wells, the permittee shall show evidence of such financial responsibility to the Director by the submission of a qualifying instrument (see § 146.85(a) of this chapter), such as a financial statement or other materials acceptable to the Director. The owner or operator of a Class VI well must comply with the financial responsibility requirements set forth in § 146.85 of this chapter.
- (8) **Mechanical integrity.** A permit for any Class I, II, III or VI well or injection project which lacks mechanical integrity 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 under § 146.8, or § 146.89 of this chapter for Class VI, that the well has mechanical integrity.
- (9) **Additional conditions.** 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.

(b)

- (1) In addition to conditions required in all permits the Director shall establish conditions in permits as required on a case-by-case basis, to provide for and assure compliance with all applicable requirements of the SDWA and parts 144, 145, 146 and 124.
- (2) For a State issued permit, an applicable requirement is a State statutory or regulatory requirement which takes effect prior to final administrative disposition of the permit. For a permit issued by EPA, an applicable requirement is a statutory or regulatory requirement (including any interim final regulation) which takes effect prior to the issuance of the permit. Section 124.14 (reopening of comment period) provides a means for reopening EPA permit proceedings at the discretion of the Director where new requirements become effective during the permitting process and are of sufficient magnitude to make additional proceedings desirable. For State and EPA administered programs, an applicable requirement is also any requirement which takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in § 144.39.

(3) New or reissued permits, and to the extent allowed under § 144.39 modified or revoked and reissued permits, shall incorporate each of the applicable requirements referenced in § 144.52.

(c) **Incorporation.** All permit conditions shall be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements must be given in the permit.

[48 FR 14189, Apr. 1, 1983, as amended at 49 FR 20185, May 11, 1984; 53 FR 28147, July 26, 1988; 58 FR 63898; Dec. 3, 1993; 65 FR 30913, May 15, 2000; 75 FR 77289, Dec. 10, 2010]

§ 144.53 Schedule of compliance.

(a) **General.** The permit may, when appropriate, specify a schedule of compliance leading to compliance with the SDWA and parts 144, 145, 146, and 124.

(1) **Time for compliance.** Any schedules of compliance shall require compliance as soon as possible, and in no case later than 3 years after the effective date of the permit.

(2) **Interim dates.** Except as provided in paragraph (b)(1)(ii) of this section, if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.

(i) The time between interim dates shall not exceed 1 year.

(ii) If the time necessary for completion of any interim requirement is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(3) **Reporting.** The permit shall be written to require that if paragraph (a)(1) of this section is applicable, progress reports be submitted no later than 30 days following each interim date and the final date of compliance.

(b) **Alternative schedules of compliance.** A permit applicant or permittee may cease conducting regulated activities (by plugging and abandonment) rather than continue to operate and meet permit requirements as follows:

(1) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

(i) The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

(ii) The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.

(2) If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which will ensure timely compliance with applicable requirements.

(3) If the permittee is undecided whether to cease conducting regulated activities, the Director may issue or modify a permit to contain two schedules as follows:

- (i) Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the decision is to continue conducting regulated activities;
 - (ii) One schedule shall lead to timely compliance with applicable requirements;
 - (iii) The second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements;
 - (iv) Each permit containing two schedules shall include a requirement that after the permittee has made a final decision under paragraph (b)(3)(i) of this section it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.
- (4) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the Director, such as a resolution of the board of directors of a corporation.

§ 144.54 Requirements for recording and reporting of monitoring results.

All permits shall specify:

- (a) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);
- (b) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including when appropriate, continuous monitoring;
- (c) Applicable reporting requirements based upon the impact of the regulated activity and as specified in part 146. Reporting shall be no less frequent than specified in the above regulations.

§ 144.55 Corrective action.

- (a) **Coverage.** Applicants for Class I, II, (other than existing), or III injection well permits shall identify the location of all known wells within the injection well's area of review which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the injection formation, all known wells within the area of review penetrating formations affected by the increase in pressure. For such wells which are improperly sealed, completed, or abandoned, the applicant shall also submit a plan consisting of such steps or modifications as are necessary to prevent movement of fluid into underground sources of drinking water ("corrective action"). Where the plan is adequate, the Director shall incorporate it into the permit as a condition. Where the Director's review of an application indicates that the permittee's plan is inadequate (based on the factors in § 146.07), the Director shall require the applicant to revise the plan, prescribe a plan for corrective action as a condition of the permit under paragraph (b) of this section, or deny the application. The Director may disregard the provisions of § 146.06 (Area of Review) and § 146.07 (Corrective Action) when reviewing an application to permit an existing Class II well.
- (b) **Requirements —**
 - (1) **Existing injection wells.** Any permit issued for an existing injection well (other than Class II) requiring corrective action shall include a compliance schedule requiring any corrective action accepted or prescribed under paragraph (a) of this section to be completed as soon as possible.

- (2) **New injection wells.** No owner or operator of a new injection well may begin injection until all required corrective action has been taken.
- (3) **Injection pressure limitation.** 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 any 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.
- (4) **Class III wells only.** When setting corrective action requirements the Director shall consider the overall effect of the project on the hydraulic gradient in potentially affected USDWs, and the corresponding changes in potentiometric surface(s) and flow direction(s) rather than the discrete effect of each well. If a decision is made that corrective action is not necessary based on the determinations above, the monitoring program required in § 146.33(b) shall be designed to verify the validity of such determinations.

Subpart F—Financial Responsibility: Class I Hazardous Waste Injection Wells

Source: 49 FR 20186, May 11, 1984, unless otherwise noted.

§ 144.60 Applicability.

- (a) The requirements of §§ 144.62, 144.63, and 144.70 apply to owners and operators of all existing and new Class I Hazardous waste injection wells, except as provided otherwise in this section.

§ 144.61 Definitions of terms as used in this subpart.

- (a) **Plugging and abandonment plan** means the plan for plugging and abandonment prepared in accordance with the requirements of §§ 144.28 and 144.51.
- (b) **Current plugging cost estimate** means the most recent of the estimates prepared in accordance with § 144.62 (a), (b) and (c).
- (c) **Parent corporation** means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the injection well owner or operator; the latter corporation is deemed a *subsidiary* of the parent corporation.
- (d) The following terms are used in the specifications for the financial test for plugging and abandonment. The definitions are intended to represent the common meanings of the terms as they are generally used by the business community.

Assets means all existing and all probable future economic benefits obtained or controlled by a particular entity.

Current assets means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

Current liabilities means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

Independently audited refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

Liabilities means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

Net working capital means current assets minus current liabilities.

Net worth means total assets minus total liabilities and is equivalent to owner's equity.

Tangible net worth means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

§ 144.62 Cost estimate for plugging and abandonment.

- (a) The owner or operator must prepare a written estimate, in current dollars, of the cost of plugging the injection well in accordance with the plugging and abandonment plan as specified in §§ 144.28 and 144.51. The plugging and abandonment cost estimate must equal the cost of plugging and abandonment at the point in the facility's operating life when the extent and manner of its operation would making plugging and abandonment the most expensive, as indicated by its plugging and abandonment plan.
- (b) The owner or operator must adjust the plugging and abandonment cost estimate for inflation within 30 days after each anniversary of the date on which the first plugging and abandonment cost estimate was prepared. The adjustment must be made as specified in paragraphs (b) (1) and (2) of this section, using an inflation factor derived from the annual Oil and Gas Field Equipment Cost Index. The inflation factor is the result of dividing the latest published annual Index by the Index for the previous year.
 - (1) The first adjustment is made by multiplying the plugging and abandonment cost estimate by the inflation factor. The result is the adjusted plugging and abandonment cost estimate.
 - (2) Subsequent adjustments are made by multiplying the latest adjusted plugging and abandonment cost estimate by the latest inflation factor.
- (c) The owner or operator must revise the plugging and abandonment cost estimate whenever a change in the plugging and abandonment plan increases the cost of plugging and abandonment. The revised plugging and abandonment cost estimate must be adjusted for inflation as specified in § 144.62(b).
- (d) The owner or operator must keep the following at the facility during the operating life of the facility: the latest plugging and abandonment cost estimate prepared in accordance with § 144.62 (a) and (c) and, when this estimate has been adjusted in accordance with § 144.62(b), the latest adjusted plugging and abandonment cost estimate.

§ 144.63 Financial assurance for plugging and abandonment.

An owner or operator of each facility must establish financial assurance for the plugging and abandonment of each existing and new Class I hazardous waste injection well. He must choose from the options as specified in paragraphs (a) through (f) of this section.

(a) *Plugging and abandonment trust fund.*

- (1) An owner or operator may satisfy the requirements of this section by establishing a plugging and abandonment trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. An owner or operator of a Class I well injecting hazardous waste must submit the originally signed duplicate of the trust agreement to the Regional Administrator with the permit application or for approval to operate under rule. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

- (2) The wording of the trust agreement must be identical to the wording specified in § 144.70(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 144.70(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current plugging and abandonment cost estimate covered by the agreement.
- (3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial permit or over the remaining operating life of the injection well as estimated in the plugging and abandonment plan, whichever period is shorter; this period is hereafter referred to as the “pay-in period.” The payments into the plugging and abandonment trust fund must be made as follows:
- (i) For a new well, the first payment must be made before the initial injection of hazardous waste. A receipt from the trustee for this payment must be submitted by the owner or operator to the Regional Administrator before this initial injection of hazardous waste. The first payment must be at least equal to the current plugging and abandonment cost estimate, except as provided in § 144.70(g), divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{\text{PE} - \text{CV}}{Y}$$

where PE is the current plugging and abandonment cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

- (ii) If an owner or operator establishes a trust fund as specified in § 144.63(a) of this chapter, and the value of that trust fund is less than the current plugging and abandonment cost estimate when a permit is awarded for the injection well, the amount of the current plugging and abandonment cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in paragraph (a)(3) of this section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to part 144 of this chapter. The amount of each payment must be determined by this formula:

$$\text{Next payment} = \frac{\text{PE} - \text{CV}}{Y}$$

where PE is the current plugging and abandonment cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

- (4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current plugging and abandonment cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in paragraph (a)(3) of this section.
- (5) If the owner or operator establishes a plugging and abandonment trust fund after having used one or more alternate mechanisms specified in this section or in § 144.63 of this chapter, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this paragraph.

- (6) After the pay-in period is completed, whenever the current plugging and abandonment cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current plugging and abandonment cost estimate, or obtain other financial assurance as specified in this section to cover the difference.
- (7) If the value of the trust fund is greater than the total amount of the current plugging and abandonment cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current plugging and abandonment cost estimate.
- (8) If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current plugging and abandonment cost estimate covered by the trust fund.
- (9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in paragraph (a) (7) or (8) of this section, the Regional Administrator will instruct the trustee to release to the owner or operator such funds as the Regional Administrator specifies in writing.
- (10) After beginning final plugging and abandonment, an owner or operator or any other person authorized to perform plugging and abandonment may request reimbursement for plugging and abandonment expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for plugging and abandonment activities, the Regional Administrator will determine whether the plugging and abandonment expenditures are in accordance with the plugging and abandonment plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of plugging and abandonment will be significantly greater than the value of the trust fund, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 144.63(i), that the owner or operator is no longer required to maintain financial assurance for plugging and abandonment.
- (11) The Regional Administrator will agree to termination of the trust when:
 - (i) An owner or operator substitutes alternate financial assurance as specified in this section; or
 - (ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 144.63(i).

(b) Surety bond guaranteeing payment into a plugging and abandonment trust fund.

- (1) An owner or operator must satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator with the application for a permit or for approval to operate under rule. The bond must be effective before the initial injection of hazardous waste. The surety company issuing the trust must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.
- (2) The wording of the surety bond must be identical to the wording in § 144.70(b).

- (3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 144.63(a), except that:
 - (i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and
 - (ii) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these requirements:
 - (A) Payments into the trust fund as specified in § 144.63(a);
 - (B) Updating of Schedule A of the trust agreement [see § 144.70(a)] to show current plugging and abandonment cost estimates;
 - (C) Annual valuations as required by the trust agreement; and
 - (D) Notices of nonpayment as required by the trust agreement.
- (4) The bond must guarantee that the owner or operator will:
 - (i) Fund the standby trust fund in an amount equal to the penal sum of the bond before beginning of plugging and abandonment of the injection well; or
 - (ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin plugging and abandonment is issued by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or
 - (iii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.
- (5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.
- (6) The penal sum of the bond must be in amount at least equal to the current plugging and abandonment cost estimate, except as provided in § 144.63(g).
- (7) Whenever the current plugging and abandonment cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current plugging and abandonment cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current plugging and abandonment cost estimate decreases, the penal sum may be reduced to the amount of the current plugging and abandonment cost estimate following written approval by the Regional Administrator.
- (8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during 120 days beginning on the date of the receipt of the notice of cancellation by both owner or operator and the Regional Administrator as evidenced by the returned receipts.

- (9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this section.

(c) ***Surety bond guaranteeing performance of plugging and abandonment.***

- (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. An owner or operator of a new facility must submit the bond to the Regional Administrator with the permit application or for approval to operate under rule. The bond must be effective before injection of hazardous waste is started. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.
- (2) The wording of the surety bond must be identical to the wording specified in § 144.70(c).
- (3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. The standby trust must meet the requirements specified in § 144.63(a), except that:
 - (i) An original signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and
 - (ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:
 - (A) Payments into the trust fund as specified in § 144.63(a);
 - (B) Updating of Schedule A of the trust agreement [see § 144.70(a)] to show current plugging and abandonment cost estimates;
 - (C) Annual valuations as required by the trust agreement; and
 - (D) Notices of nonpayment as required by the trust agreement.
- (4) The bond must guarantee that the owner or operator will:
 - (i) Perform plugging and abandonment in accordance with the plugging and abandonment plan and other requirements of the permit for the injection well whenever required to do so; or
 - (ii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.
- (5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a determination that the owner or operator has failed to perform plugging and abandonment in accordance with the plugging and abandonment plan and other permit requirements when required to do so, under terms of the bond the surety will perform plugging and abandonment as guaranteed by the bond or will deposit the amount of the penal sum into the standby trust fund.
- (6) The penal sum of the bond must be in an amount at least equal to the current plugging and abandonment cost estimate.

- (7) Whenever the current plugging and abandonment cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current plugging and abandonment cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section. Whenever the plugging and abandonment cost estimate decreases, the penal sum may be reduced to the amount of the current plugging and abandonment cost estimate following written approval by the Regional Administrator.
- (8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.
- (9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent. The Regional Administrator will provide such written consent when:
 - (i) An owner or operator substitute alternate financial assurance as specified in this section; or
 - (ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 144.63(i).
- (10) The surety will not be liable for deficiencies in the performance of plugging and abandonment by the owner or operator after the Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 144.63(i).

(d) ***Plugging and abandonment letter of credit.***

- (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph and submitting the letter to the Regional Administrator. An owner or operator of an injection well must submit the letter of credit to the Regional Administrator during submission of the permit application or for approval to operate under rule. The letter of credit must be effective before initial injection of hazardous waste. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.
- (2) The wording of the letter of credit must be identical to the wording specified in § 144.70(d).
- (3) An owner or operator who uses a letter of credit to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements of the trust fund specified in § 144.63(a), except that:
 - (i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the letter of credit; and
 - (ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:
 - (A) Payments into the trust fund as specified in § 144.63(a);
 - (B) Updating of Schedule A of the trust agreement (see § 144.70(a)) to show current plugging and abandonment cost estimates;

- (C) Annual valuations as required by the trust agreement; and
 - (D) Notices of nonpayment as required by the trust agreement.
- (4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for plugging and abandonment of the well by the letter of credit.
 - (5) The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Regional Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Regional Administrator have received the notice, as evidenced by the return receipts.
 - (6) The letter of credit must be issued in an amount at least equal to the current plugging and abandonment cost estimate, except as provided in § 144.63(g).
 - (7) Whenever the current plugging and abandonment cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current plugging and abandonment cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current plugging and abandonment cost estimate decreases, the amount of the credit may be reduced to the amount of the current plugging and abandonment cost estimate following written approval by the Regional Administrator.
 - (8) Following a determination that the owner or operator has failed to perform final plugging and abandonment in accordance with the plugging and abandonment plan and other permit requirements when required to do so, the Regional Administrator may draw on the letter of credit.
 - (9) If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. The Regional Administrator may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Regional Administrator will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the Regional Administrator.
 - (10) The Regional Administrator will return the letter of credit to the issuing institution for termination when:
 - (i) An owner or operator substitutes alternate financial assurance as specified in this section; or
 - (ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 144.63(i).

(e) *Plugging and abandonment insurance.*

- (1) An owner or operator may satisfy the requirements of this section by obtaining plugging and abandonment insurance which conforms to the requirements of this paragraph and submitting a certificate of such insurance to the Regional Administrator. An owner or operator of a new injection well must submit the certificate of insurance to the Regional Administrator with the permit application or for approval operate under rule. The insurance must be effective before injection starts. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.
- (2) The wording of the certificate of insurance must be identical to the wording specified in § 144.70(e).
- (3) The plugging and abandonment insurance policy must be issued for a face amount at least equal to the current plugging and abandonment estimate, except as provided in § 144.63(g). The term “face amount” means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurers future liability will be lowered by the amount of the payments.
- (4) The plugging and abandonment insurance policy must guarantee that funds will be available whenever final plugging and abandonment occurs. The policy must also guarantee that once plugging and abandonment begins, the issuer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Regional Administrator, to such party or parties as the Regional Administrator specifies.
- (5) After beginning plugging and abandonment, an owner or operator or any other person authorized to perform plugging and abandonment may request reimbursement for plugging and abandonment expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for plugging and abandonment activities, the Regional Administrator will determine whether the plugging and abandonment expenditures are in accordance with the plugging and abandonment plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of plugging and abandonment will be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 144.63(i), that the owner or operator is no longer required to maintain financial assurance for plugging and abandonment of the injection well.
- (6) The owner or operator must maintain the policy in full force and effect until the Regional Administrator consents to termination of the policy by the owner or operator as specified in paragraph (e)(10) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this section, will constitute a significant violation of these regulations, warranting such remedy as the Regional Administrator deems necessary. Such violation will be deemed to begin upon receipt by the Regional Administrator of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.
- (7) Each policy must contain provisions allowing assignment to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
- (8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice

by certified mail to the owner or operator and the Regional Administrator. Cancellation, termination, or failure to renew may not occur, however, during 120 days beginning with the date of receipt of the notice by both the Regional Administrator and the owner or operator, as evidenced by the return of receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

- (i) The Regional Administrator deems the injection well abandoned; or
 - (ii) The permit is terminated or revoked or a new permit is denied; or
 - (iii) Plugging and abandonment is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or
 - (iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under title 11 (Bankruptcy), U.S. Code; or
 - (v) The premium due is paid.
- (9) Whenever the current plugging and abandonment cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current plugging and abandonment estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current plugging and abandonment cost estimate decreases, the face amount may be reduced to the amount of the current plugging and abandonment cost estimate following written approval by the Regional Administrator.
- (10) The Regional Administrator will give written consent to the owner or operator that he may terminate the insurance policy when:
- (i) An owner or operator substitutes alternate financial assurance as specified in this section; or
 - (ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 144.63(i).

(f) ***Financial test and corporate guarantee for plugging and abandonment.***

- (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of either paragraph (f)(1)(i) or (f)(1)(ii) of this section:
- (i) The owner or operator must have:
 - (A) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and
 - (B) Net working capital and tangible net worth each at least six times the sum of the current plugging and abandonment cost estimate; and
 - (C) Tangible net worth of at least \$10 million; and
 - (D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current plugging and abandonment cost estimate.
 - (ii) The owner or operator must have:

- (A) A current rating for his most recent bond issuance of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and
 - (B) Tangible net worth at least six times the sum of the current plugging and abandonment cost estimate; and
 - (C) Tangible net worth of at least \$10 million; and
 - (D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current plugging and abandonment cost estimates.
- (2) The phrase "current plugging and abandonment cost estimate" as used in paragraph (f)(1) of this section refers to the cost estimate required to be shown in paragraphs 1 through 4 of the letter from the owner's or operator's chief financial officer § 144.70(f).
- (3) To demonstrate that he meets this test, the owner or operator must submit the following items to the Regional Administrator:
 - (i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 144.70(f); and
 - (ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and
 - (iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:
 - (A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and
 - (B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.
- (4) An owner or operator of a new injection well must submit the items specified in paragraph (f)(3) of this section to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.
- (5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.
- (6) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must send notice to the Regional Administrator of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.
- (7) The Regional Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (f)(1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (f)(3) of this section. If the Regional Administrator finds, on the basis of such reports or other information,

that the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, the owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of such a finding.

- (8) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements [see paragraph (f)(3)(ii) of this section]. An adverse opinion or disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance.
- (9) The owner or operator is no longer required to submit the items specified in paragraph (f)(3) of this section when:
 - (i) An owner or operator substitutes alternate financial assurance as specified in this section; or
 - (ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 144.63(i).
- (10) An owner or operator may meet the requirements of this section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantee must be the parent corporation of the owner or operator. The guarantee must meet the requirements for owners or operators in paragraphs (f)(1) through (f)(8) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in § 144.70(h). The corporate guarantee must accompany the items sent to the Regional Administrator as specified in paragraph (f)(3) of this section. The terms of the corporate guarantee must provide that:
 - (i) If the owner or operator fails to perform plugging and abandonment of the injection well covered by the corporate guarantee in accordance with the plugging and abandonment plan and other permit requirements whenever required to do so, the guarantee will do so or establish a trust fund as specified in § 144.63(a) in the name of the owner or operator.
 - (ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and the Regional Administrator, as evidenced by the return receipts. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.
 - (iii) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.
- (g) **Use of multiple financial mechanisms.** An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per injection well. These mechanisms are limited to trust funds, surety bonds, guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms must be as specified in paragraphs (a), (b), (d), and (e), respectively, of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the adjusted plugging and abandonment cost. If an owner or operator uses a trust fund in combination with a surety bond or letter of credit, he may use that trust fund

as the standby trust fund for the other mechanisms. A single standby trust may be established for two or more mechanisms. The Regional Administrator may invoke any or all of the mechanisms to provide for plugging and abandonment of the injection well.

- (h) ***Use of a financial mechanism for multiple facilities.*** An owner or operator may use a financial assurance mechanism specified in this section to meet the requirements of this section for more than one injection well. Evidence of financial assurance submitted to the Regional Administrator must include a list showing, for each injection well, the EPA Identification Number, name, address, and the amount of funds for plugging and abandonment assured by the mechanism. If the injection wells covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each injection well. In directing funds available through the mechanism for plugging and abandonment of any of the injection wells covered by the mechanism, the Regional Administrator may direct only the amount of funds designated for that injection well, unless the owner or operator agrees to use additional funds available under the mechanism.
- (i) ***Release of the owner or operator from the requirements of this section.*** Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that plugging and abandonment has been accomplished in accordance with the plugging and abandonment plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this section to maintain financial assurance for plugging and abandonment of the injection well, unless the Regional Administrator has reason to believe that plugging and abandonment has not been in accordance with the plugging and abandonment plan.

§ 144.64 Incapacity of owners or operators, guarantors, or financial institutions.

- (a) An owner or operator must notify the Regional Administrator by certified mail of the commencement of a voluntary or involuntary proceeding under title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within 10 business days after the commencement of the proceeding. A guarantor of a corporate guarantee as specified in § 144.63(f) must make such a notification if he is named as debtor, as required under the terms of the guarantee (§ 144.70(f)).
- (b) An owner or operator who fulfills the requirements of § 144.63 by obtaining a letter of credit, surety bond, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy, insolvency, or a suspension or revocation of the license or charter of the issuing institution. The owner or operator must establish other financial assurance or liability coverage within 60 days after such an event.

§ 144.65 Use of State-required mechanisms.

- (a) For a facility located in a State where EPA is administering the requirements of this subpart but where the State has plugging and abandonment regulations that include requirements for financial assurance of plugging and abandonment, an owner or operator may use State-required financial mechanisms to meet the requirements of this subpart if the Regional Administrator determines that the State mechanisms are at least equivalent to the mechanisms specified in this subpart. The Regional Administrator will evaluate the equivalency of the mechanisms mainly in terms of
 - (1) certainty of the availability of funds for the required plugging and abandonment activities and

(2) the amount of funds that will be made available. The Regional Administrator may also consider other factors. The owner or operator must submit to the Regional Administrator evidence of the establishment of the mechanism together with a letter requesting that the State-required mechanism be considered acceptable for meeting the requirements of this subpart. The submittal must include the following information: The facility's EPA Identification Number, name and address, and the amounts of funds for plugging and abandonment coverage assured by the mechanism. The Regional Administrator will notify the owner or operator of his determination regarding the mechanism's acceptability. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary for making this determination.

(b) If a State-required mechanism is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this subpart by increasing the funds available through the State-required mechanism or using additional mechanisms as specified in this subpart. The amounts of funds available through the State and Federal mechanisms must at least equal the amounts required by this subpart.

§ 144.66 State assumption of responsibility.

(a) If a State either assumes legal responsibility for an owner's or operator's compliance with the plugging and abandonment requirements of these regulations or assures that funds will be available from State sources to cover these requirements, the owner or operator will be in compliance with the requirements of this subpart if the Regional Administrator determines that the State's assumption of responsibility is at least equivalent to the mechanisms specified in this subpart. The Regional Administrator will evaluate the equivalency of State guarantees mainly in terms of

(1) certainty of the availability of funds for the required plugging and abandonment coverage and

(2) the amount of funds that will be made available. The Regional Administrator may also consider other factors. The owner or operator must submit to the Regional Administrator a letter from the State describing the nature of the State's assumption of responsibility together with a letter from the owner or operator requesting that the State's assumption of responsibility be considered acceptable for meeting the requirements of this subpart. The letter from the State must include, or have attached to it, the following information: the facility's EPA Identification Number, name and address, and the amounts of funds for plugging and abandonment coverage that are guaranteed by the State. The Regional Administrator will notify the owner or operator of his determination regarding the acceptability of the State's guarantee in lieu of mechanisms specified in this subpart. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary to make this determination. Pending this determination, the owner or operator will be deemed to be in compliance with § 144.63.

(b) If a State's assumption of responsibility is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this subpart by use of both the State's assurance and additional financial mechanisms as specified in this subpart. The amount of funds available through the State and Federal mechanisms must at least equal the amount required by this subpart.

§ 144.70 Wording of the instruments.

(a)

- (1) A trust agreement for a trust fund, as specified in § 144.63(a) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Trust Agreement

TRUST AGREEMENT, the "Agreement," entered into as of [date] by and between [name of the owner or operator], a [name of State] [insert "corporation," "partnership," "association," or "proprietorship"], the "Grantor," and [name of corporate trustee], [insert "incorporated in the State of ____" or "a national bank"], the "Trustee."

Whereas, the United States Environmental Protection Agency, "EPA," an agency of the United States Government, has established certain regulations applicable to the Grantor, requiring that an owner or operator of an injection well shall provide assurance that funds will be available when needed for plugging and abandonment of the injection well,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facility(ies) identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

- (a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.
- (b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.
- (c) Facility or activity means any "underground injection well" or any other facility or activity that is subject to regulation under the Underground Injection Control Program.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A [on Schedule A, for each facility list the EPA Identification Number, name, address, and the current plugging and abandonment cost estimate, or portions thereof, for which financial assurance is demonstrated by this Agreement].

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EPA. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the

Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EPA.

Section 4. Payment for Plugging and Abandonment. The Trustee shall make payments from the Fund as the EPA Regional Administrator shall direct, in writing, to provide for the payment of the costs of plugging and abandonment of the injection wells covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the EPA Regional Administrator from the Fund for plugging and abandonment expenditures in such amounts as the EPA Regional Administrator shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the EPA Regional Administrator specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; *except that:*

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 *et seq.*, including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the appropriate EPA Regional Administrator a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EPA Regional Administrator shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement of any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EPA Regional Administrator, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EPA Regional Administrator to the Trustee shall be in writing, signed by the EPA Regional Administrators of the Regions in which the facilities are located, or their designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EPA, except as provided for herein.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the appropriate EPA Regional Administrator, by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate EPA Regional Administrator, or by the Trustee and the appropriate EPA Regional Administrator if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EPA Regional Administrator, or by the Trustee and the EPA Regional Administrator if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EPA Regional Administrator issued in accordance with this

Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of [insert name of State].

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in 40 CFR 144.70(a)(1) as such regulations were constituted on the date first above written.

[Signature of Grantor]

By [Title]

Attest:

[Title]

[Seal]

[Signature of Trustee]

By

Attest:

[Title]

[Seal]

- (2) The following is an example of the certification of acknowledgment which must accompany the trust agreement for a trust fund as specified in § 144.63(a). State requirements may differ on the proper content of this acknowledgment.

State of _____

County of _____

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order to the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

[Signature of Notary Public]

- (b) A surety bond guaranteeing payment into a trust fund, as specified in § 144.63 of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Financial Guarantee Bond

Dated bond executed: _____

Effective date: _____

Principal: [legal name and business address of owner or operator].

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"].

State of incorporation: _____

Surety(ies): [name(s) and business address(es)].

EPA Identification Number, name, address, and plugging and abandonment amount(s) for each facility guaranteed by this bond [indicate plugging and abandonment amounts separately]: _____

Total penal sum of bond: \$_____

Surety's bond number: _____

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the U.S. Environmental Protection Agency (hereinafter called EPA), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-surties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Underground Injection Control Regulations (UIC), to have a permit or comply with requirements to operate under rule in order to own or operate each injection well identified above, and

Whereas said Principal is required to provide financial assurance for plugging and abandonment as a condition of the permit or provisions to operate under rule, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of plugging and abandonment of each injection well identified above, fund the standby trust fund in the amount(s) identified above for the injection well,

Or if the Principal shall fund the standby trust fund in such amount(s) within 15 days after an order to begin plugging and abandonment is issued by an EPA Regional Administrator or a U.S. district court or other court of competent jurisdiction,

Or, if the Principal shall provide alternate financial assurance, as specified in subpart F of 40 CFR part 144, as applicable, and obtain the EPA Regional Administrator's written approval of such assurance, within 90 days after the date of notice of cancellation is received by both the Principal and the EPA Regional Administrator(s) from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by an EPA Regional Administrator that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the injection well(s) into the standby trust funds as directed by the EPA Regional Administrator.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the EPA Regional Administrator(s) for the Region(s) in which the injection well(s) is (are) located, provided, however, that that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the EPA Regional Administrator(s), as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Regional Administrator(s) of the Region(s) in which the bonded facility(ies) is (are) located.

[The following paragraph is an optional rider that may be included but is not required.]

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new plugging and abandonment amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the EPA Regional Administrator(s).

In Witness Whereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 40 CFR 144.70(b) as such regulations were constituted on the date this bond was executed.

Principal

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate seal]

Corporate Surety(ies)

[Name and address]

State of incorporation: _____.

Liability limit: \$_____.

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: \$_____.

- (c) A surety bond guaranteeing performance of plugging and abandonment, as specified in § 144.63(c), must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Performance Bond

Date bond executed: _____.

Effective date: _____.

Principal: [legal name and business address of owner or operator].

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"].

State of incorporation: _____.

Surety(ies): [name(s) and business address(es)]

EPA Identification Number, name, address, and plugging and abandonment amounts(s) for each injection well guaranteed by this bond [indicate plugging and abandonment amounts for each well]:

Total penal sum of bond: \$____.

Surety's bond number: _____.

Know All Persons By These Presents, That We, the Principal and Surety(ies) hereto are firmly bound to the U.S. Environmental Protection Agency [hereinafter called EPA], in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Underground Injection Control Regulations, as amended, to have a permit or comply with provisions to operate under rule for each injection well identified above, and

Whereas said Principal is required to provide financial assurance for plugging and abandonment as a condition of the permit or approval to operate under rule, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully perform plugging and abandonment, whenever required to do so, of each injection well for which this bond guarantees plugging and abandonment, in accordance with the plugging and abandonment plan and other requirements of the permit or provisions for operating under rule and other requirements of the permit or provisions for operating under rule as may be amended, pursuant to all applicable laws, statutes, rules and regulations, as such laws, statutes, rules, and regulations may be amended,

Or, if the Principal shall provide alternate financial assurance as specified in subpart F of 40 CFR part 144, and obtain the EPA Regional Administrator's written approval of such assurance, within 90 days after the date of notice of cancellation is received by both the Principal and the EPA Regional Administrator(s) from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by an EPA Regional Administrator that the Principal has been found in violation of the plugging and abandonment requirements of 40 CFR part 144, for an injection well which this bond guarantees performances of plugging and abandonment, the Surety(ies) shall either perform plugging and abandonment in accordance with the plugging and abandonment plan and other permit requirements or provisions for operating under rule and other requirements or place the amount for plugging and abandonment into a standby trust fund as directed by the EPA Regional Administrator.

Upon notification by an EPA Regional Administrator that the Principal has failed to provide alternate financial assurance as specified in subpart F of 40 CFR part 144, and obtain written approval of such assurance from the EPA Regional Administrator(s) during the 90 days following receipt by both the Principal and the EPA Regional Administrator(s) of a notice of cancellation of the bond, the Surety(ies) shall place funds in the amount guaranteed for the injection well(s) into the standby trust fund as directed by the EPA Regional Administrator.

The surety(ies) hereby waive(s) notification of amendments to plugging and abandonment plans, permits, applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice by certified mail to the owner or operator and to the EPA Regional Administrator(s) for the Region(s) in which the injection well(s) is (are) located, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the EPA Regional Administrator(s), as evidenced by the return receipts.

The principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Regional Administrator(s) of the EPA Region(s) in which the bonded injection well(s) is (are) located.

[The following paragraph is an optional rider that may be included but is not required.]

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new plugging and abandonment amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the EPA Regional Administrator(s).

In Witness Whereof, The Principal and Surety(ies) have executed this Performance Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording on this surety bond is identical to the wording specified in 40 CFR 144.70(c) as such regulation was constituted on the date this bond was executed.

Principal.

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate seal]

[Corporate Surety(ies)]

[Name and address]

State of incorporation:

Liability limit: \$_____.

[Signature(s)]

[Name(s) and title(s)]

Corporate seal:

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: \$_____.

(d) A letter of credit, as specified in § 144.63(d) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Irrevocable Standby Letter of Credit

Regional Administrator(s)

Region(s) _____

U.S. Environmental Protection Agency.

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. _____ in your favor, at the request and for the account of [owner's or operator's name and address] up to the aggregate amount of [in words] U.S. dollars \$_____, available upon presentation [insert, if more than one Regional Administrator is a beneficiary, "by any one of you"] of

(1) Your sight draft, bearing reference to this letter of credit No. _____, and

(2) Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the Safe Drinking Water Act."

This letter of credit is effective as of [date] and shall expire on [date at least 1 year later], but such expiration date shall be automatically extended for a period of [at least 1 year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and [owner's or operator's name] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and [owner's or operator's name], as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner's or operator's name] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in 40 CFR 144.70(d) as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]

[Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce," or "the Uniform Commercial Code"].

- (e) A certificate of insurance, as specified in § 144.63(e) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Certificate of Insurance for Plugging and Abandonment

Name and Address of Insurer (herein called the "insurer"):

Name and Address of Insurer (herein called the "insurer"):

Injection Wells covered: [list for each well: The EPA Identification Number, name, address, and the amount of insurance for plugging and abandonment (these amounts for all injection wells covered must total the face amount shown below).]

Face Amount: _____

Policy Number: _____

Effective Date: _____

The insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for plugging and abandonment for the injection wells identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of 40 CFR 144.63(e), as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the EPA Regional Administrator(s) of the U.S. Environmental Protection Agency, the Insurer agrees to furnish to the EPA Regional Administrator(s) a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in 40 CFR 144.70(e) as such regulations were constituted on the date shown immediately below.

[Authorized signature of Insurer]

[Name of person signing]

[Title of person signing]

[Signature of witness or notary:]

[Date]

- (f) A letter from the chief financial officer, as specified in § 144.63(f) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Letter From Chief Financial Officer

[Address to Regional Administrator of every Region in which injection wells for which financial responsibility is to be demonstrated through the financial test are located.]

I am the chief financial officer of [name and address of firm.] This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in subpart F of 40 CFR part 144.

[Fill out the following four paragraphs regarding injection wells and associated cost estimates. If your firm has no injection wells that belong in a particular paragraph, write "None" in the space indicated. For each injection well, include its EPA Identification Number, name, address, and current plugging and abandonment cost estimate.]

1. This firm is the owner or operator of the following injection wells for which financial assurance for plugging and abandonment is demonstrated through the financial test specified in subpart F of 40 CFR part 144. The current plugging and abandonment cost estimate covered by the test is shown for each injection well: _____.

2. This firm guarantees, through the corporate guarantee specified in subpart F of 40 CFR part 144, the plugging and abandonment of the following injection wells owned or operated by subsidiaries of this firm. The current cost estimate for plugging and abandonment so guaranteed is shown for each injection well: _____.

3. In States where EPA is not administering the financial requirements of subpart F of 40 CFR part 144, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the plugging and abandonment of the following injection wells through the use of a test equivalent or substantially equivalent to the financial test specified in subpart F of 40 CFR part 144. The current plugging and abandonment cost estimate covered by such a test is shown for each injection well: _____.

4. This firm is the owner or operator of the following injection wells for which financial assurance for plugging and abandonment is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in subpart F of 40 CFR part 144 or equivalent or substantially equivalent State mechanisms. The current plugging and abandonment cost estimate not covered by such financial assurance is shown for each injection well: _____.

This firm [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended [date].

[Fill in Alternative I if the criteria of paragraph (f)(1)(i) of § 144.63 of this chapter are used. Fill in Alternative II if the criteria of paragraph (f)(1)(ii) of § 144.63 of this chapter are used.]

Alternative I

1. (a) Current plugging and abandonment cost	\$_____	
(b) Sum of the company's financial responsibilities under 40 CFR Parts 264 and 265, Subpart H, currently met using the financial test or corporate guarantee		
(c) Total of lines a and b		
*2. Total liabilities [if any portion of the plugging and abandonment cost is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4]		
*3. Tangible net worth		
*4. Net worth		
*5. Current assets		
*6. Current liabilities		
*7. Net working capital [line 5 minus line 6]		
*8. The sum of net income plus depreciation, depletion and amortization		
*9. Total assets in U.S. (required only if less than 90% of firm's assets are located in U.S.)		
	Yes	No
10. Is line 3 at least \$10 million?		
11. Is line 3 at least 6 times line 1(c)?		

12. Is line 7 at least 6 times line 1(c)?		
*13. Are at least 90% of firm's assets located in the U.S.? If not, complete line 14.		
14. Is line 9 at least 6 times line 1(c)?		
15. Is line 2 divided by line 4 less than 2.0?		
16. Is line 8 divided by line 2 greater than 0.1?		
17. Is line 5 divided by line 6 greater than 1.5?		

Alternative II

1. (a) Current plugging and abandonment cost	\$_____	
(b) Sum of the company's financial responsibilities under 40 CFR Parts 264 and 265, Subpart H, currently met using the financial test or corporate guarantee		
(c) Total of lines a and b		
2. Current bond rating of most recent issuance of this firm and name of rating service		
3. Date of issuance of bond		
4. Date of maturity of bond		
*5. Tangible net worth [if any portion of the plugging and abandonment cost estimate is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to this line]		
*6. Total assets in U.S. (required only if less than 90% of firm's assets are located in U.S.)		
	Yes	No
7. Is line 5 at least \$10 million?		
8. Is line 5 at least 6 times line 1(c)?		
*9. Are at least 90% of the firm's assets located in the U.S.? If not, complete line 10		
10. Is line 6 at least 6 times line 1(c)?		

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 144.70(f) as such regulations were constituted on the date shown immediately below.

[Signature]

[Name]

[Title]

[Date]

- (g) A corporate guarantee as specified in § 144.63(e) must be worded as follows except that instructions in brackets are to be replaced with the relevant information and the bracketed material deleted:

Guarantee for Plugging and Abandonment

Guarantee made this ____ day of _____, 19____, by [name of guaranteeing entity], a business corporation organized under the laws of the State of _____, herein referred to as guarantor, to the United States Environmental Protection Agency (EPA), obligee, on behalf of our subsidiary [owner or operator] of [business address].

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in 40 CFR 144.63(e).
2. [Owner or operator] owns or operates the following Class I hazardous waste injection well covered by this guarantee: [List for each facility: EPA Identification Number, name, and address. Indicate for each whether guarantee is for closure, post-closure care, or both.]
3. "Plugging and abandonment plan" as used below refers to the plans maintained as required by 40 CFR part 144 for the plugging and abandonment of injection wells as identified above.
4. For value received from [owner or operator], guarantor guarantees to EPA that in the event that [owner or operator] fails to perform ["plugging and abandonment"] of the above facility(ies) in accordance with the plugging and abandonment plan and other requirements when required to do so, the guarantor will do so or fund a trust fund as specified in 40 CFR 144.63 in the name of [owner or operator] in the amount of the adjusted plugging and abandonment cost estimates prepared as specified in 40 CFR 144.62.
5. Guarantor agrees that, if at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor will send within 90 days, by certified mail, notice to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located and to [owner or operator] that he intends to provide alternate financial assurance as specified in 40 CFR 144.63 in the name of [owner or operator]. Within 30 days after sending such notice, the guarantor will establish such financial assurance if [owner or operator] has not done so.
6. The guarantor agrees to notify the Regional Administrator, by certified mail, of a voluntary or involuntary case under Title 11, U.S. Code, naming guarantor as debtor, within 10 days after its commencement.
7. Guarantor agrees that within 30 days after being notified by an EPA Regional Administrator of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor of plugging and abandonment, he will establish alternate financial assurance, as specified in 40 CFR 144.63, in the name of [owner or operator] if [owner or operator] has not done so.
8. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of the plugging and abandonment plan, the extension or reduction of the time of performance of plugging and abandonment or any other modification or alteration of an obligation of [owner or operator] pursuant to 40 CFR part 144.

9. Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable financial assurance requirements of 40 CFR part 144 for the above-listed facilities, except that guarantor may cancel this guarantee by sending notice by certified mail, to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located and to [owner or operator], such cancellation to become effective no earlier than 120 days after actual receipt of such notice by both EPA and [owner or operator] as evidenced by the return receipts.

10. Guarantor agrees that if [owner or operator] fails to provide alternate financial assurance and obtain written approval of such assurance from the EPA Regional Administrator(s) within 90 days after a notice of cancellation by the guarantor is received by both the EPA Regional Administrator(s) and [owner or operator], guarantor will provide alternate financial assurance as specified in 40 CFR 144.63 in the name of [owner or operator].

11. Guarantor expressly waives notice of acceptance of this guarantee by the EPA or by [owner or operator]. Guarantor also expressly waives notice of amendments or modifications of the plugging and abandonment plan.

I hereby certify that the wording of this guarantee is identical to the wording specified in 40 CFR 144.70(f).

Effective date: _____.

[Name of guarantor]

[Authorized signature for guarantor]

[Type name of person signing]

[Title of person signing]

Signature of witness or notary: _____

[48 FR 14189, Apr. 1, 1983, as amended at 59 FR 29959, June 10, 1994]

Subpart G—Requirements for Owners and Operators of Class V Injection Wells

Source: 64 FR 68566, Dec. 7, 1999, unless otherwise noted.

§ 144.79 General.

This subpart tells you what requirements apply if you own or operate a Class V injection well. You may also be required to follow additional requirements listed in the rest of this part. Where they may apply, these other requirements are referenced rather than repeated. The requirements described in this subpart and elsewhere in this part are to protect underground sources of drinking water and are part of the Underground Injection Control (UIC) Program established under the Safe Drinking Water Act. This subpart is written in a special format to make it easier to understand the regulatory requirements. Like other EPA regulations, it establishes enforceable legal requirements.

DEFINITION OF CLASS V INJECTION WELLS

§ 144.80 What is a Class V injection well?

As described in § 144.6, injection wells are classified as follows:

(a) **Class I.**

- (1) Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to inject hazardous waste beneath the lowermost formation containing, within one-quarter mile of the well bore, an underground source of drinking water.
- (2) Other industrial and municipal disposal wells which inject fluids beneath the lowermost formation containing, within one quarter mile of the well bore, an underground source of drinking water;
- (3) Radioactive waste disposal wells which inject fluids below the lowermost formation containing an underground source of drinking water within one quarter mile of the well bore.

(b) **Class II.** Wells which inject fluids:

- (1) 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 waste waters 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.
- (2) For enhanced recovery of oil or natural gas; and
- (3) For storage of hydrocarbons which are liquid at standard temperature and pressure.

(c) **Class III.** Wells which inject fluids for extraction of minerals including:

- (1) Mining of sulfur by the Frasch process;
- (2) *In situ* production of uranium or other metals; this category includes only in situ production from ore bodies which have not been conventionally mined. Solution mining of conventional mines such as stopes leaching is included in Class V.
- (3) Solution mining of salts or potash.

(d) **Class IV.**

- (1) Wells used by generators of hazardous waste or of radioactive waste, by owners and operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste into a formation which within one quarter ($\frac{1}{4}$) mile of the well contains an underground source of drinking water.
- (2) Wells used by generators of hazardous waste or of radioactive waste, by owners and operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste above a formation which within one quarter ($\frac{1}{4}$) mile of the well contains an underground source of drinking water.
- (3) Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to dispose of hazardous waste, which cannot be classified under paragraph (a)(1) or (d)(1) and (2) of this section (e.g., wells used to dispose of hazardous waste into or above a formation which contains an aquifer which has been exempted pursuant to 40 CFR 146.04).

- (e) **Class V.** Injection wells not included in Class I, II, III, IV or VI. Typically, Class V wells are shallow wells used to place a variety of fluids directly below the land surface. However, if the fluids you place in the ground qualify as a hazardous waste under the Resource Conservation and Recovery Act (RCRA), your well is either a Class I or Class IV well, not a Class V well. Examples of Class V wells are described in § 144.81.
- (f) **Class VI.** Wells used for geologic sequestration of carbon dioxide beneath the lowermost formation containing a USDW, except those wells that are experimental in nature; or, wells used for geologic sequestration of carbon dioxide that have been granted a waiver of the injection depth requirements pursuant to requirements at § 146.95 of this chapter; or, wells used for geologic sequestration of carbon dioxide that have received an expansion to the areal extent of a existing Class II enhanced oil recovery or enhanced gas recovery aquifer exemption pursuant to § 146.4 of this chapter and § 144.7(d).

[64 FR 68566, Dec. 7, 1999, as amended at 75 FR 77290, Dec. 10, 2010]

§ 144.81 Does this subpart apply to me?

This subpart applies to you if you own or operate a Class V well, for example:

- (1) Air conditioning return flow wells used to return to the supply aquifer the water used for heating or cooling in a heat pump;
- (2) Large capacity cesspools including multiple dwelling, community or regional cesspools, or other devices that receive sanitary wastes, containing human excreta, which have an open bottom and sometimes perforated sides. The UIC requirements do not apply to single family residential cesspools nor to non-residential cesspools which receive solely sanitary waste and have the capacity to serve fewer than 20 persons a day.
- (3) Cooling water return flow wells used to inject water previously used for cooling;
- (4) Drainage wells used to drain surface fluids, primarily storm runoff, into a subsurface formation;
- (5) Dry wells used for the injection of wastes into a subsurface formation;
- (6) Recharge wells used to replenish the water in an aquifer;
- (7) Salt water intrusion barrier wells used to inject water into a fresh aquifer to prevent the intrusion of salt water into the fresh water;
- (8) Sand backfill and other backfill wells used to inject a mixture of water and sand, mill tailings or other solids into mined out portions of subsurface mines whether what is injected is a radioactive waste or not.
- (9) Septic system wells used to inject the waste or effluent from a multiple dwelling, business establishment, community or regional business establishment septic tank. The UIC requirements do not apply to single family residential septic system wells, nor to non-residential septic system wells which are used solely for the disposal of sanitary waste and have the capacity to serve fewer than 20 persons a day.
- (10) Subsidence control wells (not used for the purpose of oil or natural gas production) used to inject fluids into a non-oil or gas producing zone to reduce or eliminate subsidence associated with the overdraft of fresh water;
- (11) Injection wells associated with the recovery of geothermal energy for heating, aquaculture and production of electric power;
- (12) Wells used for solution mining of conventional mines such as stopes leaching;

- (13) Wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts;
- (14) Injection wells used in experimental technologies.
- (15) Injection wells used for in situ recovery of lignite, coal, tar sands, and oil shale.
- (16) Motor vehicle waste disposal wells that receive or have received fluids from vehicular repair or maintenance activities, such as an auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shop (e.g., transmission and muffler repair shop), or any facility that does any vehicular repair work. Fluids disposed in these wells may contain organic and inorganic chemicals in concentrations that exceed the maximum contaminant levels (MCLs) established by the primary drinking water regulations (see 40 CFR part 141). These fluids also may include waste petroleum products and may contain contaminants, such as heavy metals and volatile organic compounds, which pose risks to human health.

[64 FR 68566, Dec. 7, 1999, as amended at 67 FR 39593, June 7, 2002]

REQUIREMENTS FOR ALL CLASS V INJECTION WELLS

§ 144.82 What must I do to protect underground sources of drinking water?

If you own or operate any type of Class V well, the regulations below require that you cannot allow movement of fluid into USDWs that might cause endangerment, you must comply with other Federal UIC requirements in 40 CFR parts 144 through 147, and you must comply with any other measures required by your State or EPA Regional Office UIC Program to protect USDWs, and you must properly close your well when you are through using it. You also must submit basic information about your well, as described in § 144.83.

(a) **Prohibition of fluid movement.**

- (1) As described in § 144.12(a), your injection activity cannot allow the movement of fluid containing any contaminant into USDWs, if the presence of that contaminant may cause a violation of the primary drinking water standards under 40 CFR part 141, other health based standards, or may otherwise adversely affect the health of persons. This prohibition applies to your well construction, operation, maintenance, conversion, plugging, closure, or any other injection activity.
- (2) If the Director of the UIC Program in your State or EPA Region learns that your injection activity may endanger USDWs, he or she may require you to close your well, require you to get a permit, or require other actions listed in § 144.12(c), (d), or (e).

(b) **Closure requirements.** You must close the well in a manner that complies with the above prohibition of fluid movement. Also, you must dispose or otherwise manage any soil, gravel, sludge, liquids, or other materials removed from or adjacent to your well in accordance with all applicable Federal, State, and local regulations and requirements.

(c) **Other requirements in Parts 144 through 147.** Beyond this subpart, you are subject to other UIC Program requirements in 40 CFR parts 144 through 147. While most of the relevant requirements are repeated or referenced in this subpart for convenience, you need to read these other parts to understand the entire UIC Program.

- (d) **Other State or EPA requirements.** 40 CFR parts 144 through 147 define minimum Federal UIC requirements. EPA Regional Offices administering the UIC Program have the flexibility to establish additional or more stringent requirements based on the authorities in parts 144 through 147, if believed to be necessary to protect USDWs. States can have their own authorities to establish additional or more stringent requirements if needed to protect USDWs. You must comply with these additional requirements, if any exist in your area. Contact the UIC Program Director in your State or EPA Region to learn more.

§ 144.83 Do I need to notify anyone about my Class V injection well?

Yes, you need to provide basic “inventory information” about your well to the UIC Director, if you haven't already. You also need to provide any additional information that your UIC Program Director requests in accordance with the provisions of the UIC regulations.

- (a) **Inventory requirements.** Unless you know you have already satisfied the inventory requirements in § 144.26 that were in effect prior to the issuance of this Subpart G, you must give your UIC Program Director certain information about yourself and your injection operation.

Note: This information is requested on national form “Inventory of Injection Wells,” OMB No. 2040-0042.

- (1) The requirements differ depending on your well status and location, as described in the following table:

If your well is . . .	And you're in one of these locations ("Primacy" States, where the State runs the Class V UIC Program): Alabama, Arkansas, Commonwealth of Northern Mariana Islands, Connecticut, Delaware, Florida, Georgia, Guam, Idaho, Illinois, Kansas, Louisiana, Maine, Maryland, Massachusetts, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Puerto Rico, Rhode Island, South Carolina, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, or Wyoming	Or you're in one of these locations ("Direct Implementation" or DI Programs, where EPA runs the Class V UIC Program): Alaska, American Samoa, Arizona, California, Colorado, Hawaii, Indiana, Iowa, Kentucky, Michigan, Minnesota, Montana, New York, Pennsylvania, South Dakota, Tennessee, Virginia, Virgin Islands, Washington, DC, or any Indian Country
(i) New (prior to construction of your well)	. . . then you must contact your State UIC Program to determine what you must submit and by when.	. . . then you must submit the inventory information described in (a)(2) of this section prior to constructing your well.
(ii) Existing (construction underway or completed)	. . . then you must contact your State UIC Program to determine what you must submit and by when.	. . . then you must cease injection and submit the inventory information. You may resume injection 90 days after you submit the information unless the UIC Program Director notifies you that injection may not resume or may resume sooner.

- (2) If your well is in a Primacy State or a DI Program State, here is the information you must submit:

- (i) No matter what type of Class V well you own or operate, you must submit at least the following information for each Class V well: facility name and location; name and address of legal contact; ownership of facility; nature and type of injection well(s); and operating status of injection well(s).
- (ii) **Additional information.** If you are in a Direct Implementation State and you own or operate a well listed below you must also provide the information listed in paragraph (a) (2) (iii) as follows:
 - (A) Sand or other backfill wells (40 CFR 144.81(8) and 146.5(e)(8) of this chapter);
 - (B) Geothermal energy recovery wells (40 CFR 144.81(11) and 146.5 (e)(12) of this chapter);
 - (C) Brine return flow wells (40 CFR 144.81(13) and 146.5 (e)(14) of this chapter);
 - (D) Wells used in experimental technology (40 CFR 144.81(14) and 146.5 (e)(15) of this chapter);
 - (E) Municipal and industrial disposal wells other than Class I; and
 - (F) Any other Class V wells at the discretion of the Regional Administrator.

- (iii) You must provide a list of all wells owned or operated along with the following information for each well. (A single description of wells at a single facility with substantially the same characteristics is acceptable).
 - (A) Location of each well or project given by Township, Range, Section, and Quarter-Section, or by latitude and longitude to the nearest second, according to the conventional practice in your State;
 - (B) Date of completion of each well;
 - (C) Identification and depth of the underground formation(s) into which each well is injecting;
 - (D) Total depth of each well;
 - (E) Construction narrative and schematic (both plan view and cross-sectional drawings);
 - (F) Nature of the injected fluids;
 - (G) Average and maximum injection pressure at the wellhead;
 - (H) Average and maximum injection rate; and
 - (I) Date of the last inspection.

- (3) Regardless of whether your well is in a Primacy State or DI Program you are responsible for knowing about, understanding, and complying with these inventory requirements.

- (b) **Information in response to requests.** If you are in one of the DI Programs listed in the table above, the UIC Program Director may require you to submit other information believed necessary to protect underground sources of drinking water.

- (1) Such information requirements may include, but are not limited to:
 - (i) Perform ground water monitoring and periodically submit your monitoring results;
 - (ii) Analyze the fluids you inject and periodically submit the results of your analyses;
 - (iii) Describe the geologic layers through which and into which you are injecting; and
 - (iv) Conduct other analyses and submit other information, if needed to protect underground sources of drinking water.
- (2) If the Director requires this other information, he or she will request it from you in writing, along with a brief statement on why the information is required. This written notification also will tell you when to submit the information.
- (3) You are prohibited from using your injection well if you fail to comply with the written request within the time frame specified. You can start injecting again only if you receive a permit.

§ 144.84 Do I need to get a permit?

No, unless you fall within an exception described below:

- (a) **General authorization by rule.** With certain exceptions listed in paragraph (b) of this section, your Class V injection activity is “authorized by rule,” meaning you have to comply with all the requirements of this subpart and the rest of the UIC Program but you don't have to get an individual permit. Well authorization expires once you have properly closed your well, as described in § 144.82(b).

- (b) **Circumstances in which permits or other actions are required.** If you fit into one of the categories listed below, your Class V well is no longer authorized by rule. This means that you have to either get a permit or close your injection well. You can find out by contacting the UIC Program Director in your State or EPA Region if this is the case. Subpart D of this part tells you how to apply for a permit and describes other aspects of the permitting process. Subpart E of this part outlines some of the requirements that apply to you if you get a permit.
- (1) You fail to comply with the prohibition of fluid movement standard in § 144.12(a) and described in § 144.82(a) (in which case, you have to get a permit, close your well, and/or comply with other conditions determined by the UIC Program Director in your State or EPA Region);
 - (2) You own or operate a Class V large-capacity cesspool (in which case, you must close your well as specified in the additional requirements below) or a Class V motor vehicle waste disposal well in a ground water protection area or sensitive ground water area (in which case, you must either close your well or get a permit as specified in the additional requirements in this subsection). New motor vehicle waste disposal wells and new cesspools are prohibited as of April 5, 2000;
 - (3) You are specifically required by the UIC Program Director in your State or EPA Region to get a permit (in which case, rule authorization expires upon the effective date of the permit issued, or you are prohibited from injecting into your well upon:
 - (i) Failure to submit a permit application in a timely manner as specified in a notice from the Director; or
 - (ii) Upon the effective date of permit denial);
 - (4) You have failed to submit inventory information to your UIC Program Director, as described in § 144.83(a) (in which case, you are prohibited from injecting into your well until you comply with the inventory requirements); or
 - (5) If you are in a DI State and you received a request from your UIC Program Director for additional information under § 144.83(b), and have failed to comply with the request in a timely manner (in which case, you are prohibited from injecting into your well until you get a permit).

ADDITIONAL REQUIREMENTS FOR CLASS V LARGE-CAPACITY CESSPOOLS AND MOTOR VEHICLE WASTE DISPOSAL WELLS

§ 144.85 Do these additional requirements apply to me?

- (a) **Large-capacity cesspools.** The additional requirements apply to all new and existing large-capacity cesspools regardless of their location. If you are using a septic system for these type of wastes you are not subject to the additional requirements in this subpart.
- (b) **Motor vehicle waste disposal wells existing on April 5, 2000.** If you have a Class V motor vehicle waste disposal well these requirements apply to you if your well is located in a ground water protection area or other sensitive ground water area that is identified by your State or EPA Region. If your State or EPA Region fails to identify ground water protection areas and/or other sensitive ground water areas these requirements apply to all Class V motor vehicle wells in the State.
- (c) **New motor vehicle waste disposal wells.** The additional requirements apply to all new motor vehicle waste disposal wells as of April 5, 2000.

§ 144.86 What are the definitions I need to know?

- (a) **State Drinking Water Source Assessment and Protection Program.** This is a new approach to protecting drinking water sources, specified in the 1996 Amendments to the Safe Drinking Water Act at Section 1453. States must prepare and submit for EPA approval a program that sets out how States will conduct local assessments, including: delineating the boundaries of areas providing source waters for public water systems; identifying significant potential sources of contaminants in such areas; and determining the susceptibility of public water systems in the delineated areas to the inventoried sources of contamination.
- (b) **Complete local source water assessment for ground water protection areas.** When EPA has approved a State's Drinking Water Source Assessment and Protection Program, States will begin to conduct local assessments for each public water system in their State. For the purposes of this rule, local assessments for community water systems and non-transient non-community systems are complete when four requirements are met: First, a State must delineate the boundaries of the assessment area for community and non-transient non-community water systems. Second, the State must identify significant potential sources of contamination in these delineated areas. Third, the State must "determine the susceptibility of community and non-transient non-community water systems in the delineated area to such contaminants." Lastly, each State will develop its own plan for making the completed assessments available to the public.
- (c) **Ground water protection area.** A ground water protection area is a geographic area near and/or surrounding community and non-transient non-community water systems that use ground water as a source of drinking water. These areas receive priority for the protection of drinking water supplies and States are required to delineate and assess these areas under section 1453 of the Safe Drinking Water Act. The additional requirements in § 144.88 apply to you if your Class V motor vehicle waste disposal well is in a ground water protection area for either a community water system or a non-transient non-community water system, in many States, these areas will be the same as Wellhead Protection Areas that have been or will be delineated as defined in section 1428 of the SDWA.
- (d) **Community water system.** A community water system is a public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.
- (e) **Non-transient non-community water system.** A public water system that is not a community water system and that regularly serves at least 25 of the same people over six months a year. These may include systems that provide water to schools, day care centers, government/military installations, manufacturers, hospitals or nursing homes, office buildings, and other facilities.
- (f) **Delineation.** Once a State's Drinking Water Source Assessment and Protection Program is approved, the States will begin delineating their local assessment areas. Delineation is the first step in the assessment process in which the boundaries of ground water protection areas are identified.
- (g) **Other sensitive ground water areas.** States may also identify other areas in the State in addition to ground water protection areas that are critical to protecting underground sources of drinking water from contamination. These other sensitive ground water areas may include areas such as areas overlying sole-source aquifers; highly productive aquifers supplying private wells; continuous and highly productive aquifers at points distant from public water supply wells; areas where water supply aquifers are recharged; karst aquifers that discharge to surface reservoirs serving as public water supplies; vulnerable or sensitive hydrogeologic settings, such as glacial outwash deposits, eolian sands, and fractured

volcanic rock; and areas of special concern selected based on a combination of factors, such as hydrogeologic sensitivity, depth to ground water, significance as a drinking water source, and prevailing land-use practices.

§ 144.87 How does the identification of ground water protection areas and other sensitive ground water areas affect me?

- (a) You are subject to these new requirements if you own or operate an existing motor vehicle well and you are located in a ground water protection area or an other sensitive ground water area. If your State or EPA Region fails to identify these areas within the specified time frames these requirements apply to all existing motor vehicle waste disposal wells within your State.
- (b) **Ground water protection areas.**
 - (1) For the purpose of this subpart, States are required to complete all local source water assessments for ground water protection areas by January 1, 2004. Once a local assessment for a ground water protection area is complete every existing motor vehicle waste disposal well owner in that ground water protection area has one year to close the well or receive a permit. If a State fails to complete all local assessments for ground water protection areas by January 1, 2004, the following may occur:
 - (i) The new requirements in this subpart will apply to all existing motor vehicle waste disposal wells in the State and owners and operators of motor vehicle waste disposal wells located outside of completed assessments for ground water protection areas must close their well or receive a permit by January 1, 2005.
 - (ii) EPA may grant a State an extension for up to one year from the January 1, 2004 deadline if the State is making reasonable progress in completing the source water assessments for ground water protection areas. States must apply for the extension by June 1, 2003. If a State fails to complete the assessments for the remaining ground water protection areas by the extended date the rule requirements will apply to all motor vehicle waste disposal wells in the State and owners and operators of motor vehicle waste disposal wells located outside of ground water protection areas with completed assessments must close their well or receive a permit by January 1, 2006.
 - (2) The UIC Program Director may extend the compliance deadline for specific motor vehicle waste disposal wells for up to one year if the most efficient compliance option for the well is connection to a sanitary sewer or installation of new treatment technology.
- (c) **Other sensitive ground water areas.** States may also delineate other sensitive ground water areas by January 1, 2004. Existing motor vehicle waste disposal well owners and operators within other sensitive ground water areas have until January 1, 2007 to receive a permit or close the well. If a State or EPA Region fails to identify these additional sensitive ground water areas by January 1, 2004, the new requirements of this rule will apply to all motor vehicle waste disposal wells in the State effective January 1, 2007 unless they are subject to a different compliance date pursuant to paragraph (b) of this section. Again, EPA may extend the January 1, 2004 deadline for up to one year for States to delineate other sensitive ground water areas if the State is making reasonable progress in identifying the sensitive areas. States must apply for this extension by June 1, 2003. If a State has been granted an extension, existing motor vehicle waste disposal well owners and operators within the sensitive ground water areas have until January 1, 2008 to close the well or receive a permit, unless they are subject to a different compliance date pursuant to paragraph (b) of this section. If a State has been granted an extension and

fails to delineate sensitive areas by the extended date, the rule requirements will apply to all motor vehicle waste disposal wells in the State and owners and operators have until January 1, 2008 to close the well or receive a permit, unless they are subject to a different compliance date pursuant to paragraph (b) of this section.

- (d) ***How to find out if your well is in a ground water protection area or sensitive ground water area.*** States are required to make their local source water assessments widely available to the public through a variety of methods after the assessments are complete. You can find out if your Class V well is in a ground water protection area by contacting the State agency responsible for the State Drinking Water Source Assessment and Protection Program in your area. You may call the Safe Drinking Water Hotline at 1-800-426-4791 to find out who to call in your State for this information. The State office responsible for implementing the Drinking Water Source Assessment and Protection Program makes the final and official determination of boundaries for ground water protection areas. Because States that choose to delineate other sensitive ground water areas are also required to make the information on these areas accessible to the public, they may do so in a manner similar to the process used by the States in publicizing the EPA approved Drinking Water Source Assessment and Protection Program. You can find out if your Class V well is in an other sensitive ground water area by contacting the State or Federal agency responsible for the Underground Injection Control Program. You may call the Safe Drinking Water Hotline at 1-800-426-4791 to find out who to call for information.
- (e) ***Changes in the status of the EPA approved state drinking water source assessment and protection program.*** After January 1, 2004 your State may assess a ground water protection area for ground water supplying a new community water system or a new non-transient non-community water system that includes your Class V injection well. Also, your State may officially re-delineate the boundaries of a previously delineated ground water protection area to include additional areas that includes your motor vehicle waste disposal well. This would make the additional regulations apply to you if your motor vehicle waste disposal well is in such an area. The additional regulations start applying to you one year after the State completes the local assessment for the ground water protection area for the new drinking water system or the new re-delineated area. The UIC Program Director responsible for your area may extend this deadline for up to one year if the most efficient compliance option for the well is connection to a sanitary sewer or installation of new treatment technology.
- (f) ***What happens if my state doesn't designate other sensitive ground water areas?*** If your State or EPA Region elects not to delineate the additional sensitive ground water areas, the additional regulations apply to you regardless of the location of your well by January 1, 2007, or January 2008 if an extension has been granted as explained in paragraph (c) of this section, except for wells in ground water protection areas which are subject to different compliance deadlines explained in paragraph (b) of this section.
- (g) [Reserved]
- (h) ***Application of requirements outside of ground water protection areas and sensitive ground water areas.*** EPA expects and strongly encourages States to use existing authorities in the UIC program to take whatever measures are needed to ensure Class V wells are not endangering USDWs in any other areas outside of delineated ground water protection areas and sensitive ground water areas. Such measures could include, if believed to be necessary by a UIC Program Director, applying the additional requirements below to other areas and/or other types of Class V wells. Therefore, the Director may apply the additional requirements to you, even if you are not located in the areas listed in paragraph (a) of this section.

§ 144.88 What are the additional requirements?

The additional requirements are specified in the following tables:

(a) Table 1—Additional Requirements for Large-Capacity Cesspools Statewide

[See § 144.85 to determine if these additional requirements apply to you]

Well Status	Requirement	Deadline
If your cesspool is. . .	Then you. . .	By. . .
(1) Existing (operational or under construction by April 5, 2000)	(i) Must close the well	April 5, 2005.
	(ii) Must notify the UIC Program Director (both Primacy States and Direct Implementation States) of your intent to close the well. Note: This information is requested on national form "Preclosure Notification for Closure of Injection Wells,"	At least 30 days prior to closure.
(2) New or converted (construction not started before April 5, 2000)	Are prohibited	April 5, 2000.

(b) Table 2—Additional Requirements for Motor Vehicle Waste Disposal Wells

[See § 144.85 to determine if these additional requirements apply to you]

Well status	Requirement	Deadline
If your motor vehicle waste disposal well is	Then. . .	By. . .
(1) Existing (operational or under construction by April 5, 2000)	(i) If your well is in a ground water protection area, you must close the well or obtain a permit	Within 1 year of the completion of your local source water assessment; your UIC Program Director may extend the closure deadline, but not the permit application deadline, for up to one year if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technology.
	(ii) If your well is in an other sensitive ground water area, you must close the well or obtain a permit	By January 1, 2007; your UIC Program Director may extend the closure deadline, but not the permit application deadline, for up to one year if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technology.
	(iii) If you plan to seek a waiver from the ban and apply for a permit, you must meet MCLs at the point of injection while your permit application	The date you submit your permit application.

Well status	Requirement	Deadline
	is under review, if you choose to keep operating your well	
	(iv) If you receive a permit, you must comply with all permit conditions, if you choose to keep operating your well, including requirements to meet MCLs and other health based standards at the point of injection, follow best management practices, and monitor your injectate and sludge quality	The date(s) specified in your permit.
	(v) If your well is in a State which has not completed all their local assessments by January 1, 2004 or by the extended date if your State has obtained an extension as described in 144.87, and you are outside an area with a completed assessment you must close the well or obtain a permit	January 1, 2005 unless your State obtains an extension as described in 144.87 (b) in which case your deadline is January 1, 2006; your UIC Program Director may extend the closure deadline, but not the permit application deadline, for up to one year if the most efficient compliance option is connection to a sanitary sewer or installation of new treatment technology.
	(vi) If your well is in a State that has not delineated other sensitive ground water areas by January 1, 2004 and you are outside of an area with a completed assessment you must close the well or obtain a permit regardless of your location	January 1, 2007 unless your State obtains an extension as described in 144.87(c) in which case your deadline is January 2008.
	(vii) If you plan to close your well, you must notify the UIC Program Director of your intent to close the well (this includes closing your well prior to conversion) Note: This information is requested on national form "Preclosure Notification for Closure of Injection Wells".	At least 30 days prior to closure.
(2) New or converted (construction not started before April 5, 2000)	Are prohibited	April 5, 2000.

[64 FR 68566, Dec. 7, 1999; 64 FR 70316, Dec. 16, 1999]

§ 144.89 How do I close my Class V injection well?

The following describes the requirements for closing your Class V injection well.

(a) **Closure.**

- (1) Prior to closing a Class V large-capacity cesspool or motor vehicle waste disposal well, you must plug or otherwise close the well in a manner that complies with the prohibition of fluid movement standard in § 144.12 and summarized in § 144.82(a). If the UIC Program Director in your State or EPA Region has any additional or more specific closure standards, you have to meet those standards too. You also must dispose or otherwise manage any soil, gravel, sludge, liquids, or other materials removed from or adjacent to your well in accordance with all applicable Federal, State, and local regulations and requirements, as in § 144.82(b).
 - (2) Closure does not mean that you need to cease operations at your facility, only that you need to close your well. A number of alternatives are available for disposing of waste fluids. Examples of alternatives that may be available to motor vehicle stations include: recycling and reusing wastewater as much as possible; collecting and recycling petroleum-based fluids, coolants, and battery acids drained from vehicles; washing parts in a self-contained, recirculating solvent sink, with spent solvents being recovered and replaced by the supplier; using absorbents to clean up minor leaks and spills, and placing the used materials in approved waste containers and disposing of them properly; using a wet vacuum or mop to pick up accumulated rain or snow melt, and if allowed, connecting floor drains to a municipal sewer system or holding tank, and if allowed, disposing of the holding tank contents through a publicly owned treatment works. You should check with the publicly owned treatment works you might use to see if they would accept your wastes. Alternatives that may be available to owners and operators of a large-capacity cesspool include: conversion to a septic system; connection to sewer; and installation of an on-site treatment unit.
- (b) **Conversions.** In limited cases, the UIC 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 semi-permanent 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.

[64 FR 68566, Dec. 7, 1999; 65 FR 5024, Feb. 2, 2000]