

where:

Pm=injection pressure at the wellhead in pounds per square inch

Sg=specific gravity of injected fluid (unitless)

d=injection depth in feet.

**§ 147.1454 Existing Class II enhanced recovery and hydrocarbon storage wells authorized by rule.**

(a) *Maximum injection pressure.* (1) To meet the operating requirements of § 144.28(f)(3)(ii) (A) and (B) of this chapter, the owner or operator:

(i) Shall use an injection pressure no greater than the pressure established by the Regional Administrator for the field or formation in which the well is located. The Regional Administrator shall establish such a maximum pressure after notice, opportunity for comment, and opportunity for a public hearing, according to the provisions of part 124, subpart A of this chapter, and will inform owners and operators in writing of the applicable maximum pressure; or

(ii) May inject at pressures greater than those specified in paragraph (a)(1)(i) of this section for the field or formation in which he is operating provided he submits a request in writing to the Regional Administrator, and demonstrates to the satisfaction of the Regional Administrator that such injection pressure will not violate the requirement of § 144.28(f)(3)(ii) (A) and (B). The Regional Administrator may grant such a request after notice, opportunity for comment, and opportunity for public hearing, according to the provisions of part 124, subpart A of this chapter.

(2) Prior to such time as the Regional Administrator establishes field rules for maximum injection pressure based on data provided pursuant to paragraph (a)(2)(ii) of this section the owner or operator shall:

(i) Limit injection pressure to a value which will not exceed the operating requirements of § 144.28(f)(3)(ii); and

(ii) Submit data acceptable to the Regional Administrator which defines the fracture pressure of the formation in which injection is taking place. A single test may be submitted on behalf of two or more operators conducting operations in the same formation, if

the Regional Administrator approves such submission. The data shall be submitted to the Regional Administrator within one year following the effective date of this program.

(b) *Casing and cementing.* Where the Regional Administrator determines that the owner or operator of an existing enhanced recovery or hydrocarbon storage well may not be in compliance with the requirements of §§ 144.28(e) and 146.22, the owner or operator shall comply with paragraphs (b) (1) through (4) of this section, when required by the Regional Administrator:

(1) Protect USDWs by:

(i) Cementing surface casing by recirculating the cement to the surface from a point 50 feet below the lowermost USDW; or

(ii) Isolating all USDWs by placing cement between the outermost casing and the well bore; and

(2) Isolate any injection zones by placing sufficient cement to fill the calculated space between the casing and the well bore to a point 250 feet above the injection zone; and

(3) Use cement:

(i) Of sufficient quantity and quality to withstand the maximum operating pressure;

(ii) Which is resistant to deterioration from formation and injection fluids; and

(iii) In a quantity no less than 120% of the calculated volume necessary to cement off a zone.

(4) The Regional Administrator may specify other requirements in addition to or in lieu of the requirements set forth in paragraphs (b) (1) through (3) of this section, as needed to protect USDWs.

**Subpart EE—New Hampshire**

**§ 147.1500 State-administered program.**

The UIC program for all classes of wells in the State of New Hampshire, except those wells on Indian lands, is the program administered by the New Hampshire Department of Environmental Services, approved by the EPA pursuant to section 1422 of the SDWA. Notice of this approval was published in the FR on September 21, 1982 (47 FR

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41561); the effective date of this program is October 21, 1982. This program consists of the following elements:

(a) *Incorporation by reference.* The requirements set forth in the State statutes and regulations cited in this paragraph are hereby incorporated by reference and made a part of the applicable UIC program under the SDWA for the State of New Hampshire. This incorporation by reference was approved by the Director of the Federal Register on June 25, 1984.

(1) New Hampshire Revised Statutes Annotated section 149:8 III(a) (1978);

(2) New Hampshire Code of Administrative Rules, Part Wc 410 (Protection of Groundwaters of the State, sections Ws 410.1 through Ws 410.16) (Issue Ws 3-82).

(b)(1) The Memorandum of Agreement between EPA Region I and the New Hampshire Water Supply and Pollution Control Commission, signed by the EPA Regional Administrator on August 23, 1982;

(2) Amendment No. 1 to the Memorandum of Agreement, signed by the EPA Regional Administrator on July 16, 1982.

(c) *Statement of legal authority.* (1) Letter from Attorney General of New Hampshire to Regional Administrator, EPA Region I, "Re: Attorney General's Statement—Underground Injection Control Program," March 23, 1982;

(2) Letter from Attorney General of New Hampshire to Regional Administrator, EPA Region I, "Re: Attorney General's Statement—Underground Injection Control Program," July 1, 1982.

(d) The Program Description and any other materials submitted as part of the application or as supplements thereto.

[49 FR 20197, May 11, 1984, as amended at 53 FR 43088, Oct. 25, 1988; 56 FR 9417, Mar. 6, 1991]

### § 147.1501 EPA-administered program—Indian lands.

(a) *Contents.* The UIC program for all classes of wells on Indian lands in the State of New Hampshire is administered by EPA. This program consists of the UIC program requirements of 40 CFR parts 124, 144, 146, 148, and any additional requirements set forth in the remainder of this subpart. Injection

well owners and operators, and EPA shall comply with these requirements.

(b) *Effective date.* The effective date of the UIC program for Indian lands in New Hampshire is November 25, 1988.

[53 FR 43088, Oct. 25, 1988, as amended at 56 FR 9417, Mar. 6, 1991]

## Subpart FF—New Jersey

### § 147.1550 State-administered program.

The UIC program for all classes of wells in the State of New Jersey, except those on Indian lands, is the program administered by the New Jersey Department of Environmental Protection, approved by EPA pursuant to section 1422 of the SDWA. Notice of this approval was published in the FEDERAL REGISTER on July 15, 1983 (48 FR 32343); the effective date of this program is August 15, 1983. This program consists of the following elements, as submitted to EPA in the State's program application.

(a) *Incorporation by reference.* The requirements set forth in the State statutes and regulations cited in this paragraph are hereby incorporated by reference and made a part of the applicable UIC program under the SDWA for the State of New Jersey. This incorporation by reference was approved by the Director of the Federal Register on June 25, 1984.

(1) Water Pollution Control Act, New Jersey Statutes Annotated sections 58:10A-1 through 58:10A-20 (West 1982 and Supp. 1990);

(2) New Jersey Administrative Code, sections 7:14A-1.1 through 1.9 (subchapter 1), 7:14A-2.1 through 2.15 (subchapter 2), 7:14A-5.1 through 5.17, (subchapter 5) (amended March 1988).

(b)(1) The Memorandum Agreement between EPA Region II and the New Jersey Department of Environmental Protection, signed by the EPA Regional Administrator on September 9, 1982;

(2) Letter from Commissioner, New Jersey Department of Environmental Protection, to Regional Administrator, EPA Region II, March 21, 1983.

(c) *Statement of legal authority.* (1) Letter from Attorney General of New Jersey (by Deputy Attorney General)