

Environmental Protection Agency

§ 147.1952

468.005 through 468.605, and 468.780 through 468.997; Chapters 516 and 522 (1983);

(2) Oregon Administrative Rules, chapter 137, Div. 3 (July 1982); chapter 340, Div. 11 (April 1988); chapter 340, Div. 12 (March 1989); chapter 340, Div. 14 (November 1983); chapter 340, Div. 52 (November 1983); chapter 632, Div. 1 (June 1980); chapter 632, Div. 20 (January 1981).

(c)(1) The Memorandum of Agreement between EPA Region X and the Oregon Department of Environmental Quality, signed by the EPA Regional Administrator on May 3, 1984.

(d) *Statement of legal authority.* (1) "Underground Injection Control Program Legal Counsel's Statement," October 1983, signed by the Assistant Attorney General, Oregon;

(2) Opinion of the Attorney General, Oregon, 35 Op. Attorney General 1042 (1972).

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

[49 FR 37594, Sept. 25, 1984, as amended at 53 FR 43090, Oct. 25, 1988; 56 FR 9418, Mar. 6, 1991]

§ 147.1901 EPA-administered program—Indian lands.

(a) *Contents.* The UIC program for all classes of wells on Indian lands in the State of Oregon 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 Oregon is November 25, 1988.

[53 FR 43090, Oct. 25, 1988, as amended at 56 FR 9419, Mar. 6, 1991]

Subpart NN—Pennsylvania

§ 147.1950 State-administered program. [Reserved]

§ 147.1951 EPA-administered program.

(a) *Contents.* The UIC program for the State of Pennsylvania, including all Indian lands, 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 dates.* The effective date for the UIC program on Indian lands is November 25, 1988. The effective date for the UIC program for the rest of Pennsylvania is June 25, 1984.

[53 FR 43090, Oct. 25, 1988, as amended at 56 FR 9419, Mar. 6, 1991]

§ 147.1952 Aquifer exemptions.

(a) This section identifies any aquifers or their portions exempted in accordance with §§144.7(b) and 146.4 of this chapter at the time of program promulgation. EPA may in the future exempt other aquifers or portions, according to applicable procedures, without codifying such exemptions in this section. An updated list of exemptions will be maintained in the Regional office.

(b) Those portions of the following oil bearing aquifers, which would otherwise meet the definition of a USDW, are exempted in accordance with the provisions of §§144.7(b) and 146.4 of this chapter for Class II enhanced recovery injection activities only.

(1) The Sugar Run and Bradford series of oil producing sands of the Bradford Field, in McKean County; including the Bradford, West Branch, Stack, Bennett Brook, Marilla Brook, Brooder Hollow, Cyclone, Minard Run, Minard Run School, and Sugar Run (or Watsonville) Pools.

(2) The Bradford Third oil producing sand of the Guffey Field in McKean County.

(3) The Bradford series of oil producing sands of the Lewis Run Field in McKean County.

(4) The Bradford series of oil producing sands of the Windfall Field and Kings Run Pool in McKean County.

(5) The Red Valley member of the Second Sand formation of the Venango Group of oil producing sands in the Foster-Reno Field in Venango County; including the Foster, Bully Hill, Victory, Bredinsburg, Egypt Corners, Reno, Monarch Park and Seneca Pools.

(6) The Glade and Clarendon oil producing sands of the Morrison Run Field and Elk Run Pool in Warren County.

(7) The Clarendon and Glade oil producing sands of the Clarendon Field in Warren County.

(8) The Bradford Third oil producing sand in the Shinglehouse Field, including the Kings Run, Janders Run and Ceres Pools in Potter and McKean Counties.

§ 147.1953 Existing Class I, II (except enhanced recovery and hydrocarbon storage) and III wells authorized by rule.

Maximum injection pressure. The owner or operator shall limit injection pressure to the lesser of:

(a) A value which will not exceed the operating requirements of § 144.28(f)(3)(i) or (ii) as applicable or

(b) A value for well head pressure calculated by using the following formula:

$$P_m = (0.733 - 0.433 S_g)d$$

where:

P_m =injection pressure at the well head in pounds per square inch

S_g =specific gravity of injection fluid (unitless)

d =injection depth in feet.

§ 147.1954 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 a public hearing, according to the provisions of part 124, subpart A of this chapter.

(2) Prior to such time as the Regional Administrator establishes 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 information shall be submitted to the Regional Administrator within one year of the effective date of this regulation.

(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

(iii) For wells as described in § 146.8(b)(3)(ii), installing a smaller diameter pipe inside the existing injection tubing and setting it on an appropriate packer; 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 50 feet above the injection zone; and