

Environmental Protection Agency

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(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 inject fluid (unitless)

d = injection depth in feet.

§ 147.1354 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 established rules for maximum injection pressure based on data provided pursuant to paragraph (ii) below 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 1 year of 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 when required by the Regional Administrator:

(1) Isolate all USDWs by placing cement between the outermost casing and the well bore as follows:

(i) If the injection well is east of the 108th meridian, cement the outermost casing from a point 50 feet into a major shale formation underlying the uppermost USDW to the surface. For the purpose of this paragraph, major shale formations are defined as the Bearpaw, Clagget, and Colorado formations.

(ii) If the injection well is west of the 108th meridian, cement the outermost casing to a depth of 1,000 feet, or to the base of the lowermost USDW in use as a source of drinking water whichever is deeper. The Regional Administrator may allow an owner or operator to cement to a lesser depth if he can demonstrate to the satisfaction of the Regional Administrator that no USDW will be affected by the injection facilities.

(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

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to or in lieu of the requirements set forth in paragraphs (b) (1) through (3) of this section, as needed to protect USDWs.

§ 147.1355 Requirements for all wells.

(a) Area of review. Notwithstanding the alternatives presented in §146.6 of this chapter, the area of review shall be a fixed radius as described in §146.06(b) of this chapter.

(b) The applicant must give separate notice of intent to apply for a permit to each owner or tenant of the land within one-quarter mile of the site. This requirement may be waived by the Regional Administrator where individual notice to all land owners and tenants would be impractical. The addresses of those to whom notice is given, and a description of how notice was given, shall be submitted with the permit application. The notice shall include:

- (1) Name and address of applicant;
- (2) A brief description of the planned injection activities, including well location, name and depth of the injection zone, maximum injection pressure and volume, and fluid to be injected;
- (3) EPA contact person; and
- (4) A statement that opportunity to comment will be announced after EPA prepares a draft permit.

(c) Owners and operators on or within one-half mile of Indian lands shall provide notice as specified in paragraph (b) of this section, except that such notice shall be provided within a one-half mile radius of the site.

APPENDIX A TO SUBPART BB OF PART 147—STATE REQUIREMENTS INCORPORATED BY REFERENCE IN SUBPART BB OF PART 147 OF THE CODE OF FEDERAL REGULATIONS

The following is an informational listing of state requirements incorporated by reference in Subpart BB of part 147 of the Code of Federal Regulations:

Subpart BB—Montana

- (a) The statutory provisions include:
 - (1) Montana Code annotated, 1995, Title 2, Chapter 15:
 - Section 2-15-121. Allocation for administrative purposes only.
 - Section 2-15-124. Quasi-judicial boards.

Section 2-15-3303. Board of oil and gas conservation-composition—allocation—quasi-judicial.

(2) Montana Code annotated, 1995, Title 82, Chapter 10:

Section 82-10-101. Action for accounting for royalty.

Section 82-10-102. Remedy not exclusive.

Section 82-10-103. Obligation to pay royalties as essence of contract-interest.

Section 82-10-104. Payment of royalties-form of record required.

Section 82-10-105 through 82-10-109 reserved.

Section 82-10-110. Division order-definition-effect.

Section 82-10-201. Authorization for lease and terms-land not subject to leasing.

Section 82-10-202. Acreage pooling.

Section 82-10-203. Interference with normal use of land prohibited.

Section 82-10-204. Lease of acquired oil and gas interests.

Section 82-10-301. Definitions.

Section 82-10-302. Policy.

Section 82-10-303. Use of eminent domain to acquire underground reservoirs.

Section 82-10-304. Certificate of board required prior to use of eminent domain.

Section 82-10-305. Proceedings.

Section 82-10-401. Notice required before abandonment of well-owner's option.

Section 82-10-402. Inventory of abandoned wells and seismic operations-reclamation procedures.

Section 82-10-501. Purpose-legislative findings.

Section 82-10-502. Definitions.

Section 82-10-503. Notice of drilling operations.

Section 82-10-504. Surface damage and disruption payments-penalty for late payment.

Section 82-10-505. Liability for damages to property.

Section 82-10-506. Notification of injury.

Section 82-10-0507. Agreement—offer of settlement.

Section 82-10-508. Rejection—legal action.

Section 82-10-509 and 82-10-510. Reserved.

Section 82-10-511. Remedies cumulative.

(3) Montana Code annotated, 1995, Title 82, Chapter 11:

Section 82-11-101. Definitions.

Section 82-11-102. Oil or gas wells not public utilities.

Section 82-11-103. Lands subject to law.

Section 82-11-104. Construction-no conflict with board of land commissioners' authority.

Section 82-11-105 through 82-11-110 reserved.

Section 82-11-111. Powers and duties of board.

Section 82-11-112. Intergovernmental cooperation.

Section 82-11-113. Role of board in implementation of national gas policy.