

## NEBRASKA ADMINISTRATIVE CODE

### Title 122 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

#### Chapter 19 - OPERATING REQUIREMENTS

##### 001 General Requirements

001.01 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 specific requirements of Section 002 of this Chapter.

##### 002 Specific Requirements

002.01 Operating requirements for Class I injection wells shall, at a minimum, specify that:

002.01A Injection pressure at the wellhead shall not exceed a maximum which shall be calculated so as to assure that the pressure in the injection zone during injection does not initiate new fractures or propagate existing fractures in the injection zone, initiate fractures in the confining zone or cause the movement of injection or formation fluids into an underground source of drinking water;

002.01B Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited; and

002.01C Unless an alternative to a packer has been approved under Chapter 17 of this Title, the annulus between the tubing and the long string of casings shall be filled with a fluid approved by the Director; and a pressure, also approved by the Director, shall be maintained on the annulus.

002.02 Operating requirements for Class III injection wells shall, at a minimum, specify that:

002.02A Injection pressure at the wellhead shall not exceed a maximum which shall be calculated so as to assure that the pressure in the injection

zone during injection does not initiate new fractures or propagate existing fractures in the injection zone, initiate fractures in the confining zone or cause the migration of injection or formation fluids into an underground source of drinking water; and

002.02B Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited.

002.03 Operating requirements for Class V injection wells authorized by permit shall, at a minimum, specify that:

002.03A Injection pressure at the wellhead shall not exceed a maximum which shall be calculated so as to assure that the pressure in the injection zone during injection does not initiate new fractures or propagate existing fractures in the injection zone, initiate fractures in the confining zone or cause the migration of injection or formation fluids into another underground source of drinking water; and

002.03B Injection between the outermost casing protecting an underground source of drinking water and the well bore is prohibited.

002.03C Injection fluid concentrations may not exceed Nebraska Title 118 - Ground Water Quality Standards and Use Classification, except as outlined in Chapter 3 of this Title.

003 Restoration and Financial Responsibility Requirements During Operation Any person conducting Class III injection and/or mineral production activities shall comply with the restoration plan as approved by the Director (Chapter 16, 008 of this Title) and maintain financial responsibility as per Chapter 13 of this Title.

004 Notice of Intent to Operate Prior to operation of a Class I or III injection well(s) and/or mineral production well(s), the permittee must submit a notice of completion construction to the Director and provide the following information as required by the permit to obtain approval to operate:

004.01 All available logging and testing program data on the well(s);

004.02 A demonstration of mechanical integrity pursuant to Chapter 18 of this Title;

004.03 The results of the formation testing program;

004.04 The compatibility of injected materials with fluids in the injection zone and minerals in both the injection zone and the confining zone; and

004.05 The status of corrective action on defective wells in the area of review.

Enabling Legislation: Neb. Rev. Stat. §§ 81-1504(2)(12)(13); 81-1505(1)(2)(9)

Legal Citation: Title 122, Ch.19, Nebraska Department of Environmental Quality