

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 26 INJECTION

19.15.26.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
 [19.15.26.1 NMAC - Rp, 19.15.9.1 NMAC, 12/1/08]

19.15.26.2 SCOPE: 19.15.26 NMAC applies to persons engaged in secondary or other enhanced recovery of oil or gas, pressure maintenance, salt water disposal and underground storage of oil or gas.
 [19.15.26.2 NMAC - Rp, 19.15.9.2 NMAC, 12/1/08]

19.15.26.3 STATUTORY AUTHORITY: 19.15.26 NMAC is adopted pursuant to the Oil and Gas Act, NMSA 1978, Section 70-2-6, Section 70-2-11 and Section 70-2-12, which authorizes the division to permit the injection of gas or other substances into a pool for repressuring, cycling, pressure maintenance, secondary or other enhanced recovering operations; and to regulate the disposition of water produced or used in connection with drilling for or producing oil or gas and to direct subsurface disposal of the water.
 [19.15.26.3 NMAC - Rp, 19.15.9.3 NMAC, 12/1/08]

19.15.26.4 DURATION: Permanent.
 [19.15.26.4 NMAC - Rp, 19.15.9.4 NMAC, 12/1/08]

19.15.26.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
 [19.15.26.5 NMAC - Rp, 19.15.9.5 NMAC, 12/1/08]

19.15.26.6 OBJECTIVE: To regulate secondary or other enhanced recovery, pressure maintenance, salt water disposal and underground storage to prevent waste, protect correlative rights and protect public health, fresh water and the environment.
 [19.15.26.6 NMAC - Rp, 19.15.9.6 NMAC, 12/1/08]

19.15.26.7 DEFINITIONS:

- A.** "Affected person" means the division designated operator; in the absence of an operator, a lessee whose interest is evidenced by a written conveyance document either of record or known to the applicant as of the date the applicant files the application; or in the absence of an operator or lessee, a mineral interest owner whose interest is evidenced by a written conveyance document either of record or known to the applicant as of the date the applicant filed the application for permit to inject.
- B.** "Pressure maintenance project" means a project in which an operator injects fluids into the producing horizon in an effort to build up or maintain the reservoir pressure in an area that has not reached the advanced or stripper state of depletion.
- C.** "Water flood project" means a project in which an operator injects water into a producing horizon in sufficient quantities and under sufficient pressure to stimulate oil production from other wells in the area, and is limited to those areas in which the wells have reached an advanced state of depletion and are regarded as what is commonly referred to as stripper wells.

[19.15.26.7 NMAC - Rp, 19.15.9.701 NMAC, 12/1/08]

~~19.15.26.8 INJECTION OF FLUIDS INTO RESERVOIRS:~~

A. Permit for injection required. An operator shall not inject gas, liquefied petroleum gas, air, water or other fluid into a reservoir or formation to maintain reservoir pressure or for secondary or other enhanced recovery or for storage or inject water into a formation for disposal except pursuant to a permit the division has granted after notice and hearing, or that the division has granted by administrative order as authorized in 19.15.26.8 NMAC. The division shall grant a permit for injection under 19.15.26.8 NMAC only to an operator who is in compliance with Subsection A of 19.15.5.9 NMAC. The division may revoke a permit for injection issued under 19.15.26.8 NMAC after notice and hearing if the operator is not in compliance with Subsection A of 19.15.5.9 NMAC.

B. Method of making application.

(1) The operator shall apply for authority to inject gas, liquefied petroleum gas, air, water or other medium into a formation for any reason, including the establishment of or the expansion of water flood projects, enhanced recovery projects, pressure maintenance projects or salt water disposal, by submitting form C-108 complete with all attachments to the division.

(2) The applicant shall furnish, by certified or registered mail, a copy of the application to each owner of the land surface on which each injection or disposal well is to be located and to each leasehold operator or other affected person within any tract wholly or partially contained within one-half mile of the well.

C. Administrative approval.

(1) If the application is for administrative approval rather than for a hearing, it shall be accompanied by a copy of a legal notice the applicant published in a newspaper of general circulation in the county in which the proposed injection well is located. The legal notice shall include:

- (a) the applicant's name, address, phone number and contact party;
- (b) the injection well's intended purpose, with the exact location of single wells or the section, township and range location of multiple wells;
- (c) the formation name and depth with expected maximum injection rates and pressures; and
- (d) a notation that interested parties shall file objections or requests for hearing with the division within 15 days.

(2) The division shall not approve an application for administrative approval until 15 days following the division's receipt of form C-108 complete with all attachments including evidence of mailing as required under Paragraph (2) of Subsection B of 19.15.26.8 NMAC and proof of publication as required by Paragraph (1) of Subsection C of 19.15.26.8 NMAC.

(3) If the division does not receive an objection within the 15-day period, and a hearing is not otherwise required, the division may approve the application administratively.

D. Hearings. If a written objection to an application for administrative approval of an injection well is filed within 15 days after receipt of a complete application, if 19.15.26.8 NMAC requires a hearing or if the director deems a hearing advisable, the division shall set the application for hearing and give notice of the hearing.

E. Water disposal wells.

(1) The director may grant an application for a water disposal well administratively, without hearing, only when the waters to be disposed of are mineralized to such a degree as to be unfit for domestic, stock, irrigation or other general use and when the waters are to be disposed of into a formation older than Triassic (Lea county only) and the division receives no objections pursuant to Subsection C of 19.15.26.8 NMAC.

(2) The division shall not permit disposal into zones containing waters having total dissolved solids concentrations of 10,000 mg/l or less except after public notice and hearing, provided that the division may, by order issued after public notice and hearing, establish exempted aquifers for such zones where the division may administratively approve the injection.

(3) Notwithstanding the provisions of Paragraph (2) of Subsection E of 19.15.26.8 NMAC, the director may authorize disposal into such zones administratively if the waters to be disposed of are of higher quality than the native water in the disposal zone.

F. Pressure maintenance projects.

(1) The division shall set applications for establishment of pressure maintenance projects for hearing. The division shall fix the project area and the allowable formula for a pressure maintenance project on an individual basis after notice and hearing.

(2) The division may authorize an operator to expand a pressure maintenance project and place additional wells on injection after hearing or administratively, subject to the notice requirements of Subsection B of 19.15.26.8 NMAC.

(3) The director may grant an exception to the hearing requirements of Subsection A of 19.15.26.8 NMAC for the conversion to injection of additional wells within a project area provided that the wells are necessary to develop or maintain efficient pressure maintenance within the project and provided that the division receives no objections pursuant to Subsection C of 19.15.26.8 NMAC.

(4) An established pressure maintenance project shall have only one designated operator. The division shall set an application for exception for hearing.

G. Water flood projects.

(1) The division shall set applications for establishment of water flood projects for hearing.

(2) The project area of a water flood project shall comprise the proration units a given operator owns or operates upon which injection wells are located plus proration units the same operator owns or operates that directly or diagonally offset the injection tracts and have producing wells completed on them in the same formation; provided however, that the division may include in the project area additional proration units not directly or diagonally offsetting an injection tract if, after notice and hearing, the operator establishes that the additional units have wells completed on the unit that have experienced a substantial response to water injection.

(3) The allowable the division assigns to wells in a water flood project area shall equal the wells' ability to produce and is not subject to the depth bracket allowable for the pool or to the market demand percentage factor.

(4) Nothing in Subsection G of 19.15.26.8 NMAC shall prohibit the division's assignment of special allowables to wells in buffer zones after notice and hearing. The division may assign special allowables in the limited instances where it is established at a hearing that it is imperative for the protection of correlative rights to do so.

(5) The division shall authorize the expansion of water flood projects and the placement of additional wells on injection after hearing or administratively, subject to the notice requirements of Subsection B of 19.15.26.8 NMAC.

(6) The director may grant an exception to the hearing requirements of Subsection A of 19.15.26.8 NMAC for conversion to injection of additional wells provided that the well is necessary to develop or maintain thorough and efficient water flood injection for an authorized project and provided that the division does not receive an objection pursuant to Subsection C of 19.15.26.8 NMAC.

(7) An established water flood project shall have only one designated operator. The division shall set for hearing an application for exception.

H. Storage wells.

(1) The director may grant administratively, without hearing, an application for the underground storage of liquefied petroleum gas or liquid hydrocarbons in secure caverns within massive salt beds, and provided the applicant has complied with the notice provisions of Subsection B of 19.15.26.8 NMAC and the division receives no objections pursuant to Subsection C of 19.15.26.8 NMAC.

(2) In addition to the filing requirements of Subsection B of 19.15.26.8 NMAC, the applicant for approval of a storage well under Subsection H of 19.15.26.8 NMAC shall file the following:

- (a) with the director, financial assurance in accordance with the provisions of 19.5.8 NMAC; and
- (b) with the appropriate division district office:
 - (i) form C-101;
 - (ii) form C-102; and
 - (iii) form C-105.

[19.15.26.8 NMAC - Rp, 19.15.9.701 NMAC, 12/1/08]

19.15.26.9 CASING AND CEMENTING OF INJECTION WELLS: The operator of a well used for injection of gas, air, water or other medium into a formation shall case the well with safe and adequate casing or tubing so as to prevent leakage, and set and cement the casing or tubing to prevent the movement of formation or injected fluid from the injection zone into another zone or to the surface around the outside of a casing string.

[19.15.26.9 NMAC - Rp, 19.15.9.702 NMAC, 12/1/08]

19.15.26.10 OPERATION AND MAINTENANCE:

A. The operator of an injection well shall equip, operate, monitor and maintain the well to facilitate periodic testing and to assure continued mechanical integrity that will result in no significant leak in the tubular goods and packing materials used and no significant fluid movement through vertical channels adjacent to the well bore.

B. The operator of an injection project shall operate and maintain at all times the injection project, including injection wells, producing wells and related surface facilities, in such a manner as will confine the injected fluids to the interval or intervals approved and prevent surface damage or pollution resulting from leaks, breaks or spills.

C. The operator shall report the failure of an injection well, producing well or surface facility, which failure may endanger underground sources of drinking water, to the division under the "immediate notification" procedure of 19.15.29.10 NMAC

D. The operator shall report injection well or producing well failures requiring casing repair or cementing to the division prior to commencement of workover operations.

E. The division may restrict the injected volume and pressure for, or shut-in, injection wells or projects that have exhibited failure to confine injected fluids to the authorized injection zone or zones, until the operator has identified and corrected the failure.

[19.15.26.10 NMAC - Rp 19.15.9.703 NMAC, 12/1/08]

19.15.26.11 TESTING, MONITORING, STEP-RATE TESTS, NOTICE TO THE DIVISION, REQUESTS FOR PRESSURE INCREASES:

A. Testing.

(1) Prior to commencement of injection and any time the operator pulls the tubing or reseats the packer, the operator shall test the well to assure the integrity of the casing and the tubing and packer, if used, including pressure testing of the casing-tubing annulus to a minimum of 300 psi for 30 minutes or such other pressure or time as the appropriate district supervisor may approve. The operator shall use a pressure recorder and submit copies of the chart to the appropriate division district office within 30 days following the test date.

(2) At least once every five years thereafter, the operator shall test an injection well to assure its continued mechanical integrity. Tests demonstrating continued mechanical integrity shall include the following:

(a) measurement of annular pressures in a well injecting at positive pressure under a packer or a balanced fluid-seal;

(b) pressure testing of the casing-tubing annulus for a well injecting under vacuum conditions; or

(c) other tests that are demonstrably effective and that the division may approve for use.

(3) Notwithstanding the test procedures outlined in Paragraphs (1) and (2) of Subsection A of 19.15.26.11 NMAC, the division may require the operator to conduct more comprehensive testing of the injection well when deemed advisable, including the use of tracer surveys, noise logs, temperature logs or other test procedures or devices.

(4) In addition, the division may order that the operator conduct special tests prior to the expiration of five years if the division believes conditions so warrant. The division shall consider a special test that demonstrates a well's continued mechanical integrity the equivalent of an initial test for test scheduling purposes, and the regular five-year testing schedule shall be applicable thereafter.

(5) The operator shall advise the division of the date and time any initial, five-year or special tests are to be

commenced so the division may witness the tests.

B. Monitoring. The operator shall equip an injection well so that the injection pressure and annular pressure may be determined at the wellhead and the injected volume may be determined at least monthly.

C. Step-rate tests, notice to the division, requests for injection pressure limit increases.

(1) Whenever an operator conducts a step-rate test for the purpose of increasing an authorized injection or disposal well pressure limit, the operator shall give notice of the date and time of the test in advance to the appropriate division district office.

(2) The operator shall submit copies of injection or disposal well pressure-limit increase applications and supporting documentation to the division's Santa Fe office and to the appropriate division district office.

[19.15.26.11 NMAC - Rp, 19.15.9.704 NMAC, 12/1/08]

19.15.26.12 COMMENCEMENT, DISCONTINUANCE AND ABANDONMENT OF INJECTION OPERATIONS:

A. The following provisions apply to injection projects, storage projects, salt water disposal wells and special purpose injection wells.

B. Notice of commencement and discontinuance.

(1) Immediately upon the commencement of injection operations in a well, the operator shall notify the division of the date the operations began.

(2) Within 30 days after permanent cessation of gas or liquefied petroleum gas storage operations or within 30 days after discontinuance of injection operations into any other well, the operator shall notify the division of the date of the discontinuance and the reasons for the discontinuance.

(3) Before temporarily abandoning or plugging an injection well, the operator shall obtain approval from the appropriate division district office in the same manner as when temporarily abandoning or plugging oil and gas wells or dry holes.

C. Abandonment of injection operations.

(1) Whenever there is a continuous one year period of non-injection into all wells in an injection or storage project or into a salt water disposal well or special purpose injection well, the division shall consider the project or well abandoned, and the authority for injection shall automatically terminate ipso facto.

(2) For good cause shown, the director may grant an administrative extension or extensions of injection authority as an exception to Paragraph (1) of Subsection C of 19.15.26.12 NMAC, provided that any such extension may be granted only prior to the end of one year or continuous non-injection, or during the term of a previously granted extension.

[19.15.26.12 NMAC - Rp, 19.15.9.705 NMAC, 12/1/08]

19.15.26.13 RECORDS AND REPORTS:

A. The operator of an injection well or project for secondary or other enhanced recovery, pressure maintenance, gas storage, salt water disposal or injection of other fluids shall keep accurate records and shall report monthly to the division gas or fluid volumes injected, stored or produced as required on the appropriate form listed below:

- (1) secondary or other enhanced recovery on form C-115;
- (2) pressure maintenance on form C-115 and as otherwise prescribed by the division;
- (3) salt water disposal not regulated by 19.15.36 NMAC on form C-115;
- (4) salt water disposal at surface waste management facilities regulated by 19.15.36 NMAC on form C-120-A;
- (5) gas storage on form C-131-A; and
- (6) injection of other fluids on a division-prescribed form.

B. The operator of a liquefied petroleum gas storage project shall report to the division annually on form C-131-B.

[19.15.26.13 NMAC - Rp, 19.15.9.706 NMAC, 12/1/08]

19.15.26.14 RECLASSIFICATION OF WELLS: The director may reclassify an injection well from a category defined in Subsection B of 19.15.26.8 NMAC to another category without notice and hearing upon the request and proper showing by the injection well's operator.

[19.15.26.14 NMAC - Rp, 19.15.9.707 NMAC, 12/1/08]

19.15.26.15 TRANSFER OF AUTHORITY TO INJECT:

A. Authority to inject granted under a division order is not transferable except upon division approval. An operator may obtain approval of transfer of authority to inject by filing completed form C-145.

B. The division may require the operator to demonstrate mechanical integrity of each injection well that will be transferred prior to approving transfer of authority to inject.

[19.15.26.15 NMAC - Rp, 19.15.9.708 NMAC, 12/1/08]

HISTORY of 19.15.26 NMAC:

History of Repealed Material: 19.15.9 NMAC, Secondary or Other Enhanced Recovery, Pressure Maintenance, Salt Water Disposal, and Underground Storage (filed 11/13/2000) repealed 12/1/08.

NMAC History:

Those applicable portions of 19.15.9 NMAC, Secondary or Other Enhanced Recovery, Pressure Maintenance, Salt Water Disposal, and Underground Storage (Sections 1-6, 701 - 708) (filed 11/13/2000) were replaced by 19.15.26 NMAC, Injection, effective 12/1/08.