

STATE OF NEW MEXICO
ENERGY, MINERAL, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION

APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION FOR
AMENDMENT OF CERTAIN PROVISIONS OF TITLE 19, CHAPTER 15, PART 26 OF
THE NEW MEXICO ADMINISTRATIVE CODE CONCERNING PERSONS ENGAGED
IN SECONDARY OR OTHER ENHANCED RECOVERY OF OIL OR GAS, PRESUURE
MAINTENANCE, SALT WATER DISPOSAL, ACID GAS DISPOSAL, AND
UNDERGROUND STORAGE OF OIL OR GAS

APPLICATION FOR SCHEDULING CONFERENCE FOR RULEMANKING

I

*Reopened
Case 14974*

For purposes of providing notice to the public and to allow for commentary and proposed alternative language, the New Mexico Oil Conservation Division (OCD), through its undersigned attorney, hereby applies to the New Mexico Oil Conservation Commission (OCC) for a scheduling conference for:

- A. Amending the provisions of the New Mexico Administrative Code (NMAC) concerning persons engaged in secondary or other enhanced recovery of oil or gas, pressure maintenance, salt water disposal, acid gas disposal and underground storage of oil or gas (19.15.26 NMAC) to clarify the rule allowing for a more efficient permitting process by providing clear guidance for applicants and sufficient data for the OCD and OCC, and all affected persons to make informed decisions. The rule as amended will protect ground water, human health and the environment, help the development of oil and gas, protect against waste and protect correlative right; and
- B. Certifying the amended OCC rules for publication in the New Mexico Register as required by statute.

II

The intended effect and amending of the proposed rule includes the following:

1. amending existing definitions and adding new definitions to clarify the rule;
2. create a more efficient method of making application that provides more data needed in the decision making process and clarifies the notice requirements;
3. clarify the administrative approval process for injection;
4. allow for certain administrative approval for pressure maintenance projects and require additional data for applications for pressure maintenance projects;
5. create special rules for acid gas disposal wells; and

6. otherwise amend rule 19.15.26 NMAC to protect water, public health and the environment, prevent the waste of oil and gas, and to protect correlative rights.

III

A draft of the proposed amended rule 19.15.26.1 through 19.15.26.16 is attached hereto as Exhibit A and incorporated herein by reference. A copy of a proposed newspaper advertisement is attached as Exhibit B.

Respectfully Submitted,



Gabriel Wade, Attorney
Oil Conservation Division
Energy, Minerals and Natural Resources
Department
1220 S. St. Francis Drive
Santa Fe, NM 87505

NOTICE OF RULE MAKING

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

The State of New Mexico, through its Oil Conservation Commission, hereby gives notice that the Commission will conduct a public hearing at 9:00 A.M. on **Wednesday, November 19, 2014** in Porter Hall at 1220 South St. Francis Drive, Santa Fe, New Mexico, to schedule a proposal to amend 19.15.17.26 NMAC (concerning injection). The proposed new rule will amend existing definitions and add new definitions to clarify the rule; create a more efficient method of making application that provides more data needed in the decision making process and clarifies the notice requirements; clarify the administrative approval process for injection; allow for certain administrative approval for pressure maintenance projects and require additional data for applications for pressure maintenance projects; create special rules for acid gas disposal wells; and otherwise amend rule 19.15.26 NMAC to protect water, public health and the environment, prevent the waste of oil and gas, and to protect correlative rights. Copies of the text of the proposed rule are available from Division Administrator Florene Davidson at (505)-476-3458 or from the Division's web site at <http://www.emnrd.state.nm.us/ocd/whatsnew.htm>. The purpose of the Oil Conservation Commission hearing November 19, 2014 is only to give notice of the proposed rulemaking and to facilitate the scheduling of the proposed rule. Proposals for alternatives to the proposed rule and written comments on the proposed new rule can be submitted to the Division Administrator Florene Davidson. Additional future notice from the Oil Conservation Commission will inform the public of the deadlines for proposed alternatives, comments and pre-hearing statements for persons intending to offer technical testimony at the hearing. Proposed alternatives and written comments may be hand-delivered or mailed to Ms. Davidson at 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, or may be faxed to Ms. Davidson at (505)-476-3462. Pre-hearing statements must be hand-delivered or mailed to Ms. Davidson at the above address. If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing, please contact Ms. Davidson at (505)-476-3458 or through the New Mexico Relay Network (1-800-659-1779) as soon as possible.

Given under the Seal of the State of New Mexico Oil Conservation Commission at Santa Fe, New Mexico on this ____th day of October, 2014.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**

**Jami Bailey
Chair, Oil Conservation Commission**

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, acid gas disposal and underground storage of oil or gas.

[19.15.26.2 NMAC - Rp, 19.15.9.2 NMAC, 12/1/08; A, _____]

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 re-pressuring, 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; and to regulate the disposition of nondomestic wastes resulting from the exploration and production of crude oil or natural gas.

[19.15.26.3 NMAC - Rp, 19.15.9.3 NMAC, 12/1/08; A, _____]

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, acid gas 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; A, _____]

19.15.26.7 DEFINITIONS:

A. "Acid gas" means residual waste gas or combination of residual waste gases (such as carbon dioxide or hydrogen sulfide) initially derived from a geologic formation that forms acidic solutions when combined with water. This residual waste gas may be modified or concentrated by oil and gas processing facilities for disposal.

~~[A.]~~B. "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] well or unit operator; in the absence of a well or unit operator, any mineral lessee who owns an interest in the proposed injection zone and that interest, as of the date the applicant files the application, is evidenced by a written conveyance document either known to the applicant or filed in the (i) county land records, (ii) the New Mexico office of the BLM or (iii) the state land office; or in the absence of an operator or lessee, any mineral interest owner in the proposed injection zone whose interest, as of the date the applicant files the application, is evidenced by a written conveyance document either known to the applicant or filed in the (i) county land records, (ii) the New Mexico office of the BLM or (iii) the state land office.

C. "Affected reservoir volume" means the calculated volume within the applicant's proposed injection zone that would be occupied by acid gas at the conclusion of injection as proposed in the application.

D. "Confining zone" means a formation, group of formations or portion of a formation stratigraphically overlying and underlying the injection zone that acts as a barrier to fluid movement.

E. "Injection zone" means the upper and lower limits of the formation or portion thereof that will receive injected fluid and is identified on the form C-108 submitted with the application.

F. "Maximum allowable operating pressure" means the maximum authorized surface injection pressure measured at the wellhead.

~~[B.]~~G. "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~~].

H. "Technical area of review" means the radius of the cylindrical area that is calculated by doubling the affected reservoir volume, but not less than a ½ mile.

~~[C.]~~ **I.** "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; A, _____]

19.15.26.8 INJECTION OF FLUIDS INTO RESERVOIRS:

A. Permit for injection required.

(1) 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 or acid gas 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 or 19.15.26.9 NMAC. The division shall grant a permit for injection under 19.15.26.8 NMAC and 19.15.26.9 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 and 19.15.26.9 NMAC after notice and hearing if the operator is not in compliance with Subsection A of 19.15.5.9 NMAC.

(2) An operator shall begin injection within two years from issuance of a permit for injection. If the operator has not commenced injection within two years from issuance of a permit for injection, the operator may request an extension of time to inject from the director.

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,] fluid into a reservoir or formation to maintain reservoir pressure or for secondary or other enhanced recovery or for storage or inject water or acid gas into a formation for disposal by submitting form C-108 (current as the date of the application) complete with all attachments to the division. The C-108 shall include at a minimum:

- (a) description of proposed injection zone or zones;
- (b) a map that identifies all wells and leases within two miles of any proposed injection well with a ½ mile radius circle drawn around each proposed injection well that identifies the well's area of review;
- (c) a summary table and current completion schematic for all wells within the area of review that penetrate the confining zone;
- (d) well diagrams for each proposed injection well showing the current and the proposed construction including borehole diameters, casing selection, tubing and packer location and cement program with method of determination for the top-of-cement;
- (e) the proposed average daily rate and volume of liquids to be injected;
- (f) whether the system is open or closed;
- (g) proposed average and maximum injection pressure;
- (h) sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water;
- (i) if injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, an attached chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.);
- (j) a description of a proposed stimulation program, if any;
- (k) an attached chemical analysis of fresh water from two or more fresh water wells (if available and producing) or; historical data (if available) if freshwater wells are not available; within one mile of any injection or disposal well showing location of wells and dates samples were taken;
- (l) an affirmative statement that the applicant has examined available geologic and engineering data and found no evidence of open faults or any other hydrologic connection between the injection zone and any underground sources of drinking water; and
- (m) an affirmative statement that the applicant has examined available geologic and engineering data and found that the injected fluids will remain within the injection zone.

~~[_____ (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.]

(2) Upon the division's request, the applicant shall supply additional information compiled for preparation of the application such as interpretations of geophysical logs, subsurface maps, cross sections, reservoir assessments or other relevant information that supports the application.

(3) An acid gas disposal well applicant shall also comply with the requirements of 19.15.26.9 NMAC.

(4) A pressure maintenance applicant shall also comply with the requirements of Subsection G of 19.15.26.8 NMAC.

C. Notice. Except for applications for acid gas disposal wells, before or upon application the applicant shall furnish the following notice. For applications for acid gas disposal wells, the applicant shall provide notice once an application for an acid gas disposal well has been determined to be, or has been deemed to be, administratively complete and the division has placed the technical analysis memorandum in the application file.

(1) A notice published in a newspaper of general circulation in the county in which the proposed well, or wells, will be located. This notice must include:

(a) the applicant's name, address, phone number and the name of the applicant's contact person;

(b) the proposed well's or wells' location, with the exact location of single wells or the section, township and range location of multiple wells;

(c) a brief description of the well or wells including the purpose;

(d) the identification of the proposed injection formation, including the formation name and depth, the requested injection zone, the requested maximum injection pressures, and, if applicable, rates;

(e) for applications for acid gas disposal wells, the applicant shall include the requested term of injection and, if applicable, volumes or maximum injection rate;

(f) for applications for acid gas disposal wells, a notation that the technical analysis memorandum has been prepared and is available in the application file;

(g) a notation that interested persons must file legal or technical objections, comments or a request for hearing with the applicant and the division's Santa Fe office by no later than the 30th day after the publication of the public notice.

(2) A written notice sent by certified mail, return receipt requested, to the following:

(a) the surface owner of the property on which the well, or wells, is to be located;

(b) for applications for acid gas disposal wells, all other surface owners within a ½ mile radius of the proposed well or wells;

(c) for vertical wells, all affected persons in any tract wholly or partially contained within a ½-mile radius of the proposed surface location of the well; for directional or horizontal wells, all affected persons in any tract wholly or partially contained within a ½ mile radius of the wellbore from the penetration point to the terminus of the wellbore within the proposed injection zone, as defined in 19.15.26.7 NMAC; and

(d) for applications for acid gas disposal wells, if the estimated area of lateral extent of the proposed plume is greater than ½ mile, then notice must be given to all affected persons within the area of the proposed plume.

(3) The mailed, written notice shall include all of the elements of the published notice described in Paragraph (1) of Subsection C of 19.15.26.8 NMAC and shall also include a statement that upon request the applicant shall send the complete C-108 application to the requesting party or make it available electronically as specified by the requesting party.

(4) The applicant shall or shall cause to be filed with the division an affidavit certifying that the foregoing notices have been completed and a copy of the notices. The affidavit of notice shall be certified by the applicant's attorney or landman.

[C.] D. 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)] (1)~~ The division shall not approve an application for administrative approval until ~~[45]~~ 30 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]~~ evidence of notice as required by Paragraph (4) of Subsection C of 19.15.26.8 NMAC.

~~[(3)] (2)~~ If the division does not receive an objection within the ~~[45-day]~~ 30-day period, and a hearing is not otherwise required, the division may approve the application administratively.

~~[D.] E.~~ Hearings. If a written objection to an application for administrative approval of an injection well is filed within ~~[45]~~ 30 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.] F.~~ 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 ~~[E]~~ D 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]~~ F 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.] G.~~ 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. The division may approve expansion of established pressure maintenance projects administratively provided that the division receives no objections pursuant to Subsection D of 19.15.26.8 NMAC.

(2) In addition to other requirements in Subsections B and C of 19.15.26.8 NMAC, the application requirements for pressure maintenance projects are

(a) identification of all active and plugged wells located within ½-mile of the proposed surface location of the injection well or wells, which penetrate the proposed injection zone (for vertical wells), or identification of all active and plugged wells located within ½ mile radius of the wellbore starting from the penetration point to the terminus of the wellbore within the proposed injection zone, as defined in 19.15.16.7 NMAC (for directional or horizontal wells);

(b) current estimated average reservoir pressure and the proposed maximum reservoir pressure for the project area; and

(c) a proposed maximum operating pressure; the applicant shall propose the maximum operating pressure either by (i) multiplying the surface psi gradient by the true vertical depth in feet to the top of the injection zone, where surface psi gradient equals 0.633 minus the product of 0.433 times the liquid specific gravity of the fluid being injected or (ii) another method approved by the division.

~~[(2)] (3)~~ 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]~~ C of 19.15.26.8 NMAC.

~~[(3)] (4)~~ ~~[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.]~~ The division may approve applications to convert additional wells to injection within an established project area administratively provided that the well is necessary to develop or maintain efficient pressure maintenance for an authorized project and provided that the division does not receive an objection pursuant to Subsections C and D of 19.15.26.8 NMAC.

~~[(4)] (5)~~ An established pressure maintenance project shall have only one designated operator. The division shall set an application for exception for hearing.

~~[G.] H.~~ 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] H 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] C 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.]~~ The division may approve applications to convert additional wells to injection within an established project area administratively provided that the well is necessary to develop or maintain efficient water flood injection for an authorized project and provided that the division does not receive an objection pursuant to Subsections C and D 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.]~~ **I.** 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] C of 19.15.26.8 NMAC and the division receives no objections pursuant to Subsection [E] D 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] I 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]~~ 19.15.8 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; A, _____]

19.15.26.9 SPECIAL RULES FOR ACID GAS DISPOSAL WELLS:

A. Application requirements. The items enumerated below are required before the division may deem an application for an acid gas disposal well administratively complete:

(1) a completed form C-108 as provided in Paragraph (1) of Subsection B of 19.15.26.8 NMAC;

(2) a copy of the proposed notice and the proposed affidavit of notice required by Subsection C of 19.15.26.8 NMAC and Subsection F of 19.15.26.9 NMAC;

(3) identification of all active, inactive and plugged wells located in the technical area of review that penetrate the proposed injection zone; the identification shall include well name, API number, whether the well is producing and if so from where, whether the well is plugged or temporarily abandoned and the total true vertical depth of the well no matter its status;

(4) detailed description of how the proposed well will be designed for sour service with due consideration of American Petroleum Institute, RP55 Conducting Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide and RP49 Recommended Practice for Drilling and Well Servicing Operations Involving Hydrogen Sulfide, and National Association of Corrosion Engineers, MR-0175 Petroleum and Natural Gas Industries - Materials for Use in H₂S-containing Environments in Oil and Gas Production, as may be amended, and a detailed description of the packer fluid to be used;

(5) a proposed maximum operating pressure; applicant shall propose the maximum operating

pressure either by:

- (a) multiplying the surface psi gradient by the true vertical depth in feet to the top of the injection zone, where surface psi gradient equals 0.633 minus the product of 0.433 times the liquid specific gravity of the fluid being injected; or
- (b) another method approved by the division;
- (6) detailed description of the monitoring equipment that will be used to provide real time injection conditions including temperature, pressure and injection rate and ensure safe operations of the facility is maintained;
- (7) detailed description of the safety standards that will be used in operation of the well to prevent release of acid gas to the surface;
- (8) calculated radii of exposure as required in 19.15.11 NMAC;
- (9) a statement that injection will not occur until a contingency plan, as required by 19.15.11 NMAC, has been approved by the division;
- (10) the proposed date for commencement of injection;
- (11) the proposed time period for disposal; and
- (12) a demonstration to the director's satisfaction that the wells will be sited in an area with a suitable geologic network; the geologic network must be comprised of:

- (a) an injection zone of sufficient areal extent, thickness, porosity and permeability to receive the total anticipated volume of the injected acid gas stream; and

- (b) a confining zone or zones that is of sufficient areal extent and integrity to contain the injected acid gas stream and displaced formation fluids and allow injection at proposed maximum pressures and volumes without initiating or propagating fractures in the confining zone or zones.

B. Exception. An applicant may propose alternatives to the application requirements provided in Subsection A of 19.15.26.9 NMAC. If proposing an alternative, the applicant must set forth in the application how the alternative will provide equivalent or better protection of fresh water, public health and the environment. The applicant requesting an alternative shall provide a brief description of the proposed alternative in the notice required under Subsection C of 19.15.26.8 NMAC and Subsection F of 19.15.26.9 NMAC.

C. Administrative completeness determination. Within 30 days after its receipt of the application, the division shall review the application and determine whether it is administratively complete.

(1) If the division determines that the application is administratively complete, the division shall send a letter by certified mail, return receipt requested, to the applicant advising the applicant that the division has determined that the application is administratively complete.

(2) If the division determines that the application is administratively incomplete, the division shall send a letter by certified mail, return receipt requested, to the applicant stating with specificity what additional information is needed to make the application administratively complete. The division shall review any additional information the applicant submits within 30 days of receipt and determine whether the application is administratively complete.

(3) If the division does not make an administrative completeness determination within the time prescribed the application shall be deemed administratively complete.

D. Technical analysis memorandum. No later than the 45th day after an application has been deemed administratively complete, the division shall prepare and place in the application file a technical analysis memorandum, which summarizes the division's technical review of the application. The division shall notify the applicant when the division has filed the technical analysis memorandum. The technical analysis memorandum shall include the following elements:

(1) a discussion explaining how the application has provided or not provided all of the elements required of an applicant under 19.15.26.9 NMAC, including all administrative and technical requirements;

(2) copies of any technical documents, staff calculations or other materials used or relied upon by the division's technical staff in undertaking the technical review; and

(3) a proposed order, including any proposed conditions or limitations and a proposed time period for injection, or a detailed explanation why the division proposes to deny the application; the division may deny an application because the permit application is inaccurate, does not comply with the Oil and Gas Act, does not comply with division rules, is not sited in an area with a suitable geologic system, may cause waste, may impact correlative rights or may otherwise adversely affect fresh water, public safety or the environment.

E. Application Re-submittal. If the division's proposed order would deny the application, the applicant may either (1) withdraw the application and submit a new application or (2) proceed with the application and provide notice of the application as required in Subsection C of 19.15.26.8 NMAC and Subsection F of 19.15.26.9 NMAC. If the applicant chooses to withdraw the application and submit a revised application the

division will treat the revised application as a new application.

F. Notice. Once an application for an acid gas disposal well has been determined to be, or has been deemed to be, administratively complete and the division has placed the technical analysis memorandum in the application file, the applicant shall cause notice to be provided in accordance with Subsection C of 19.15.26.8 NMAC. If the applicant has withdrawn the application pursuant to Subsection E of 19.15.26.9 NMAC notice is not required.

G. Application approval.

(1) Administrative approval. If the division does not receive an objection, or request for hearing, or the division director does not otherwise cause the matter to be set for hearing, after 30 days from the date of publication of the notice, then the division, through the Santa Fe office, shall grant, grant with conditions or deny the application administratively.

(2) Hearing on Application. If the division receives an objection, or request for hearing, a hearing shall be held before the division unless the hearing on the matter is held before the commission because the director determines the commission should hear the matter.

H. Order Decision. Any order issued by the division or commission shall set forth all necessary requirements that prevent waste, protect correlative rights and protect human health and the environment including, without limitation, parameters fixing the injection zone, the maximum injection pressure and rate, the time period for injection and, if applicable, the maximum volume that can be injected into the injection zone. The division or commission may deny an application because the application is inaccurate, does not comply with the Oil and Gas Act, does not comply with division rules, is not sited in an area with a suitable geologic network, may cause waste, may impact correlative rights or may otherwise adversely affect fresh water, public safety or the environment. If the division or commission denies the application, it shall state in writing the reasons the division or commission is denying the application.

I. Ten Year Report. The operator of an authorized acid gas disposal well shall every ten years provide the division with a report that compares the reservoir pressures, volumes injected and projected plume extent to those provided in the original order.

J. Revocation, Suspension or Modification of Order: The operator may apply to the division for a modification of the order pursuant to 19.15.26.8 NMAC and 19.15.26.9 NMAC. The operator shall demonstrate that the proposed modification complies with the applicable provisions of 19.15.26.8 NMAC and 19.15.26.9 NMAC. The division may revoke, suspend or modify an order, after notice and opportunity for hearing, if the division determines that the operator or the acid gas disposal well is in material breach of the order or the Oil and Gas Act or division rules that apply to the order, or that such action is necessary because the acid gas injection is adversely impacting correlative rights, causing waste or adversely affecting fresh water, public health or the environment. The division shall notify the operator by certified mail, return receipt requested, of any intended revocation, suspension or modification, and the operator shall have 10 days after receipt of notification to request a hearing pursuant to 19.15.4 NMAC. The division may suspend the order or impose additional conditions or limitations without hearing in an emergency to forestall an imminent threat to fresh water, public health or the environment subject to the provisions of NMSA 1978, Section 70-2-23, as amended.

K. Well Design and Operation.

(1) The operator shall use acid gas resistant cement where appropriate in constructing the well and circulate the cement to the surface on all strings.

(2) The operator shall install corrosion-resistant packers, tubing and downhole monitoring equipment in the well.

(3) The operator shall include biocides and corrosion inhibitors for any fluids used in the well's annulus.

(4) Prior to installation of the injection tubing the operator shall pressure test the casing from the surface to the packer setting depth to assure casing integrity.

(5) The operator shall install a one-way subsurface automatic safety valve on the injection tubing at the depth required in the injection permit.

(6) The operator shall install temperature controls to govern the temperature of injected acid gas within the parameters approved in the injection permit that includes an alarm system when temperatures fluctuate outside parameters.

(7) The operator shall equip the well-head with a pressure limiting device to ensure that pressure does not exceed the approved maximum injection pressure.

(8) The operator shall maintain the injected acid gas in a non-corrosive phase with minimum pressure regulating devices.

(9) The operator shall ensure cement seal of the injection interval of all wells in the area of review.
[19.15.26.9 NMAC - Rp, 19.15.9.702 NMAC, 12/1/08; 19.15.26.9 NMAC - N, _____]

~~[19.15.26.9]~~ **19.15.26.10 CASING AND CEMENTING OF INJECTION WELLS:** The operator of a well being 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.

[19.15.26.10 NMAC - Rp 19.15.9.703 NMAC, 12/1/08; 19.15.26.10 NMAC - Rn, 19.5.2.9 NMAC, _____]

~~[19.15.26.10]~~ **19.15.26.11 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 surface injection 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.

[19.15.26.11 NMAC - Rp 19.15.9.704 NMAC, 12/1/08; 19.15.26.11 NMAC - Rn & A, 19.5.2.10 NMAC, _____]

~~[19.15.26.11]~~ **19.15.26.12 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)~~ The operator of an acid gas disposal well shall test the well annually 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.

~~[19.15.26.11]~~ ~~(3)~~ (4) Notwithstanding the test procedures outlined in Paragraphs (1) and (2) of Subsection A of ~~[19.15.26.11 NMAC]~~ **19.15.26.12 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)]~~ **(5)** 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)]~~ **(6)** 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.

(1) 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.

(2) The operator of an acid gas disposal well shall gather injection pressure, injection temperature and annular pressure continuously and retain the gathered data for five years. The operator shall make it available to the division upon the division's request. An acid gas disposal well operator shall work with the district office to establish monitoring parameters and within 24 hours of discovery notify the district if operation of the well goes beyond those parameters.

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.
[19.15.26.12 NMAC - Rp, 19.15.9.705 NMAC, 12/1/08; 19.15.26.12 NMAC - Rn & A, 19.15.26.11 NMAC,
_____]

~~[19.15.26.12]~~ 19.5.26.13 COMMENCEMENT, DISCONTINUANCE AND ABANDONMENT OF INJECTION OPERATIONS:

A. The following provisions apply to ~~[injection projects, storage projects, salt water disposal wells and] secondary or other enhanced recovery, pressure maintenance, gas storage, salt water disposal, acid gas disposal, injection of other fluids or 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, acid gas 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]~~ 19.15.26.13 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.

[19.15.26.13 NMAC - Rp, 19.15.9.707 NMAC, 12/1/08; 19.15.26.13 NMAC - Rn & A, 19.15.26.12 NMAC,
_____]

~~[19.15.26.13]~~ 19.15.26.14 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, acid gas 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; and

(7) acid gas disposal on form C-115.

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

C. The operator of an acid gas disposal well shall provide logs required by the injection permit and estimated static bottom hole pressure to the district office prior to commencing injection.

[19.15.26.14 NMAC - Rp, 19.15.9.706 NMAC, 12/1/08; 19.15.26.14 NMAC - Rn & A, 19.15.26.13 NMAC, _____]

[19.15.26.14] 19.15.26.15 RECLASSIFICATION OF WELLS: Except for an acid gas disposal well, 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 subject to all of the requirements under 19.15.26.8 NMAC.

[19.15.26.15 NMAC - Rp, 19.15.9.708 NMAC, 12/1/08; 19.15.26.15 NMAC - Rn & A, 19.15.26.14 NMAC, _____]

[19.15.26.15] 19.15.26.16 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, and demonstrate that the injection or disposal permit remains in place and has not expired or been revoked, prior to approving transfer of authority to inject.

[19.15.26.16 NMAC - Rn & A, 19.15.26.15 NMAC, _____]

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.