

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

**APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION FOR
THE AMENDMENTS OF 19.15.14.8 AND 19.15.16 NMAC.**

CASE NO. 14744

APPLICATION FOR RULE AMENDMENT

The New Mexico Oil Conservation Division ("Division") applies for an order amending 19.15.14.8 and 19.15.16 NMAC to amend certain provisions pertaining to drilling permits, well locations and special rules for horizontal wells.

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BACKGROUND

1. 19.15.14.8 NMAC (concerning Applications for Permits to Drill [APDs]) does not require an operator to obtain mineral owner or lessee consent or compulsory pool prior to obtaining a permit to drill or even prior to commencing drilling operations.

2. The Division urges the Commission to adopt this provision, and the corresponding provision of proposed 19.15.16.15.A concerning horizontal wells, in order to prevent operators from trespassing and forestall controversies between operators and owners that the Division is frequently asked to resolve.

3. The amendment of 19.15.14.8 NMAC would provide additional protections for mineral owners and lessees and assist operators in completing their due diligence prior to drilling.

4. 19.15.16 NMAC contains various special rules pertaining to horizontal wells, but these rules have not proven adequate to the needs of the industry and have

burdened the Division with unnecessary applications for exceptions that are almost never opposed. The proposed amendment to 19.15.16 NMAC will address these deficiencies.

5. The Division would like to encourage the development of oil and gas reserves in New Mexico with horizontal wells where technically and economically feasible.

6. A brief summary of the intended effect of the proposed changes to 19.15.16 NMAC is attached as Exhibit A.

7. Copies of the proposed amendments to 19.15.14.8 NMAC and 19.15.16 NMAC are attached as Exhibit B.

8. The draft proposed legal notice for publication is Exhibit C.
WHEREFORE, the Division hereby applies to the Commission to enter an order:

- A. Adopting the proposed amendments as set forth in Exhibits A and C.
- B. Granting such other and further relief as the Commission deems appropriate.

RESPECTFULLY SUBMITTED,



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EXHIBIT A

The New Mexico Oil Conservation Division (OCD) is proposing adoption by the Oil Conservation Commission (OCC) of revised rules for horizontal wells.

The intended effect of the proposed rules will be the following:

1. As provided in present rules, a horizontal well need not be confined to a single spacing unit, but may be dedicated instead to a "project area" comprising multiple, contiguous spacing units. However,
 - a. An operator filing an Application for Permit to Drill (APD) for a horizontal well must certify that it has obtained consent from at least one lessee or owner of an unleased mineral interest in each tract the well will penetrate.
 - b. A horizontal well dedicated to a project area may not be produced until the operator has consolidated ownership of production for the project area by voluntary or compulsory pooling.
2. Horizontal wells must be set back from project area boundaries the same distance as the required setback from spacing unit boundaries for vertical wells (usually 330 feet for oil wells and 660 feet for gas wells). However, under the proposed rules, the setback requirements will apply only to the portion of the well beyond the casing shoe of the last cemented casing string (in an open hole) or the first perforation (in a cased hole). This will allow operators to drill outside the setbacks and build a curve that will permit penetration of the particular zone or member of the target formation close to the 330-foot, 660-foot, or other, setback line.
3. Existing vertical wells within a horizontal well's project area will continue to be assigned to their existing spacing units, and share the unit's allowable with the horizontal well.
4. Existing statewide or pool rules that limit the number of wells that may simultaneously produce from a pool within a given spacing unit or portion of a spacing unit will not apply to horizontal wells.

EXHIBIT B

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 14 DRILLING PERMITS

19.15.14.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.

[19.15.14.1 NMAC - N, 12/1/08]

19.15.14.2 SCOPE: 19.15.14 NMAC applies to persons engaged in drilling oil and gas wells within New Mexico.

[19.15.14.2 NMAC - N, 12/1/08]

19.15.14.3 STATUTORY AUTHORITY: 19.15.14 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.

[19.15.14.3 NMAC - N, 12/1/08]

19.15.14.4 DURATION: Permanent.

[19.15.14.4 NMAC - N, 12/1/08]

19.15.14.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.

[19.15.14.5 NMAC - N, 12/1/08]

19.15.14.6 OBJECTIVE: To require an operator to obtain a permit prior to commencing drilling, deepening or re-entry operations or before plugging a well back to a different pool or completing or re-completing a well in an additional pool and to establish procedures for application for and approval or denial of the permit.

[19.15.14.6 NMAC - N, 12/1/08]

19.15.14.7 DEFINITIONS: [RESERVED]

[See 19.15.2.7 NMAC for definitions.]

19.15.14.8 PERMIT TO DRILL, DEEPEN OR PLUG BACK:

A. Permit required. An operator shall obtain ~~a permit~~ an approved application for permit to drill from the division prior to commencing drilling, deepening or re-entry operations, ~~or before~~ commencing an additional lateral, plugging a well back to a different pool, or completing or re-completing a well in an additional pool.

B. Mineral owner or lessee consent required. Subject to Subsection A of 19.15.16.15 NMAC, an operator shall not file an application for permit to drill nor commence drilling operations until the operator has either:

(1) received the consent of at least one lessee or owner of an unleased mineral interest at the proposed bottom hole location; or

(2) obtained a compulsory pooling order from the division.

[19.15.14.8 NMAC - Rp, 19.15.3.102 NMAC, 12/1/08; A, X/X/11]

19.15.14.9 APPLICATIONS: An operator shall file a complete form C-101 and complete form C-102 with the division and meet the following requirements, if applicable:

A. an applicant for a permit to drill a well within the corporate limits of a city, town or village shall give notice to the duly constituted governing body of the city, town or village or its duly authorized agent and certify on form C-101 that it gave such notice;

B. an applicant for a permit to drill in a quarter-quarter section containing an existing well or wells operated by another operator shall concurrently file a plat or other acceptable document locating and identifying the well or wells, furnish a copy of the application to the other operator or operators in the quarter-quarter section and certify on form C-101 that it furnished the copies; and

C. an applicant for a permit to operate a well in a spacing or proration unit containing an existing well or wells operated by another operator shall also comply with Subsection B of 19.15.15.12 NMAC.

[19.15.14.9 NMAC - Rp, 19.15.3.102 NMAC and 19.15.13.1101 NMAC, 12/1/08]

19.15.14.10 APPROVAL OR DENIAL OF A PERMIT TO DRILL, DEEPEN OR PLUG BACK:

A. The director or the director's designee may deny a permit to drill, deepen or plug back if the applicant is not in compliance with Subsection A of 19.15.5.9 NMAC. In determining whether to grant or deny the permit, the director or the director's designee shall consider such factors as whether the non-compliance with Subsection A of 19.15.5.9 NMAC is caused by the operator not meeting the financial assurance requirements of 19.15.8 NMAC, being subject to a division or commission order finding the operator to be in violation of an order requiring corrective action, having a penalty assessment that has been unpaid for more than 70 days since the issuance of the order assessing the penalty or having more than the allowed number of wells out of compliance with 19.15.25.8 NMAC. If the non-compliance is caused by the operator having more than the allowed number of wells not in compliance with 19.15.25.8 NMAC, the director or director's designee shall consider the number of wells not in compliance, the length of time the wells have been out of compliance and the operator's efforts to bring the wells into compliance.

B. The division may impose conditions on an approved permit to drill, deepen or plug back.

C. If the division denies the permit it shall return the form C-101 to the applicant with the cause for rejection stated.

[19.15.14.10 NMAC - Rp, 19.15.3.102 NMAC and 19.15.13.1101 NMAC, 12/1/08]

19.15.14.11 APPROVED FORM C-101 AT WELL SITE: The operator shall keep a copy of the approved form C-101 at the well site during drilling operations.

[19.15.14.11 NMAC - Rp, 19.15.3.102 NMAC, 12/1/08]

HISTORY of 19.15.14 NMAC:

History of Repealed Material: 19.15.3 NMAC, Drilling (filed 10/29/2001) and 19.15.13 NMAC, Reports (filed 6/17/2004) repealed 12/1/08.

NMAC History:

Those applicable portions of 19.15.3 NMAC, Drilling (Section 118) (filed 10/29/2001) and 19.15.13 NMAC, Reports (Section 1101) (filed 6/17/2004) were replaced by 19.15.14 NMAC, Drilling Permits, effective 12/1/08.

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 16 DRILLING AND PRODUCTION

19.15.16.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.

[19.15.16.1 NMAC - Rp, 19.15.3.1 NMAC, 12/1/08]

19.15.16.2 SCOPE: 19.15.16 NMAC applies to persons engaged in the drilling and production of oil and gas wells within New Mexico.

[19.15.16.2 NMAC - Rp, 19.15.3.2 NMAC, 12/1/08]

19.15.16.3 STATUTORY AUTHORITY: 19.15.16 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.

[19.15.16.3 NMAC - Rp, 19.15.3.3 NMAC, 12/1/08]

19.15.16.4 DURATION: Permanent.

[19.15.16.4 NMAC - Rp, 19.15.3.4 NMAC, 12/1/08]

19.15.16.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.

[19.15.16.5 NMAC - Rp, 19.15.3.5 NMAC, 12/1/08]

19.15.16.6 OBJECTIVE: To regulate the drilling and production of oil and gas wells within the state.

[19.15.16.6 NMAC - Rp, 19.15.3.6 NMAC, 12/1/08]

19.15.16.7 DEFINITIONS:

A. "Azimuth" means the deviation in the horizontal plane of a well bore expressed in terms of compass degrees.

B. "Completed interval" means that portion of a well bore or lateral that is:

(1) cased, cemented and perforated;

(2) an open hole; or

(3) isolated by a packer or other non-permeable means and open to the formation.

~~[B-]~~ **C.** "Deviated well" means a well bore that is intentionally deviated from vertical but not with an intentional azimuth.

~~[C-]~~ **D.** "Directional well" means a well bore that is intentionally deviated from vertical with an intentional azimuth.

E. "Horizontal well" means a directional well bore with one or more laterals that extend a minimum of 100 feet horizontally in the target zone. A well with multiple laterals from a common well bore in the same or different target zones or formations shall be considered one well.

~~[D-]~~ **F.** "Kick-off point" means the point at which a directional well is intentionally deviated from vertical.

~~[E-]~~ **G.** "Lateral" means a portion of a directional well past the point where the well bore has been intentionally departed from the vertical.

H. "Open hole" means that portion of a well bore or lateral that is:

(1) not cased, or

(2) cased, but the casing is not cemented in place, and is not otherwise isolated from the formation.

~~[F-]~~ **I.** "Penetration point" means the ~~[point where a directional well penetrates the top of the pool from which it is intended to produce.]~~ beginning of the completed interval of a horizontal or other directional well or lateral.

~~[G-]~~ **J.** "Producing area" means the portion of a project area that lies within a window formed by plotting the measured distance from the project area's ~~[north, south, east and west]~~ outer boundaries, inside of which a ~~[vertical]~~ well bore can be drilled and produced in conformity with the setback requirements from the outer boundary of a standard spacing unit for the applicable ~~[pools]~~ pool.

~~[H-]~~ "Producing interval" means that portion of a directional well drilled inside a pool's vertical limits between its penetration point and its terminus.

K. "Project area" means an area the operator designates on form C-102 that a spacing unit's outer

~~boundaries enclose, a combination of complete, contiguous spacing units or an approved secondary, tertiary or pressure maintenance project.]~~

~~K.~~ "Project area" means an area the operator designates on form (C-102), well location and acreage dedication plat, that comprises

- ~~(1) one or more complete, contiguous spacing units (in one section or in more than one section); or~~
- ~~(2) an entire voluntary or statutory unit for an approved enhanced recovery or pressure maintenance project, an approved state exploratory unit, or a participating area in a federal unit.~~

~~L.~~ "Standard project area" means a project area that

- ~~(1) is described in Paragraph (2) of Subsection K of 19.15.16.7 NMAC;~~
- ~~(2) consists of a single spacing unit;~~
- ~~(3) consists of two or more spacing units within a single section that collectively comprise:~~
 - ~~(a) the entire section, a half-section or half-section equivalent, or a quarter section or quarter-section equivalent; or~~
 - ~~(b) the north, south, east or west half of a half-section or half-section equivalent or of a quarter section or quarter-section equivalent; or~~
- ~~(4) consists of a combination of two or more otherwise standard project areas, if the resulting area is substantially in the form of a rectangle.~~

~~M.~~ "Non-standard project area" means a project area that is not a standard project area.

~~J.~~ "Project well" means a well drilled, completed, produced or injected into as either a vertical well, deviated well or directional well.

~~K.~~ "Spacing unit" means the acreage that is dedicated for a well in accordance with 19.15.15 NMAC. Included in this definition is a unit of proration for oil or gas as defined by the division and all non-standard units the division has previously approved.]

~~L.~~ ~~N.~~ "Terminus" means the farthest point attained along the well bore or lateral.

~~M.~~ ["Vertical well" means a well that does not have an intentional departure or course deviation from the vertical.]

[19.15.16.7 NMAC - Rp, 19.15.3.111 NMAC, 12/1/08; A, X/X/11]

19.15.16.8 SIGN ON WELLS:

A. An operator shall identify wells and related facilities the division regulates by a sign, which shall remain in place until the operator plugs and abandons the well and closes the related facilities.

B. For drilling wells, the operator shall post the sign on the derrick or not more than 20 feet from the well.

C. The sign shall be of durable construction and the lettering shall be legible and large enough to be read under normal conditions at a distance of 50 feet.

D. The wells on each lease or property shall be numbered in non-repetitive, logical and distinctive sequence.

E. An operator shall have 90 days from the effective date of an operator name change to change the operator name on the well sign unless the division grants an extension of time, for good cause shown along with a schedule for making the changes.

F. Each sign shall show the:

- (1) well number;
- (2) property name;
- (3) operator's name;
- (4) location by footage, quarter-quarter section, township and range (or unit letter can be substituted for the quarter-quarter section); and
- (5) API number.

[19.15.16.8 NMAC - Rp, 19.15.3.103 NMAC, 12/1/08]

19.15.16.9 SEALING OFF STRATA:

A. During the drilling of an oil well, injection well or other service well, the operator shall seal and separate the oil, gas and water strata above the producing or injection horizon to prevent their contents from passing into other strata.

B. The operator shall ensure that fresh waters and waters of present or probable value for domestic, commercial or stock purposes are confined to their respective strata and are adequately protected by division-approved methods. The operator shall take special precautions by methods satisfactory to the division in drilling

and abandoning wells to guard against loss of artesian water from the strata in which it occurs, and the contamination of artesian water by objectionable water, oil or gas.

C. The operator shall ensure that water is shut off and excluded from the various oil- and gas-bearing strata that are penetrated. The operator shall ordinarily make water shut-offs by cementing casing. [19.15.16.9 NMAC - Rp, 19.15.3.106 NMAC, 12/1/08]

19.15.16.10 CASING AND TUBING REQUIREMENTS:

A. The operator shall equip a well drilled for oil or gas with surface and intermediate casing strings and cement as may be necessary to effectively seal off and isolate all water-, oil- and gas-bearing strata and other strata encountered in the well down to the casing point. In addition, the operator shall equip a well completed for oil or gas production with a string of properly cemented production casing at sufficient depth to ensure protection of oil- and gas-bearing strata encountered in the well, including the strata to be produced.

B. The operator shall use sufficient cement on surface casing to fill the annular space behind the casing to the top of the hole, provided that authorized division field personnel may allow exceptions to this requirement when known conditions in a given area render compliance impracticable.

C. Cementing shall be by pump and plug method unless the division expressly authorizes some other method.

D. Cementing shall be with conventional-type hard-setting cements to which the operator has added additives (lighteners, densifiers, extenders, accelerators, retarders, etc.) to suit conditions in the well.

E. Authorized division field personnel may, when conditions warrant, allow exceptions to Subsection D of 19.15.16.10 NMAC and permit the operator to use oil-base casing packing material in lieu of hard-setting cements on intermediate and production casing strings; provided that when the operator uses such materials on the intermediate casing string, the operator places conventional-type hard-setting cements throughout all oil- and gas-bearing zones and throughout at least the lowermost 300 feet of the intermediate casing string. When the operator uses such materials on the production casing string, the operator shall place conventional-type hard-setting cements throughout all oil- and gas-bearing zones that shall extend upward a minimum of 500 feet above the uppermost perforation or, in the case of an open-hole completion, 500 feet above the production casing shoe.

F. The operator shall test casing strings and prove satisfactory as provided in Subsection I of 19.15.16.10 NMAC.

G. After cementing, but before commencing tests Subsection I of 19.15.16.10 NMAC requires, all casing strings shall stand cemented in accordance with one of the options in Paragraphs (1) and (2) of Subsection G of 19.15.16.10 NMAC. Regardless of which option the operator chooses, the casing shall remain stationary and under pressure for at least eight hours after the operator places the cement. Casing shall be under pressure if the operator uses some acceptable means of holding pressure or if the operator employs one or more float valves to hold the cement in place. The operator shall either

(1) allow casing strings to stand cemented a minimum of 18 hours prior to commencing tests; an operator using this option shall report on form C-103 the actual time the cement was in place before the operator initiated tests; or

(2) in the counties of San Juan, Rio Arriba, McKinley, Sandoval, Lea, Eddy, Chaves and Roosevelt only, allow casing strings to stand cemented until the cement reaches a compressive strength of at least 500 psi in the "zone of interest" before commencing tests; provided, however, that the operator shall not commence tests until the cement is in place for at least eight hours.

(a) The "zone of interest" for surface and intermediate casing strings is the bottom 20 percent of the casing string, but is no more than 1000 feet nor less than 300 feet of the bottom-part of the casing unless the casing is set at less than 300 feet. The "zone of interest" for production casing strings includes the interval or intervals where immediate completion is contemplated.

(b) To determine that a minimum compressive strength of 500 psi has been attained, the operator shall use the typical performance data for the particular cement mix used in the well, at the minimum temperature indicated for the zone of interest by Figure 107-A, Temperature Gradient Curves. Typical performance data used shall be that data the cement manufacturer or a competent materials testing agency furnishes, as determined in accordance with the latest edition of API publication Recommended Practice for Testing Well Cements, RP 10B-2.

(See Temperature Gradient - Page 17A)

H. An operator using the compressive strength criterion in Paragraph (2) of Subsection G of 19.15.16.10 NMAC shall report the following information on form C-103:

(1) volume of cement slurry in cubic feet and brand name of cement and additives, percent additives

used and sequence of placement if the operator uses more than one type cement slurry;

- (2) approximate temperature of cement slurry when mixed;
- (3) estimated minimum formation temperature in zone of interest;
- (4) estimate of cement strength at time of casing test; and
- (5) actual time cement in place prior to starting test.

I. The operator shall test casing strings except conductor pipe after cementing and before commencing other operations on the well. The operator shall file form C-103 with the division for each casing string reporting the grade and weight of pipe used. In the case of combination strings utilizing pipe of varied grades or weights, the operator shall report the footage of each grade and weight used. The operator shall also report results of the casing test, including actual pressure held on pipe and the pressure drop observed on the same form C-103.

(1) The operator shall pressure test casing strings in wells drilled with rotary tools. Minimum casing test pressure shall be approximately one-third of the manufacturer's rated internal yield pressure except that the test pressure shall not be less than 600 psi and need not be greater than 1500 psi. In cases where combination strings are involved, the above test pressure shall apply to the lowest pressure rated casing used. The operator shall apply test pressures for a period of 30 minutes. If a drop of more than 10 percent of the test pressure occurs the casing shall be considered defective and the operator shall apply corrective measures.

(2) The operator may test casing strings in wells drilled with cable tools as outlined in Paragraph (1) of Subsection I of 19.15.16.10 NMAC, or by bailing the well dry in which case the hole shall remain satisfactorily dry for a period of at least one hour before the operator commences further operations on the well.

J. Well tubing requirements.

(1) The operator shall tube flowing oil wells equipped with casing larger in size than 2 7/8-inch OD.
(2) The operator shall tube gas wells equipped with casing larger in size than 3½-inch OD.
(3) The operator shall set tubing as near the bottom as practical and tubing perforations shall not be more than 250 feet above top of pay zone.

(4) The district supervisor of the appropriate division district office, upon application, may grant exceptions to these requirements, provided waste will not be caused.

(5) The district supervisor may request that the director review an application. The operator shall submit information and give notice as the director requests. The division may approve un-protested applications after 20 days of receipt of the application and supporting information. If a person protests the application, or the director decides, the division shall set the application for hearing.

[19.15.16.10 NMAC - Rp, 19.15.3.107 NMAC, 12/1/08]

19.15.16.11 DEFECTIVE CASING OR CEMENTING: If a well appears to have a defective casing program or faultily cemented or corroded casing that will permit or may create underground waste or contamination of fresh waters, the operator shall give written notice to the division within five working days and proceed with diligence to use the appropriate method and means to eliminate the hazard. If the hazard of waste or contamination of fresh water cannot be eliminated, the operator shall properly plug and abandon the well.

[19.15.16.11 NMAC - Rp, 19.15.3.108 NMAC, 12/1/08]

19.15.16.12 BLOWOUT PREVENTION: (See Subsection B of 19.15.10 NMAC also)

A. The operator shall install and maintain blowout preventers in good working order on drilling rigs operating in areas of known high pressures at or above the projected depth of the well and in areas where pressures that will be encountered are unknown, and on workover rigs working on wells in which high pressures are known to exist.

B. The operator shall install and maintain blowout preventers in good working order on drilling rigs and workover rigs operating within the corporate limits of a city, town or village, or within 1320 feet of habitation, a school or a church, wherever located.

C. An operator, when filing form C-101 or form C-103 for an operation requiring blowout prevention equipment in accordance with Subsections A and B of 19.15.16.12 NMAC, shall submit a proposed blowout prevention program for the well. The district supervisor may modify the program as submitted if, in the district supervisor's judgment, modification is necessary.

[19.15.16.12 NMAC - Rp, 19.15.3.109 NMAC, 12/1/08]

19.15.16.13 PULLING OUTSIDE STRINGS OF CASING: In pulling outside strings of casing from an oil or gas well, the operator shall keep and leave the space outside the casing left in the hole full of mud-laden fluid or cement of adequate specific gravity to seal off fresh and salt water strata and strata bearing oil or gas not producing.

19.15.16.14 DEVIATION TESTS [AND]; DEVIATED, DIRECTIONAL AND HORIZONTAL WELLS:

A. Deviated well bores.

(1) Deviation tests required. An operator shall test a vertical or deviated well that is drilled or deepened at reasonably frequent intervals to determine the deviation from the vertical. The operator shall make the tests at least once each 500 feet or at the first bit change succeeding 500 feet. The operator shall file with the division a tabulation of deviation tests run, that is sworn to and notarized, with form C-104.

(2) Excessive deviation. When the deviation averages more than five degrees in a 500-foot interval, the operator shall include the calculations of the hole's maximum possible horizontal displacement. When the maximum possible horizontal displacement exceeds the distance to the appropriate unit's nearest outer boundary line the operator shall run a directional survey to establish the location of the producing interval or intervals.

(3) Unorthodox locations. If the results of the directional survey indicate that the producing interval is more than 50 feet from the approved surface location and closer than the minimum setback requirements to the applicable unit's outer boundaries, then the well is considered unorthodox. To obtain authority to produce the well, the operator shall file an application with the director with a copy to the appropriate division district office, and shall otherwise follow the normal process outlined in Subsection C of 19.15.15.13 NMAC to obtain approval of the unorthodox location.

(4) Directional survey requirements. Upon the director's request, the operator shall directionally survey a vertical or deviated well. The operator shall notify the appropriate division district office of the approximate time the operator will conduct the directional survey. The operator shall file directional surveys run on a well with the division upon the well's completion. The division shall not assign an allowable to the well until the operator has filed the directional surveys.

B. Directional or horizontal well bores.

(1) Directional drilling within a project area. The appropriate division district office may grant a permit to directionally drill a well bore if the producing interval is entirely within the producing area or at an unorthodox location the division previously approved. Additionally, if the project area consists of a combination of drilling units and includes state, federal or tribal lands, the operator shall send a copy of form C-102 to the state land office or the BLM, as applicable.

(2) Unorthodox ~~[well bores]~~ locations. If all or part of a directional well bore's ~~[producing]~~ completed interval is projected to be outside of the producing area, or if any portion of a directional well bore's completed interval, as drilled, is located more than 50 feet from its projected location as indicated on form C-102 filed with the application for permit to drill the well and is outside of the producing area, the well's location is considered unorthodox. To obtain approval for the well's location, the ~~[applicant]~~ operator shall file a written application in [duplicate with the director with a copy to the appropriate division district office and shall otherwise follow the normal process in] the Santa Fe office of the division in accordance with Subsection C of [19.15.15.3] 19.15.15.13 NMAC.

(3) Allowables for project areas with multiple proration units. The division shall ~~[base the maximum allowable it assigns]~~ assign to [the] a project area within a prorated pool [upon] an allowable equal to the applicable unit allowable for the pool multiplied by the number of standard spacing units or approved non-standard spacing units [that the directional well bore's producing interval develops or traverses. The maximum allowable shall apply to production from the project area, including vertical well bores on standard spacing units inside the project area.] that a horizontal well's or lateral's completed interval penetrates. If a project area includes a spacing unit or smaller project area dedicated to an existing well bore, unless the operators of all wells in the project area otherwise agree, the project area's allowable shall be computed by deducting the actual production from the existing well bore or well bores from the total allowable for the project area.

(4) Directional surveys required. An operator shall run a directional survey on each well drilled pursuant to Subsection B of 19.15.16.14 NMAC. The operator shall notify the appropriate division district office of the approximate time the operator will conduct the directional survey. The operator shall file a directional survey run on a well with the division upon the well's completion. The division shall not assign an allowable to the well until the operator files the directional survey. If the directional survey indicates that part of the producing interval is outside of the producing area, or, in the case of an approved unorthodox location, less than the approved setback requirements from the applicable unit's outer boundary, then the operator shall file an application with the director with a copy to the appropriate division district office and shall otherwise follow the normal process outlined in Subsection C of 19.15.15.13 NMAC to obtain approval of the unorthodox location.

(5) Re-entry of vertical or deviated well bores for directional drilling projects. These well bores are

considered orthodox provided the surface location is orthodox and the producing interval's location is within the tolerance allowed for deviated well bores under Paragraph (3) of Subsection A of 19.15.16.14 NMAC.

C. Additional matters.

(1) Directional surveys that 19.15.16.14 NMAC requires shall have shot points no more than 200 feet apart and shall be run by competent surveying companies that are approved by the director. The division shall allow exceptions to the minimum shot point spacing provided the survey's accuracy is still within acceptable limits.

(2) The director may set an application for administrative approval whereby the operator shall submit appropriate information and give notice as the director requests. The division may approve un-protested applications administratively within 20 days after the division receives the application and supporting information. If the application is protested, or the director decides that a hearing is appropriate, the division may set the application for hearing.

(3) The division shall grant permission to deviate or directionally drill a well bore for any reason or in a manner not provided for in 19.15.16.14 NMAC only after notice and opportunity for hearing.
[19.15.16.14 NMAC - Rp, 19.15.3.111 NMAC, 12/1/08; A. X/X/11]

19.15.16.15 SPECIAL RULES FOR HORIZONTAL WELLS:

A. Directional and horizontal well consent requirement. An operator shall not file an application for permit to drill nor commence drilling of a horizontal or directional well until the operator has either:

(1) received the consent of at least one lessee or owner of an unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located; or

(2) obtain a compulsory pooling order from the division.

B. Well dedication and acreage plat. If the project area to be dedicated to a horizontal well includes one or more spacing units that the well bore will not penetrate the operator shall file with the application for permit to drill two well dedication and acreage plats form C-102 one of which shall depict the outer boundaries of the project area, and the other of which shall depict the spacing unit or units the well bore will penetrate.

C. Set backs.

(1) Horizontal wells drilled in project areas as defined in Subsection 1 of 19.15.16.17 NMAC shall have setbacks from the outer boundaries of the project area the same as if the well were drilled in a single spacing unit for the pool.

(2) Subject to the provisions of Paragraph (2) of Subsection B of 19.15.16.14 NMAC, every point of the completed interval must meet the minimum setback requirement from the outer boundaries of the project area, or an exception must be approved for a non-standard location.

(3) No internal setbacks are required within the project area.

(4) A horizontal well's surface location may be outside the setbacks or outside the project area provided, that the completed interval is entirely within the project area and complies with the applicable setback requirements.

D. Existing and subsequent wells in project areas.

(1) Existing wells in spacing units or project areas that are included in a newly designated project area remain dedicated to their existing spacing units or project areas and are not part of the new project area unless otherwise agreed by all working interest owners in the new project area.

(2) Subject to the terms of any applicable joint operating agreement, subsequent wells with a completed interval in a horizontal well's project area may be drilled only with the approval of all working interest owners in the project area, or by order of the division after notice to all working interest owners in the project area and opportunity for hearing.

E. Pool rules. Provision of statewide rules or special pool orders in effect on [effective date of this amendment] that limit the number of wells that may simultaneously produce from the portion of a pool or area underlying a spacing unit, or a particular portion of spacing unit, do not apply to horizontal wells. Without limitation of any other right or remedy, an owner or operator of a tract in the same pool as a project area, that is not included in the project area, who contends that a horizontal well in the project area is impairing, or will impair, the owner's or operator's correlative rights may file an application with the division. The division, after notice and hearing, may grant such relief as it determines to be necessary and appropriate, including, but not limited to, imposing a limitation on the rate or amount of production from the project area.

F. Compulsory pooling. The provision of 19.15.13 NMAC regarding compulsory pooling and proposal of additional wells in compulsory pooled units shall apply to horizontal wells and compulsory pooled project areas.

G. Formation of project areas:

(1) Except as provided in Paragraphs (2) and (3) of Subsection G of 19.15.16.15 NMAC, a project area may be formed by filing a form C-102 designating the proposed project area, and simultaneously mailing or delivering a copy thereof to the New Mexico state land office in the proposed project area includes state trust lands.

(2) Before designating a non-standard project area, the operator shall give 20-days notice by certified mail, return receipt requested, to affected persons, as defined in Subparagraph (a) of Paragraph (2) of Subsection A of 19.15.4.12 NMAC, in all spacing units that

(a) are excluded from the project area, if the project area would be a standard project area except for the exclusion of one spacing unit; or

(b) adjoin the project area, in all other cases.

(3) If within 20 days after mailing of notice as provided in Paragraph (2) of Subsection G of 19.15.16.15 NMAC, the operator receives a protest of the proposed non-standard project area, the operator shall promptly notify the division of the protest, and the division shall set the matter for hearing. Unless otherwise authorized by the division, the operator shall not commence drilling in the proposed non-standard project area until the protest has been determined by division order.

(4) No project area may be designated that lies partly within, and partly outside of, a state exploratory unit, or a federal exploratory unit or participating area if the project area includes state trust lands, without the written consent of the commissioner of public lands.

H. Consolidation of project area. If a horizontal well is dedicated to a project area in which there is more than one owner of any interest in the mineral estate, the operator of the horizontal well shall cause the project area to be consolidated by voluntary agreement for compulsory pooling before the division may approve a request for form C-104 for the horizontal well.

[19.15.16.15 NMAC - Rp, 19.15.3.112 NMAC, 12/1/08; 19.15.16.15 NMAC - N, X/X/11]

[19.15.16.15] 19.15.16.16 MULTIPLE COMPLETIONS; BRADENHEAD GAS WELLS:

A. Multiple completions.

(1) Filing. An operator intending to multiple complete shall file form C-101 or C-103 with the division for approval before completing and C-104 after completing along with information required by the form instructions.

(2) Operation and testing.

(a) The operator shall complete and produce wells so that commingling of hydrocarbons from separate pools does not occur.

(b) The operator shall commence a segregation or packer leakage test within 20 days after the multiple completion. The operator shall also make segregation tests or packer leakage tests any time the packer is disturbed. The operator shall conduct other tests and determinations the division requires. The operator shall notify the appropriate division district office 48 hours in advance of tests so the district office may schedule personnel to witness the tests. Offset operators may witness such tests and shall advise the operator in writing if they desire to be notified of the tests. The operator shall file test results with the division within 20 days of test completion. In the event a segregation or packer leakage test indicates communication between separate pools, the operator shall immediately notify the division and commence corrective action on the well.

(c) The operator shall equip wells so that reservoir pressure may be determined for each of the separate pools, and may install meters so that the gas or oil produced from each of the separate pools may be accurately measured.

(d) No multiple completion shall produce in a manner unnecessarily wasting reservoir energy.

(e) The division may require the operator to properly plug a zone of a multiple-completed well if the plugging appears necessary to prevent waste, protect correlative rights or protect ground water, public health or the environment.

B. Bradenhead gas wells.

(1) The division may permit production of gas from a bradenhead gas well only after hearing, except as noted in Paragraph (3) of Subsection B of 19.15.16.15 NMAC.

(2) The operator shall submit the application for a hearing to the division in triplicate and include an exhibit showing the location of wells on applicant's lease and offset wells on offset leases, together with a diagrammatic sketch showing the casing program, formation tops, estimated top of cement on each casing string run and other pertinent data, including drill stem tests.

(3) The director may grant an exception to Subsection A of 19.15.16.15 NMAC's requirements without notice and hearing where the operator files the application in due form, and when the lowermost producing zone involved in the completion is an oil or gas producing zone within an oil or gas pool's defined limits and the

producing zone to be produced through the bradenhead connection is a gas producing zone within a gas pool's defined limits. The applicant shall include with the application a written stipulation that the applicant has properly notified offset operators.

(4) The applicant shall furnish operators who offset the lease upon which the subject well is located a copy of the application. The director shall wait at least 10 days before approving gas production from the bradenhead gas well, and shall approve the production only in the absence of an offset operator's objection. If an operator objects to the completion the director shall consider the matter only after proper notice and hearing.

(5) The division may waive the 10-day waiting period requirement if the applicant furnishes the division with the written consent to the production of gas from the bradenhead connection by the offset operators involved.

(6) Subsection B of 19.15.16.15 NMAC shall apply only to wells completed after January 1, 1950 or, in Lea County after February 1, 1937, as bradenhead gas wells.

[19.15.16.16 NMAC - Rp, 19.15.3.113 NMAC, 12/1/08; 19.15.16.16 NMAC - Rn, 19.15.16.15 NMAC, x/x/11]

~~[19.15.16.16]~~ **19.15.16.17 SHOOTING AND CHEMICAL TREATMENT OF WELLS:** If shooting, fracturing or treating a well injures the producing formation, injection interval, casing or casing seat and may create underground waste or contaminate fresh water, the operator shall within five working days notify in writing the division and proceed with diligence to use the appropriate method and means for rectifying the damage. If shooting, fracturing or chemical treating results in the well's irreparable injury the division may require the operator to properly plug and abandon the well.

[19.15.16.17 NMAC - Rp, 19.15.3.115 NMAC, 12/1/08; 19.15.16.17 NMAC - Rn, 19.15.16.16 NMAC, x/x/11]

~~[19.15.16.17]~~ **19.15.16.18 WELL AND LEASE EQUIPMENT:**

A. The operator shall install and maintain christmas tree fittings or wellhead connections in first class condition so that necessary pressure tests may easily be made on flowing wells. On oil wells the christmas tree fittings shall have a test pressure rating at least equivalent to the calculated or known pressure in the reservoir from which production is expected. On gas wells the christmas tree fittings shall have a test pressure equivalent to at least 150 percent of the calculated or known pressure in the reservoir from which production is expected.

B. The operator shall install and maintain valves in good working order to permit pressures to be obtained on both casing and tubing. The operator shall equip each flowing well to control properly the flowing of each well, and in case of an oil well, produce the well into an oil and gas separator of a type the industry generally uses.

[19.15.16.18 NMAC - Rp, 19.15.3.117 NMAC, 12/1/08; 19.15.16.18 NMAC - Rn, 19.15.16.17 NMAC, x/x/11]

~~[19.15.16.18]~~ **19.15.16.19 LOG, COMPLETION AND WORKOVER REPORTS:** Within 20 days after the completion of a well drilled for oil or gas, or the recompletion of a well into a different common source of supply, the operator shall file a completion report with the division on form C-105. For the purpose of ~~[19.15.16.18]~~ **19.15.16.19** NMAC, a hole drilled or cored below fresh water or that penetrates oil- or gas-bearing formations or that an owner drills is presumed to be a well drilled for oil or gas.

[19.15.16.19 NMAC - Rp, 19.15.13.1104 NMAC, 12/1/08; 19.15.16.19 NMAC - Rn & A, 19.15.16.18 NMAC, x/x/11]

~~[19.15.16.19]~~ **19.15.16.20 ALLOWABLES AND AUTHORIZATION TO TRANSPORT OIL AND GAS:**

A. The division may assign an allowable to a newly completed or re-completed well or a well completed in an additional pool or issue an operator authorization to transport oil or gas from the well if the operator:

- (1) has filed a complete form C-104;
- (2) has provided a sworn and notarized tabulation of all deviation tests the operator has run on the well, and directional surveys with calculated bottom hole location, in accordance with the requirements of 19.15.16.14 NMAC;
- (3) has dedicated a standard unit for the pool in which the well is completed, a standard unit has been communitized or pooled and dedicated to the well or the division has approved a non-standard unit; and
- (4) is in compliance with Subsection A of 19.15.5.9 NMAC.

B. The allowable the division assigns to an oil well is effective at 7:00 a.m. on the completion date, provided the division receives form C-104 during the month of completion. The date of completion shall be that date when new oil is delivered into the stock tanks. Unless otherwise specified by special pool orders, the allowable

the division assigns to a gas well is effective at 7:00 a.m. on the date of connection to a gas transportation facility, as evidenced by an affidavit of connection from the transporter to the division, or the date of receipt of form C-104 by the division, whichever date is later.

[19.15.16.20 NMAC - Rn, 19.15.16.19 NMAC, X/X/11]

HISTORY of 19.15.16 NMAC:

History of Repealed Material: 19.15.3 NMAC, Drilling (filed 10/29/2001) and 19.15.13 NMAC, Reports (filed 6/17/2004) repealed 12/1/08.

NMAC History:

Those applicable portions of 19.15.3 NMAC, Drilling (Sections 103, 106 - 113, 115, & 117) (filed 10/29/2001) and 19.15.13 NMAC, Reports (Section 1104) (filed 6/17/2004) were replaced by 19.15.16 NMAC, Drilling and Production, effective 12/1/08.

EXHIBIT C

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 on **October 20, 2011**, beginning at 9:00 a.m., in Porter Hall at 1220 South St. Francis Drive, Santa Fe, New Mexico, concerning the repeal, adoption and amendment of rules issued pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38. If additional time is needed, the hearing may continue at a later date announced by the Commission.

The hearing concerns the following changes to Title 19, Chapter 15 of the New Mexico Administrative Code: amend Part 14 and 16. The changes require an operator to obtain mineral owner or lessee consent or compulsory pool prior to obtaining a permit to drill and prior to commencing drilling operations; define terms either not previously included in the rules or redefine terms; and encourage the development of oil and gas reserves in New Mexico with horizontal wells where technically and economically feasible.

Copies of the text of the proposed new rules and amendments are available from commission clerk Florene Davidson at (505) 476-3458 or from the Division's web site at <http://www.emnrd.state.nm.us/ocd> under "Announcements." 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.

Written comments on the proposed amendments, pre-hearing statements and notices of recommended modifications must be received no later than 5:00 p.m. on Friday, October 14, 2011. Any person may present non-technical testimony or make an un-sworn statement at the hearing. Any person who intends to present technical testimony or cross-examine witnesses at the hearing shall, no later than 5:00 p.m. on Friday, October 14, 2011, file six sets of a pre-hearing statement with Ms. Duran-Saenz. The pre-hearing statement shall include the person's name and the name of the person's attorney; the names of all witnesses the person will call to testify at the hearing; a concise statement of each witnesses' testimony; all technical witnesses' qualifications including a description of the witnesses' education and experience; and the approximate time needed to present the testimony. The person shall attach to the pre-hearing statement any exhibits he or she plans to offer as evidence at the hearing. Any person recommending modifications to a proposed rule change shall, no later than Monday, October 10, 2011, file a notice of recommended modifications with Ms. Davidson including the text of the recommended modifications, an explanation of the modifications' impact, and the reasons for adopting the modifications. Written comments, pre-hearing statements and notices of recommended modifications 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.

Given under the Seal of the State of New Mexico Oil Conservation Commission at Santa Fe, New Mexico on this 14th day of September 2011.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**

**Jami Bailey
Director, Oil Conservation Division**