This is an amendment to 19.15.16 NMAC, Sections 7, 14, 15, and 18; the addition of new Section 15, and the renumbering of Sections 15, 16, 17, 18, and 19, effective 2/15/2012.

- **19.15.16.7 DEFINITIONS:** These definitions apply specifically to 19.15.16 NMAC. For additional definitions that may apply see 19.15.2 NMAC.
- **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.
- $[\mathbf{C},]$ $\underline{\mathbf{D}}$. "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.
- $[\mathbf{p}_{-}]$ $\underline{\mathbf{f}}_{-}$ "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.** "Non-standard project area" means a project area that is not a standard project area.
 - I. "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-] <u>J.</u> "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-] K. "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.
- I. "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.
- <u>L.</u> "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) that are developed by the horizontal well; 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.
 - M. "Standard project area" means a project area that;
 - (1) is described in Paragraph (2) of Subsection L 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; provided that a project area consisting of three 40-acre units within a single section and excluding the fourth spacing unit 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.
- $[\mathbf{M},]$ $\underline{\mathbf{O}}$. "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, 2/15/12]

19.15.16.14 DEVIATION TESTS [AND]; <u>DEVIATED</u>, <u>DIRECTIONAL AND HORIZONTAL</u> 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 <u>or horizontal</u> 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] <u>locations</u>. If all or part of a directional well bore's [producing] <u>completed</u> interval is projected to be outside of the producing area, <u>or if any portion of a directional well bore's completed interval</u>, 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] <u>operator</u> 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 develops. 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 not to exceed the existing allowable for the well bore or well bores.
- (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, 2/15/12]

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) obtained a compulsory pooling order from the division.
 - **B.** Setbacks.
- (1) Horizontal wells drilled in project areas as defined in Subsection L of 19.15.16.7 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.
 - **C.** 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 existing and newly designated project areas.
- (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.
- D. Pool rules. Provision of statewide rules or special pool orders in effect on February 15, 2012 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.

E. Formation of project areas:

- (1) Except as provided in Paragraphs (2) and (3) of Subsection E 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 if 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) The notice shall state that the affected persons may protest the designation of a non-standard project area by mailing a protest to the operator within 20 days after mailing of notice as provided in Paragraph (2) of Subsection E of 19.15.16.15 NMAC. Within seven business days after receiving a protest of the proposed non-standard project area, the operator shall 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.
- **F.** 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 or, if applicable, 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, 2/15/12]

[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] 19.15.16.16 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] 19.15.16.16 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] 19.15.16.16 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 & A, 19.15.16.15 NMAC, 2/15/12]

[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, 2/15/12]

[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, 2/15/12]

[19.15.16.18] 19.15.16.19 LOG, COMPLETION AND WORKOVER REPORTS:

- A. 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. The operator shall signify on form C-105, or alternatively on form C-103, whether the well has been hydraulically fractured.
- B. For a hydraulically fractured well, the operator shall also complete and file the division's hydraulic fracturing disclosure form within 45 days after completion of the well. The hydraulic fracture disclosure form shall include the well API number; the well name; the well number; the well location by unit, lot, section, township and range; the county where the well is located; the well's surface and bottom hole locations by footage from the section line; the operator's name and address; the operator's OGRID; the operator's phone number; the fracture date; the well's production type (oil or gas); the pool code; the well's gross fractured interval; the well's true vertical depth; the total volume of fluid pumped; and a description of the hydraulic fluid composition and concentration listing each ingredient and for each ingredient the trade name, supplier, purpose, chemical abstract service number, maximum ingredient concentration in additive as percentage by mass, maximum ingredient concentration in the hydraulic fracturing fluid as percentage by mass; certification by the operator that the information included on the hydraulic fracture disclosure form is true and complete to the best of the operator's knowledge and belief; and the signature, printed name, e-mail address and title of the operator or operator's

designated representative. The division does not require the reporting of information beyond the material safety data sheet data as described in 29 C.F.R. 1910.1200. The division does not require the reporting or disclosure of proprietary, trade secret or confidential business information.

[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, 2/15/12]

[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, 2/15/12]