NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

<u>MEMORANDUM</u>

- TO: ALL OPERATORS
- FROM: WILLIAM J. LEMAY, Director w^{A} Oil Conservation Division

SUBJECT: PROPOSED RULE 104 CHANGES - WELL SPACING

DATE: OCTOBER 6, 1995

Enclosed is a draft of proposed Rule 104 changes which was the subject of Case 11351 which was heard by the Oil Conservation Commission on September 28, 1995. Testimony was taken and . the record will be left open until November 9, 1995 when the Commission will hear additional testimony and take the case under advisement. If you wish to submit comments you may do so prior to November 9th and if you wish to present testimony please file a prehearing statement with our attorney prior to November 2, 1995.

NMOGA's Rule 104 SubCommittee:

PROPOSED RULE 104

September 25, 1995

RULE 104. - WELL SPACING: ACREAGE REQUIREMENTS FOR DRILLING TRACTS

A. (no changes proposed)

B. ACREAGE AND WELL LOCATION REQUIREMENTS FOR WILDCATS

- (1) Lea. Chaves. Eddy and Roosevelt Counties
 - Wildcat Gas Wells. In Lea, Chaves, Eddy and Roosevelt Counties, (a) a wildcat well which is projected as a gas well to a formation and in an area which, in the opinion of the engineer or supervisor approving the application to drill, may reasonably be presumed to be productive of gas rather than oil shall be located on a drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land surveys, and shall be located not closer than 660 feet to any outer boundary of such tract nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary. Provided, however, that any such wildcat gas well which is projected to the Wolfcamp or older formations shall be located on a drilling tract consisting of 320 surface contiguous acres, more or less, comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the U.S. Public Land Surveys. Any such "deep" wildcat gas well to which is dedicated more than 160 acres shall be located not closer than 660 feet to the nearest side boundary of the dedicated tract nor closer than 1980 1650 feet to the nearest end boundary, nor closer than 330' to any guarter section or subdivision inner boundary.....
 - (b) (no changes proposed)
 - (c) (no changes proposed)

(2) Sarr Juan, Rio Arriba, and Sandoval Counties

- (a) <u>Wildcat Gas Wells.</u> In San Juan, Rio Arriba, and Sandoval Counties, a wildcat well which is projected to a gas-producing horizon shall be located on a designated drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land surveys, and shall be located not closer than 790 feet to any outer boundary of the tract nor closer than 130 feet 10 feet to any quarter-quarter section or subdivision inner boundary.
- (b) In the event gas production is encountered in a well which was projected as an oil well and which is located accordingly but does not conform to the above gas well location rule, it shall be necessary for the operator to apply to the Division for an unorthodox gas well location according to the requirements of Rule 104 (F) bring the matter to a hearing before approval for the production of gas can be given.
- (c) (no changes proposed)
- (d) (no changes proposed)

(3) <u>All Counties except Lea, Chaves, Eddy, Roosevelt, San</u> Juan, Rio Arriba and Sandoval.

- (a) (no changes proposed)
- (b) Any wildcat well which is projected as a gas well to a formation and in an area which, in the opinion of the Division representative approving the application to drill, may reasonably be presumed to be productive of gas rather than oil shall be located on a drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Surveys, and shall be located not closer than 660 feet to any outer boundary of such tract nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary.

C. ACREAGE AND WELL LOCATION REQUIREMENTS FOR DEVELOPMENT WELLS

- (1) (no changes proposed)
 - (a) (no changes proposed)
- (2) Lea. Chaves. Eddy and Roosevelt Counties.
 - (a) <u>Gas Wells.</u> Unless otherwise provided in special pool rules, each development well for a defined gas pool in a formation younger than the Wolfcamp formation, or in the Wolfcamp formation which was created and defined by the Division prior to November 1, 1975, or in a Pennsylvanian age or older formation which was created and defined by the Division prior to June 1, 1964, shall be located on a designated drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section being a legal subdivision of the U.S. Public Land Surveys, and shall be located not closer than 660 feet to any outer boundary of such tract nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary nor closer than 1320 feet to the nearest well drilling to or capable of producing from the same pool.
 - (b) Unless otherwise provided in the special pool rules, each development well for a defined gas pool in the Wolfcamp formation which was created and defined by the Division after November 1, 1975, or of Pennsylvanian age or older which was created and defined by the Division after June 1, 1964, shall be located on a designated drilling tract consisting of 320 surface contiguous acres, more or less, comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the U.S. Public Land Surveys. Any such well having more than 160 acres dedicated to it shall be located not closer than 660 feet to the nearest side boundary of the dedicated tract nor closer than 330' to any quarter section or subdivision inner boundary.

(3) San Juan, Rio Arriba, and Sandoval Counties.

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(a) <u>Gas Wells.</u> Unless otherwise provided in special pool rules, each development well for a defined gas pool shall be located on a designated drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Surveys, and shall be located not closer than 790 feet to any outer boundary of the tract nor closer than 130 feet 10 feet to any quarter-quarter section line or subdivision inner boundary.

(4) <u>All Counties except Lea, Chaves, Eddy, Roosevelt, San Juan, Rio Arriba</u> and Sandoval.

(a) <u>Gas Wells.</u> Unless otherwise provided in special pool rules, each development well for a defined gas pool shall be located on a designated drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Surveys, and shall be located not closer than 660 feet to any outer boundary of such tract nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary nor closer than 1320 feet to the nearest well drilling to or capable of producing from the same pool.

D. ACREAGE ASSIGNMENT, COMPLETED WELLS

- (1) (no changes proposed)
 - (a) (no changes proposed)
 - (b) (no changes proposed)
 - (c) (no changes proposed)

(2) Non-Standard Units.

- (a) The supervisor of the appropriate district office of the Division shall have the authority to approve non-standard units without notice and hearing when the unorthodox size and shape is necessitated by a variation in the legal subdivision of the United States Public Lands Survey and/or consists of an entire governmental section and the non-standard unit is not less than 70% nor more than 130% of a standard unit. Such approval shall consist of acceptance of Division Form C-102 showing the proposed non-standard unit and the acreage contained therein.
- (b) The supervisor of the appropriate district office of the Division shall have authority to approve Division Director may grant administrative approval to non-standard gas units without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the U.S. Public Land Surveys, or the following facts exist and the following provisions are complied with:
 - (i) The non-standard unit consists of a single quarter-quarter section or lot or the non-standard unit consists of quarterquarter sections or lots that are contiguous by a common bordering side.
 - (ii) The non-standard unit lies wholly within a single governmental quarter section if the well is completed in a pool or formation for which 40, 80, or 160 acres is the standard unit size, wholly within a single governmental half section if the well is completed in a pool or formation for which 320 acres is the standard unit size, or wholly within a single governmental section if the well is completed in a pool or formation for which 640 acres is the standard unit size.
 - (iii) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the quarter section (for 160-acre pools or formations or the half section (for 320-acre pools or formations) in which the non-standard unit is situated and which acreage is not included in said non-standard unit.

(iv) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Director has received the application.

(3) Number of Wells Per Unit in Non-Prorated Gas Pools: Unless otherwise permitted by special pool rules or authorized after notice and hearing, any spacing unit in a non-prorated gas pool in New Mexico shall not be dedicated to than one well capable of production from that pool within said unit.

E. Form C-101, Application for Permit to Drill, Deepen, or Plug Back Form C-102, Well Location and Acreage Dedication Plat for any well shall designate the exact legal subdivision allotted to the well and no Form C-101, Application for Permit to Drill, Deepen, or Plug Back will be approved by the Division or any of its agents without such proper designation of acreage.

F. UNORTHODOX LOCATIONS

(1) The Division Director shall have authority to grant an exception to the well location requirements of Sections B and C above without notice and hearing when the necessity for such unorthodox location is based upon topographical conditions, the recompletion of a well previously drilled to a deeper horizon, provided said well was drilled at an orthodox or approved unorthodox location for such original horizon, or to permit the completion of an efficient production and injection pattern within a secondary recovery or pressure maintenance project, provided that any such unorthodox location within such project is no closer than 330 feet to the outer boundary of the lease or the unitized area, nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

- (2) The Division Director shall have authority to grant an exception to the well location requirements of Rule 104 B.I.(a) and Rule 104 C.II.(a) without notice and hearing when the necessity for such unorthodox location is based upon geologic conditions provided that any such unorthodox location is based upon geologic conditions provided that any such unorthodox location shall be no closer than 660 feet to the nearest side boundary nor closer than 990 feet to the nearest end boundary of the proration unit.
- (3) Applications for administrative approval of unorthodox locations shall be filed in TRIPLICATE and shall be accompanied by plats, showing the ownership of all leases offsetting the proration or spacing unit for which the unorthodox location is sought, and also all wells completed thereon. If the proposed unorthodox location is based upon topography, the plat shall also show and describe the existent topographical conditions. If the proposed unorthodox location is based upon completion of an efficient production and injection pattern, the plat shall also show the project outline identifying all producing and injection wells therein, and the applicant shall further include a statement setting forth the necessity for such location. If the proposed unorthodox location is based upon geology as provided in Paragraph (2) above, the application shall include appropriate geologic maps, cross sections, and/or logs, and a discussion of the geologic conditions which result in the necessity for the unorthodox location.
- (4) All operators of proration or spacing units offsetting the unit for which the unorthodox location is sought shall be notified of the application by certified or registered mail, and the application shall state that such notification has been given. The Division Director may approve the unorthodox location upon receipt of waivers from all offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Director has received the application.
- (5) The Division Director may, at his discretion, set any application for administrative approval of an unorthodox location for public hearing.

- (1) Well locations for producing wells and/or injection wells which are unorthodox based on the well location requirements of section C above or the well location requirements of special pool rules and which are necessary to permit the completion of an efficient production and injection pattern within a secondary recovery, tertiary recovery, or pressure maintenance project are hereby authorized, provided that any such location within such project is no closer than the required minimum orthodox distance to the outer boundary of the lease or the unitized area, nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary. Such locations shall only require such prior approval as is necessary for an orthodox location.
- (2) Subject to the limitations of Section F(3) below, the Division Director shall have authority to grant an exception to the well location requirements of Sections B and C above or to the well location requirements of special pool rules without hearing when the necessity for such unorthodox location is based upon geologic conditions, archaeological conditions, topographical conditions, or the recompletion of a well previously drilled to a deeper horizon provided said well was drilled at an orthodox or approved unorthodox location for such original horizon.
- (3) An application for an unorthodox gas well location in Lea, Chaves, Eddy or Roosevelt Counties for a well location closer than 660 feet to any outer boundary of its spacing unit and which is subject to rules for a gas pool in which a standard sized spacing unit consists of 320-acres shall be set for hearing.
- (4) Applications for administrative approval of unorthodox locations pursuant to Section F(2), above, shall be filed in TRIPLICATE and shall be accompanied by a plat showing the subject spacing unit, its proposed unorthodox well location, the diagonal and adjoining spacing units including wells and operator or any diagonal and adjoining leases or unleased mineral interests that are actually subject to direct encroachment by the proposed unorthodox location. If the proposed unorthodox location is based upon topography or archeology, the plat shall also show and describe the existent topographical or archaeological conditions. If the proposed unorthodox location is based upon geology, the application shall include appropriate geologic exhibits and a discussion of the geologic conditions which result in the necessity for the unorthodox location.

(a) Adjoining spacing units shall be defined as those existing proration and spacing units towards which the unorthodox well location encroaches that would be intersected by a radius drawn around the unorthodox location equal to the minimum setback distance for a standard well location in the direction of encroachment as required by the subject pool rules or in the absence thereof by Rule 104. In cases where encroachment is in more than one direction, the larger of the minimum setback distances shall be used as the radius;

(b) A diagonal spacing unit shall be defined as a proration and spacing unit towards which the unorthodox well location encroaches even if the radius described in (4)(a) above does not intersect the diagonal spacing unit.

(c) A diagonal or adjoining lease or unleased mineral interest shall be defined as only those leases or mineral interests that are intersected by the radius described in (4)(a) above.

- (5) The applicant shall submit a statement attesting that applicant, on or before the same date the application was submitted to the Division has sent notification by submitting a copy of the application by certified or registered mail-return receipt and advising them that if they have an objection it must be filed in writing within twenty days of the date notice was sent to the following parties: (a) all operators of adjoining or diagonal proration or spacing units towards which the unorthodox well location is encroaching as defined by Section F(4) (a) & (b), above, and (b) in the absence of an operator, then each lessee or in the absence of a lessee the unleased mineral owner of leases and mineral interests as defined by Section F(4)(c) above. The Division Director may approve the unorthodox location upon receipt of waivers from all said parties or if no said party has entered an objection to the unorthodox location within 20 days after the Director has received the application.
- (6) The Division Director may, at his discretion, set any application for administrative approval of an unorthodox location for public hearing, and may require that a directional survey be run in the unorthodox well to establish the location of the producing interval(s).

- G. (no changes proposed)
- H. (no changes proposed)
- I. (no changes proposed)
- J. (no changes proposed)
- K. (no changes proposed)
- L. (no changes proposed)
- M. (no changes proposed)
- N. (no changes proposed)
- O. Applicant shall furnish all operators who directly and diagonally offset the units involved a copy of the application to the Division and shall include with his application a written statements that all offset operators have been properly notified. Offset operators shall include only those operators who have offset properties within the State of New Mexico. The Division shall wait at least ten days before approving any such pooling, and shall approve such pooling only in the absence of objection from any offset operator party entitled to notice. In the event that an operator party entitled to notice objects to the pooling, the Division shall consider the matter only after proper notice and hearing.
- P. (no changes proposed)
- Q. (no changes proposed)
- R. Each well drilled on any communitized tract shall be located in the approximate geographical center of the combined units with a tolerance of 150 feet for topographical conditions, but in the event shall not be located closer than 330 feet to the outer boundaries of the proposed proration unit or communitized tract.