

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

**IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION DIVISION FOR  
THE PURPOSE OF CONSIDERING:**

**CASE NO. 13779  
ORDER NO. R-12669**

**APPLICATION OF UNIT PETROLEUM COMPANY TO AMEND THE SPECIAL  
POOL RULES AND REGULATIONS FOR THE NORTH OSUDO-MORROW GAS  
POOL, LEA COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on September 14, 2006, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 13<sup>th</sup> day of December, 2006, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

**FINDS THAT:**

(1) Due public notice has been given, and the Division has jurisdiction of this case and of the subject matter.

(2) Unit Petroleum Company ("applicant" or "Unit Petroleum"), requests the Special Pool Rules and Regulations for the North Osudo-Morrow Gas Pool be amended to provide for the following:

(a) Orthodox well locations no closer than 660 feet to a quarter section line, nor closer than 10 feet to a quarter-quarter section line or subdivision inner boundary;

(b) Four wells per section, provided that no more than one well shall be allowed per quarter section; and

(c) Limiting these rules to acreage currently within the designated horizontal extent of the pool.

In addition, the applicant requests the 640-acre spacing unit size be retained with provisions for non-standard spacing units.

(3) The North Osudo-Morrow Gas Pool (82160) was created in Commission Order No. R-2937 on July 13, 1965. The pool was last expanded under Division Order No. R-10972 on April 13, 1998, and currently covers the following lands in Lea County, New Mexico:

Township 19 South, Range 36 East, NMPM

Section 30: All  
Section 31: E/2  
Section 32: All

Township 20 South, Range 36 East, NMPM

Section 6: All  
Section 7: All  
Section 16-21: All  
Section 29: All  
Section 30: All

(4) Commission Order No. R-3305-A effective on August 13, 1968, made permanent the following Special Pool Rules and Regulations for the North Osudo-Morrow Gas Pool (82160), which rules were established on a temporary basis by Commission Order R-3305 on August 29, 1967.

SPECIAL RULES AND REGULATIONS  
FOR THE  
NORTH OSUDO-MORROW GAS POOL

RULE 1; Each well completed or recompleted in the North Osudo-Morrow Gas Pool or in the Morrow formation within one mile thereof, and not nearer to or within the limits of another designated Morrow gas pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 640 acres, more or less, consisting of a governmental section.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 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 United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a governmental section and contains less acreage than a standard unit.
- (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (d) 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 Secretary-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 Secretary-Director has received the application.

RULE 4. Each well shall be located no nearer than 1650 feet to the outer boundary of the section and no nearer than 330 feet to any governmental quarter-quarter section line.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

(5) Division Rule 1210A.(4)(b) requires notice to the following parties when an application involves changing special pool rules and does not involve changing the amount of acreage to be dedicated to a well:

(i) all division-designated operators in the pool; and

(ii) all division-designated operators of wells within the same formation as the pool and within one mile of the pool's outer boundary that have not been assigned to another pool.

(6) No other party entered an appearance or otherwise opposed this case.

(7) Applicant is a working interest owner and operator in this pool.

(8) Applicant appeared at the hearing and presented land and geology related testimony as follows.

(a) The operator has noticed all operators in the Morrow formation of these proposed changes to the Special Rules as required in Division Rule 1210.(4)(b).

(b) Concho Resources supports this application as long as the spacing remains 640 acres with provision for non-standard spacing units.

(c) The North Osudo-Morrow Pool is part of a structural platform extending generally north-south. The middle Morrow sand is the dominant contributing member in this pool. The Morrow sediments in this area generally trend from Northeast to Southwest and originated from sources north and east.

(d) Many sections within the North Osudo-Morrow Gas Pool already have 2 or 3 wells. Of the 22 Morrow wells in this pool, 11 were drilled on non-standard locations. These 11 unorthodox wells have produced over 30 Bcf of gas. The other 11

wells, drilled at standard locations, have only produced 8.7 Bcf of gas. The Morrow lenses are discontinuous within a small area and the setback requirements should be relaxed in order to allow operators to follow the geology.

(e) The Morrow geology and reservoir in this pool is not different from other Morrow wells in Southeast New Mexico and yet the Special Rules for this pool only allow one well per 640-acre unit with 1,650 feet setbacks. Rule 104 currently allows deep gas wells in the Southeast such as Morrow wells to be located within 320-acre units, two wells allowed per unit, and wells located with 660 feet setbacks.

(9) Applicant did not present an engineering analysis of the extent or direction that pressure drainage occurred in the past after succeeding wells were allowed within the same 640-acre spacing unit. However, the comparison of cumulative gas between standard and non-standard locations and the geological assessment of the Morrow formation's stratigraphy are compelling reasons to allow up to four wells within each 640-acre spacing unit and allow those wells to be located within 660 feet of the spacing unit boundary. The applicant's proposal will promote additional drilling and will possibly increase recovery of gas from this pool.

(10) Applicant's proposal to limit the extent of the effect of these Special Rules and Regulations to the current North Osudo-Morrow Gas Pool boundaries should be approved in order to restrict creation of additional 640-acre units located outside this pool's boundary.

(11) Provisions for exceptions to the Special Rules and Regulations for the North Osudo-Morrow Gas Pool should be governed by existing Division Rule 104. As such, existing Rules 3 and 5 of these Special Rules should be deleted.

(12) Applicant's proposal to amend the Special Rules and Regulations for the North Osudo-Morrow Gas Pool as detailed in finding paragraph (2) should be approved in order to prevent waste and protect correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) Pursuant to the application of Unit Petroleum Company, the Special Pool Rules and Regulations for the North Osudo-Morrow Gas Pool (82160) are hereby amended to provide for the following:

(a) Orthodox well locations no closer than 660 feet to a quarter section line, nor closer than 10 feet to a quarter-quarter section line or subdivision inner boundary;

(b) Four wells per section, provided that no more than one well shall be allowed per quarter section; and

(c) Limiting these rules to acreage currently within the designated horizontal extent of the pool.

(2) The horizontal extent of the North Osudo-Morrow Gas Pool (82160) shall no longer be expanded and shall be limited to the following lands:

Township 19 South, Range 36 East, NMPM  
Section 30: All

Section 31: E/2  
Section 32: All

Township 20 South, Range 36 East, NMPM

Section 6: All  
Section 7: All  
Section 16-21: All  
Section 29: All  
Section 30: All

(3) The Special Pool Rules and Regulations for the North Osudo-Morrow Gas Pool (82160) shall hereafter be as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
NORTH OSUDO-MORROW GAS POOL

RULE 1; Each well completed or re-completed in the North Osudo-Morrow Gas Pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 640 acres, more or less, consisting of a single section that is a legal subdivision of the U.S. public land surveys.

RULE 3. No more than four wells shall simultaneously produce within a standard 640-acre unit and no more than one well shall produce at once from each 160-acre quarter section within any spacing unit.

RULE 4. Each well shall be located no nearer than 660 feet to any quarter section line and no nearer than 10 feet to any governmental quarter-quarter section line or subdivision inner boundary.

RULE 5. The horizontal boundaries of this pool shall not be expanded, and Rules 2, 3, and 4 shall not apply to new Morrow wells produced from bottomhole locations beyond the boundaries of this pool, as specified in Ordering Paragraph (2) of this order.

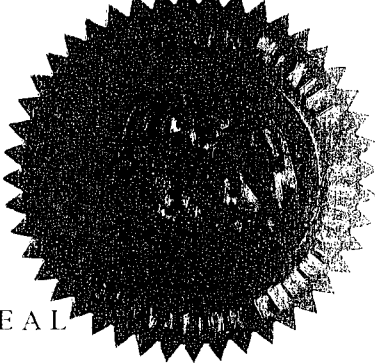
**PROVIDED THAT:**

(4) Any established 640-acre spacing unit with at least one active Morrow well at the date of this order, located beyond the boundaries of the North Osudo-Morrow Gas Pool but within 1 mile of these boundaries and not within another pool shall be governed by Rules 3 and 4 of these Special Rules and Regulations.

(5) Exceptions to these Special Rules shall be allowed in accordance with Division Rule 104.

(6) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

A handwritten signature in cursive script, appearing to read "Mark E. Fesmire".

MARK E. FESMIRE, P.E.  
Director