

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

**APPLICATION OF HILCORP ENERGY COMPANY TO
AMEND THE WELL DENSITY AND LOCATION
REQUIREMENTS AND ADMINISTRATIVE EXCEPTIONS
OF THE SPECIAL RULES FOR THE BLANCO-
MESAVERDE GAS POOL, RIO ARRIBA AND SAN JUAN
COUNTIES, NEW MEXICO.**

**CASE NO. 16403
ORDER NO. R-10987-A(2)**

ORDER OF THE COMMISSION

THIS MATTER came before the Oil Conservation Commission ("the Commission") on the application of Hilcorp Energy Company ("Hilcorp"). The Commission having conducted public hearings on September 13th and November 19th; having considered the evidence, pleadings, and other materials submitted in this matter; having taken public comments during the hearings; and having reviewed the extensive written comments provided prior to the hearings; and being otherwise fully advised, enters this order.

PROCEDURAL BACKGROUND:

1. Hilcorp filed an application with the Oil Conservation Division seeking an order amending the Well Density Requirements for the Blanco-Mesaverde Pool (72319) to permit up to eight wells in a standard 320-acre gas proration and spacing unit ("GPU") but no more than four wells within either quarter section in a GPU (the "Application"). This request will increase the well density from the current maximum of four wells (80-acre infill) per 320-acre GPU to a maximum of eight wells (40-acre infill) per 320-acre GPU.

2. Hilcorp's Application seeks to amend the Special Rules for the Blanco-Mesaverde Pool as follows:

I. ACREAGE AND WELL LOCATION REQUIREMENTS

- A. Standard GPU (Gas Proration Unit):** A standard GPU in the Blanco-Mesaverde Pool shall be 320 acres, more or less, comprising any two contiguous quarter sections of a single section that is a legal subdivision of the U. S. Public Land Surveys.

B. Well density:

- (1) Up to ~~four~~ eight (48) vertical wells may be drilled on a standard GPU; ~~as follows:~~
 - ~~(a) the FIRST OPTIONAL INFILL WELL drilled on a GPU shall be located in the quarter section not containing the INITIAL Mesaverde well;~~
 - ~~(b) the SECOND OPTIONAL INFILL WELL drilled on a GPU shall be located in a quarter quarter section not containing a Mesaverde well and within a quarter section not containing more than one (1) Mesaverde well;~~
 - ~~(c) the THIRD OPTIONAL INFILL WELL drilled on a GPU shall be located in a quarter quarter section not containing a Mesaverde well and within a quarter section not containing more than one (1) Mesaverde well;~~
 - ~~(d) at the discretion of the operator, the second or third optional infill well may be drilled prior to the drilling of the first optional infill well;~~
- (e2) No more than ~~two~~ four (4) wells shall be located within either quarter section in a GPU; and
- (f3) Any deviation from the above-described well density requirements shall be authorized only after hearing.

II. ADMINISTRATIVE EXCEPTIONS:

The Division Director, in accordance with ~~Division Rule 104~~ Subsection C of 19.15.15.11 NMAC, may administratively grant an exception to the well locations requirements of ~~I.C~~ above upon application to the Division which includes notification by certified mail-return receipt requested to affected ~~parties~~ persons. [See ~~Division Rule 1207.A(2)~~ 19.15.2.7(A)(8) NMAC].

3. Pursuant to the Division Director's authority under 19.15.4.20(B) NMAC, this matter was moved to the Commission's docket and scheduled for public hearing on September 13, 2018.

4. Hilcorp provided notice of the Division hearing scheduled for September 6 by certified mail to all division-designated operators in the San Juan Basin of New Mexico,

which included all operators within the Blanco-Mesaverde Pool and within one-mile of this pool's outer boundary. Hilcorp also published notice of the Commission hearing in a newspaper of general circulation in Rio Arriba and San Juan Counties.

5. Prior to the September 13th hearing, the San Juan Citizen's Alliance ("SJCA") filed a Notice of Intervention citing various arguments in support of intervention. SJCA also filed a Motion for Continuance of the hearing on the grounds a rancher was unavailable to testify; SJCA did not receive "personal notice" of the hearing; that it needed more time to address risks to property, groundwater, the public health and the environment; and that this is a case of "substantial public importance."

6. Hilcorp filed a motion to strike the SJCA's Notice of Intervention noting that it was untimely, did not provide a legal basis for standing as party to the proceedings, and did not provide a sufficient basis for permissive intervention on the subject matter of the hearing. Hilcorp also filed a brief in opposition to the SJCA's Motion for Continuance stating SJCA lacked standing to seek a continuance and that the issues the SJCA sought to address were not relevant to the limited subject matter of the Commission's hearing.

7. After hearing argument and deliberating at the September 13th hearing, the Commission orally granted Hilcorp's motion to strike the intervention of the SJCA, stating that the SJCA failed to show a basis for legal standing to intervene and that it failed to show it would contribute substantially to the particular issues before the Commission.

8. Since it was determined that the SJCA failed to show a proper basis for intervention, the SJCA did not pursue further its motion for a continuance.

9. At the September 13th hearing, the Commission received public comment on Hilcorp's Application from nine individuals pursuant to 19.15.4.14(C) NMAC.

10. At the conclusion of the September 13th hearing, the Commission continued the case until a special docket on November 19th to perfect notice to division-designated operators as required by 19.15.4.12(A)(4)(b) NMAC.

11. Prior to the November 19th hearing, SJCA filed a second Notice of Intervention citing concerns similar to those raised in its first notice of intervention and attaching the affidavits of surface owners alleging injury from oil and gas operations. SJCA also filed a Motion to Deny Hilcorp's Application on the basis that it should have been filed as a rulemaking rather than as an adjudication, and a second Motion for Continuance asserting information requests from the U.S. Environmental Protection Agency and Bureau of Land Management remain pending.

12. Hilcorp filed a motion to strike the SJCA's Notice of Intervention noting that it did not provide a legal basis for standing as party to the proceedings and did not provide a sufficient basis for permissive intervention on the subject matter of the hearing. Hilcorp also filed a response brief opposing the SJCA's Motion to Deny which provided points and authorities supporting a determination that its Application is properly the subject

of an adjudicatory proceeding rather than a statewide rulemaking proceeding. Hilcorp orally opposed the SJCA's Motion for Continuance stating SJCA lacked standing to seek a continuance, that the issues the SJCA sought to address were not relevant to the limited subject matter of the Commission's hearing, and that the Motion was untimely under the Commission's rules.

13. After hearing argument and deliberating at the November 19th hearing, the Commission orally granted Hilcorp's motion to strike the SJCA's notice of intervention because the SJCA failed to show a basis for legal standing to intervene and failed to show that it had the special expertise to contribute substantially to the particular issues before the Commission. The Commission also denied the SJCA's Motion for Continuance on the grounds only a party has standing to request a continuance under 19.15.4.13(C) NMAC, the SJCA had failed to justify a basis for continuance, and the Motion was filed late under 19.15.4.13(C) NMAC. Regarding the SJCA's Motion to Deny, the Commission noted that prior precedent and the New Mexico Supreme Court's decision in *Uhden v. New Mexico Oil Conservation Comm'n*, 1991-NMSC-089, ¶ 7, 817 P.2d 721, establish that Hilcorp's Application for amendment to special pool rules is an adjudication, not a statewide rulemaking proceeding.

14. At the November 19th hearing, the Commission again received public comment on Hilcorp's Application pursuant to 19.15.4.14(C) NMAC.

15. In addition to Hilcorp, the following parties of record entered their appearances in this case at both hearings:

Logos Resources II, LLC, Logos Operating, LLC, and Enduring Resources, entered appearances as parties to this proceeding as division-designated operators in the Blanco-Mesaverde Pool and appeared at the Commission hearings in support of Hilcorp's Application.

16. In addition to the parties of record, a number of individual surface owners and representatives of various interest groups also attended the hearings and offered their comments on the Application and other matters beyond the scope of the proceeding and the Commission's jurisdiction in this adjudication. These individuals included:

Daniel Tso; Don Schreiber (on behalf of Devils Spring Ranch); Mike Eisenfeld (on behalf of himself and the San Juan Citizens Alliance); Carla Sonntag (on behalf of New Mexico Business Coalition); Bob Graham; Larry Sonntag (on behalf of New Mexico Business Coalition); John Clems; Bill Midcap (on behalf of Rocky Mountain Farmers Union); Warren Umsicker (on behalf of the City of Farmington); Samuel Sage (on behalf of the Counselor Chapter); Joe Manley; Melissa Horn; Marie Morgan; Jim Winchester (on behalf of Independent Petroleum Association of New Mexico); Caren Waters; Sonia Grant; Lynne Fischer; Teresa Seamster; John Otter, Bobbe Bebord; Jon Anderson; and Richard Vietal.

18. Hilcorp presented three witnesses in support of its Application: Mr. Charles Creekmore, a petroleum landman; Mr. Andrew Sparks, a petroleum geologist; and Ms. Michelle Sivadon, a reservoir engineer. Only Ms. Sivadon appeared at the November 19th hearing to provide additional evidence and testimony in support of the Application.

THE COMMISSION FINDS AND CONCLUDES THAT:

19. Hilcorp provided notice of the Commission hearing in this matter to all Division-designated operators in the Blanco-Mesaverde Pool and 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. The Commission provided notice pursuant to 19.15.4.9 NMAC. Accordingly, all notice required by Commission rules was properly provided. *See* 19.15.4.12(A)(4)(b) NMAC.

20. A courtesy notice of Hilcorp's Application and the initial Commission hearing in this matter was also provided to the Bureau of Land Management and the New Mexico State Land Office. Under Commission rules and prior precedent, neither agency is entitled to formal notice of this type of proceeding and neither of these agencies chose to appear before the Commission, which contains a representative from the New Mexico State Land Office.

21. Hilcorp's Application raises issues of geology and reservoir engineering that relate solely to the proper management of an underground gas pool to avoid the prevention of underground waste and the protection of correlative rights. The drilling, operation, and production of oil and gas wells and the disposition of oil field wastes are not at issue under this Application.

22. The SJCA has not established a basis to intervene in this proceeding. The potential injuries alleged by the SJCA are outside the zone of interest to be protected by the statutes and rules at issue under Hilcorp's Application. The SJCA also did not establish that it or its proposed witnesses have the special expertise necessary to contribute substantially to the prevention of underground waste or the protection of correlative rights.

23. The potential injuries and harm alleged by the SJCA are limited to surface-related issues that are not at issue in this proceeding. The fears and concerns raised by the SJCA are addressed by proceedings and rules governing the actual drilling, recompletion, operation, and production of oil and gas wells, and the disposition of oil field wastes. These other regulatory proceedings and rules are not before the Commission under Hilcorp's Application.

24. The SJCA has not established a proper basis for intervention in this case. The Motion for Continuance filed by the SJCA is denied. The SJCA is not a party to this proceeding, the motion is untimely and does not provide justification for a continuance.

25. Under *Uhden v. New Mexico Oil Conservation Comm'n*, 1991-NMSC-089, 817 P.2d 721, 19.15.3.7(D) NMAC, and prior Commission precedent, Hilcorp's

Application to amend the special rules governing the Blanco-Mesaverde Pool is an adjudication, not a rulemaking.

26. Hilcorp is the operator of approximately 5,329 wells currently producing from the Blanco-Mesaverde Pool, which covers a large portion of the "San Juan Basin" across Rio Arriba and San Juan Counties, New Mexico.

27. The Blanco-Mesaverde Pool was first created by the Commission in 1949 under Order No. 799 in Case No. 163. In that Order the Commission adopted 320-acre GPUs on the assumption that one well would adequately drain and develop 320 acres. *See* Order R-10987-A, ¶ 7.

28. In 1974, following a hearing and receipt of evidence from operators in the Blanco-Mesaverde Pool, the Commission concluded that one well per GPU was inadequate to properly drain the reservoir. *See* Order No. R-1670-T. To avoid waste, the Commission modified the special pool rules to allow an optional infill well within the 320-acre GPUs, or 160-acre infill well density. *See* Order R-10987-A, ¶ 9.

29. In 1998, following a hearing and the receipt of evidence from operators in the Blanco-Mesaverde Pool, the Oil Conservation Division concluded that 160-acre well density was insufficient to properly drain the reservoir due to its low-permeability and discontinuous sandstones. The Oil Conservation Division issued Order No. R-10987-A which modified the special pool rules to increase the well density from two wells per 320-acre GPU to four wells per 320-acre GPU, or 80-acre infill well density. *See* Order R-10987-A, ¶ 2.

30. In this proceeding, Hilcorp presented evidence and testimony that supports granting an increase in infill well density, including the following:

- (a) The Blanco-Mesaverde Pool is comprised of the Mesaverde formation, which is itself comprised of the geologically distinct Cliffhouse, Menefee, and Point Lookout members. The Blanco-Mesaverde Pool is considered a depletion drive reservoir. The expected recovery efficiency for such reservoirs is approximately 80%.
- (b) Under the existing 80-acre well density with four wells per 320-acre GPU, the expected ultimate recovery (EUR) at full development is approximately 21.8 trillion cubic feet (TCF) of gas with an expected recovery efficiency of 39%.
- (c) Under the proposed 40-acre well density with up to eight wells per 320-acre GPU, the EUR at full development is approximately 34.1 TCF with an expected recovery efficiency of approximately 62%.
- (d) The additional 12.3 TCF of gas that is expected to be produced with an increase to 40-acre well density per 320-acre GPU would otherwise remain

unrecovered in the Blanco-Mesaverde Pool under the existing 80-acre well density, resulting in underground waste and impairing correlative rights.

31. Three current operators in the Blanco-Mesaverde Pool appeared at the hearing and presented statements in support of Hilcorp's Application. No operator filed an objection to Hilcorp's Application or provided any public comment in opposition to the relief requested.

32. The requested increase in well density is consistent with the Commission's management of this reservoir since 1949, represents a logical progression of the well density previously approved by the Commission, and is necessary to prevent waste and protect correlative rights.

33. Hilcorp's proposal to increase well density from four wells to eight wells per 320-acre GPU (40-acre infill) is in the best interest of conservation, the prevention of waste, and the protection of correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

1. The Application of Hilcorp Energy Company ("Hilcorp") is hereby approved.

2. Pursuant to Hilcorp's Application, and effective as of the date of this Order, the special rules for the Blanco-Mesaverde Pool are hereby amended as follows:

I. ACREAGE AND WELL LOCATION REQUIREMENTS

A. Standard GPU (Gas Proration Unit): A standard GPU in the Blanco-Mesaverde Pool shall be 320 acres, more or less, comprising any two contiguous quarter sections of a single section that is a legal subdivision of the U. S. Public Land Surveys.

B. Well density:

- (1) Up to eight (8) vertical wells may be drilled on a standard GPU;
- (2) No more than four (4) wells shall be located within either quarter section in a GPU; and
- (3) Any deviation from the above-described well density requirements shall be authorized only after hearing.

II. ADMINISTRATIVE EXCEPTIONS:

The Division Director, in accordance with Subsection C of 19.15.15.11 NMAC, may administratively grant an exception to the well location requirements of I.C. above upon application to the Division which includes notification by certified mail-return receipt requested to affected persons. [See 19.15.2.7(A)(8) NMAC].

3. The special rules for the Blanco-Mesaverde Pool are hereby set forth in their entirety in the attached Exhibit "A," which shall supersede the special pool rules for the Blanco-Mesaverde Pool in Division Order No. R-10987-A(1).

4. Jurisdiction is hereby retained for the entry of such further order as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on this 4th day of December 2018.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



ROBERT BALCH, Member

AUBREY DUNN, Member



HEATHER RILEY, Chair

SEAL

EXHIBIT "A"
Case No. 16403
Order No. R-10987-A(2)

**SPECIAL RULES FOR THE
BLANCO-MESAVERDE POOL**

I. ACREAGE AND WELL LOCATION REQUIREMENTS

- A. Standard GPU (Gas Proration Unit):** A standard GPU in the Blanco-Mesaverde Pool shall be 320 acres, more or less, comprising any two contiguous quarter sections of a single section that is a legal subdivision of the U. S. Public Land Surveys.
- B. Well density:**
- (1) Up to eight (8) vertical wells may be drilled on a standard GPU;
 - (2) No more than four (4) wells shall be located within either quarter section in a GPU; and
 - (3) Any deviation from the above-described well density requirements shall be authorized only after hearing.
- C. Well locations:**
- (1) Except as provided in subparagraph I.C (2) below, wells drilled on a GPU shall be located no closer than 660 feet to the outer boundary of the GPU and no closer than 10 feet to any interior quarter or quarter-quarter section line or subdivision inner boundary.
 - (2) A well drilled or recompleted within a federal exploratory unit is not subject to the 660-foot setback requirement to the outer boundary of a GPU, provided however:
 - (a) the well shall not be closer than 10 feet to any section, quarter section, or interior quarter-quarter section line or subdivision inner boundary;
 - (b) the well shall not be closer than 660 feet to the outer boundary of the federal exploratory unit;

- (c) if the well is located within the federal exploratory unit area but adjacent to an existing or prospective GPU containing a non-committed tract or partially committed tract, it shall not be closer than 660 feet to the outer boundary of its GPU;
 - (d) if the well is located within a non-committed or partially committed GPU, it shall not be closer than 660 feet to the outer boundary of its GPU;
 - (e) if the well is located within a participating area but adjacent to an existing or prospective GPU that is not within the same participating area, it shall not be closer than 660 feet to the outer boundary of the participating area; and
 - (f) if the well is located within the federal exploratory unit area but in an existing or prospective GPU that is a non-participating GPU, it shall not be closer than 660 feet to the outer boundary of its GPU.
- (3) The operator filing an APD for any well within a federal exploratory unit area that is closer to the outer boundary of its assigned GPU than 660 feet shall provide proof in the form of a participating area plat that such well meets the requirements of I.C(2) above.

II. ADMINISTRATIVE EXCEPTIONS:

The Division Director, in accordance with Subsection C of 19.15.15.11 NMAC, may administratively grant an exception to the well location requirements of I.C above upon application to the Division which includes notification by certified mail-return receipt requested to affected persons. [See 19.15.2.7(A)(8) NMAC].

III. ALLOCATION AND GRANTING ALLOWABLES:

- A. **Non-Marginal GPU Allowable:** The pool allowable remaining each month after deducting the total allowable assigned to marginal GPUs shall be allocated among the non-marginal GPUs entitled to an allowable in the following manner:
- (1) Seventy-five percent (75%) of the pool allowable remaining to be allocated to the non-marginal GPUs shall be allocated among such GPUs in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPUs in the pool.

When calculating the allowable for a GPU containing one or more infill wells, the deliverability of the wells shall be added in calculating the AD Factor and the allowable may be produced from all wells.

- (2) Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal GPUs shall be allocated among such GPUs in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPUs in the pool.

B. Minimum Allowable: A minimum allowable of 250 MCF per month per GPU is assigned to prevent the premature abandonment of wells.

C. A GPU in the Blanco-Mesaverde Pool shall be classified as marginal unless reclassified by the Director pursuant to Division Rule 605.F.(2). Any operator in the Blanco-Mesaverde Pool may request a reclassification of a GPU in that pool.

IV. VERTICAL LIMITS OF THE BLANCO-MESA VERDE POOL:

The vertical limits for the Blanco-Mesaverde Pool are described in relation to the Chacra line and to the Huerfanito Bentonite Marker as follows: (i) Southwest of the Chacra line the top of the pool is a point 750 feet below the Huerfanito Bentonite Marker and the base of the pool is a point 500 feet below the top of the Point Lookout Sandstone; and (ii) Northeast of the Chacra line the top of the pool is a point 300 feet above the Huerfanito Bentonite Marker and the base of the pool is a point 500 feet below the top of the Point Lookout Sandstone.

The northwest southeast trending Chacra Line (originally established by Order R-5459, as amended) divides the Blanco-Mesaverde pool for purposes of defining the vertical limits of the pool. This line traverses the south side or west side of the sections listed below:

TOWNSHIP 24 NORTH, RANGE 1 EAST, NMPM

Section 31:	West
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TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM

Section 3:	West
Section 10:	West and South
Section 14:	West and South
Section 24:	West

Section 25: West and South

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM

Section 7: West
Section 18: West and South
Section 20: West and South
Section 28:- West
Section 33: West and South

TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM

Section 1: West and South

TOWNSHIP 26 NORTH, RANGE 2 WEST, NMPM

Sections 7 and 8: South
Section 16: West and South
Section 22: West and South
Section 26: West
Section 35: West and South

TOWNSHIP 26 NORTH, RANGE 3 WEST, NMPM

Sections 2 and 3: South
Section 4: West and South
Section 12: West and South

TOWNSHIP 27 NORTH, RANGE 3 WEST, NMPM

Sections 31 and 32: South

TOWNSHIP 27 NORTH, RANGE 4 WEST, NMPM

Sections 31 through 36: South

TOWNSHIP 27 NORTH, RANGE 5 WEST, NMPM

Sections 31: West and South
Sections 32 through 36: South

TOWNSHIP 27 NORTH, RANGE 6 WEST, NMPM

Section 6: West
Section 7: West and South
Sections 8 and 9: South
Section 14: South
Section 15: West and South
Section 24: West
Section 25:- West and South

TOWNSHIP 28 NORTH, RANGE 6 WEST, NMPM

Section 7:	West
Sections 18 and 19:	West
Sections 30 and 31:	West

TOWNSHIP 29 NORTH, RANGE 7 WEST, NMPM

Section 31:	West and South
Sections 32 through 36:	South

TOWNSHIP 29 NORTH, RANGE 8 WEST, NMPM

Section 17:	South
Section 18:	West and South
Section 21:	West and South
Section 22:	South
Section 25:	South
Section 26:	West and South

TOWNSHIP 29 NORTH, RANGE 9 WEST, NMPM

Section 3:	South
Section 4:	West and South
Section 11:	West and South
Section 12:	South

TOWNSHIP 30 NORTH, RANGE 9 WEST, NMPM

Section 31:	West and South
Section 32:	South

TOWNSHIP 30 NORTH, RANGE 10 WEST, NMPM

Section 18:	South
Section 20:	West and South
Sections 21 and 22:	South
Section 25:	South
Section 26:	West and South

TOWNSHIP 30 NORTH, RANGE 11 WEST, NMPM

Section 6:	West and South
Section 8:	West and South
Sections 9 through 11:	South
Section 13:	West and South

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM

Section 19:	South
Sections 27 and 28:	South
Section 29:	West and South
Section 35:	West and South
Section 36:	South

TOWNSHIP 31 NORTH, RANGE 13 WEST, NMPM

Sections 7 and 8:	South
Sections 14 and 15:	South
Section 16:	West and South
Section 24:	West and South

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM

Section 12:	South.
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