# 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. 12290 ORDER NO. R-10987-B

APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY TO AMEND THE SPECIAL RULES AND REGULATIONS FOR THE BASINDAKOTA POOL FOR PURPOSES OF CHANGING THE WELL LOCATION REQUIREMENTS, RIO ARRIBA AND SAN JUAN COUNTIES, NEW MEXICO

# ORDER OF THE DIVISION

# BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on November 18, 1999, and on February 17, 2000, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 3044 day of June, 2000, 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 New Mexico Oil Conservation Division ("Division") has jurisdiction of this case and its subject matter.
- (2) Burlington Resources Oil & Gas Company ("Burlington") seeks an order of the Division to amend the special poolwide rules for the Basin-Dakota Pool to:
  - (A) change the initial and infill well location set-back requirements to allow a well to be located not closer than 660 feet to any outer boundary of a gas spacing and proration unit and not closer than 10 feet to any quarter-quarter section line or subdivision inner boundary;
  - (B) delete the 920-foot minimum distance between wells; and
  - (C) add location requirements for federal exploratory units.

- (3) Burlington operates approximately 1,633 producing gas wells within the Basin-Dakota Pool.
- (4) In accordance with Rule 1207.A (4), revised by Division Order No. R-11205, issued in Case No. 12177 and made effective July 15, 1999, Burlington sent approximately 131 copies of its application including its proposed rules and notice of hearing to operators in the Basin-Dakota Pool. Notice of this case was also published in the newspaper and on the Division's hearing docket that is mailed to approximately 300 operators in New Mexico.
- (5) No operator or interested party appeared at the hearing in opposition to this application. A representative of the Ute Mountain Ute Indian Tribe appeared at the February 17, 2000 hearing in support of this application. Dugan Production Corporation, which operates approximately 95 producing gas wells within the Basin-Dakota Pool, submitted a letter supporting this application.
- (6) The horizontal limits of the Basin-Dakota Pool comprise all of San Juan and Rio Arriba Counties, New Mexico and all of Section 21, Township 23 North, Range 5 West, NMPM, Sandoval County, New Mexico, but excludes any other pool that has the word "Dakota" in its name.
- (7) The current rules and procedures governing the Basin-Dakota Pool are titled the "Special Rules and Regulations for the Basin-Dakota Gas Pool" and are included in "EXHIBIT "B" of the "SPECIAL RULES FOR INDIVIDUAL PRORATED GAS POOLS" of New Mexico Oil Conservation Commission Order No. R-10987, issued in Case No. 11705 and dated May 7, 1998. Exhibit "B" currently states:

The vertical limits for the Basin-Dakota Gas Pool shall be from the base of the Greenhorn Limestone to a point 400 feet below the base of the said formation and consisting of the Graneros formation, the Dakota formation and the productive upper portion of the Morrison formation.

The Basin-Dakota Gas Pool was created February 1, 1961, and gas proration became effective February 1, 1961.

WELL ACREAGE AND LOCATION REQUIREMENTS

The STANDARD GPU (Gas Proration Unit) in the Basin-Dakota Gas Pool shall be 320 acres.

#### WELL LOCATION:

- 1) THE INITIAL WELL drilled on a GPU shall be located not closer than 790 feet to any outer boundary of the quarter section on which the well is located and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.
- 2) THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Dakota well, and shall be located with respect to the GPU boundaries as described in the preceding paragraph.

No Dakota infill well shall be drilled nearer than 920 feet to an existing Dakota well on the same GPU.

The plat (Form C-102) accompanying the Application for Permit to Drill (OCD Form C-101 or the federal form) for the subsequent well on a GPU shall have outlined thereon the boundaries of the GPU and shall show the location of all existing Dakota wells on the GPU plus the proposed new well.

In the event an infill well is drilled on any GPU, both wells shall be produced for so long as it is economically feasible to do so.

#### ALLOCATION AND GRANTING ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

- GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.
- When calculating the allowable for a GPU containing an infill well, the deliverability of both wells shall be added in calculating the AD Factor and the allowable may be produced from both wells.
- Sixty percent (60%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent the premature abandonment of wells.

A GPU in the BASIN DAKOTA GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F. (2). Any operator in the BASIN DAKOTA GAS POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

- (8) The following is an historical summary of the well spacing and location rules applicable to the Basin-Dakota Pool:
  - By Order No. 850 issued in Case No. 189, dated (A) December 9, 1949, and made effective January 1, Mexico Conservation 1950. the New Oil Commission ("Commission") adopted rules and regulations for statewide application, which in Rule 104. (c) established 160-acre spacing for wells in defined gas pools with wells located not closer than 660 feet to the outer boundary of the unit nor closer than 1320 feet to any other well in the pool. Prior to this order spacing for all oil and gas wells in New Mexico, unless otherwise provided for by special pool rules, was on 40-acre spacing and proration units (see Commission Order No. 1 issued on June 29, 1935) with wells to be located no closer than 330 feet from any unit boundary nor closer than 660 feet to any other well (see Commission Order No. 538 issued in Case No. 39 and dated June 22, 1943).
  - (B) By Order No. R-238, issued in Case No. 226 and dated December 29, 1952, the Commission required a 330-foot setback from any quarter-quarter section or subdivision inner boundary [see Rule 104. (d)].
  - (C) By Order No. R-855, issued in Case No. 1104 and dated August 10, 1956, the Commission retained the 160-acre spacing and the 1320-feet between-well spacing for gas wells in northwest New Mexico, but

changed the set-back requirements to allow wells to be no closer than 990 feet from the outer boundaries of the 160-acre unit provided, however, that a tolerance of plus or minus 200 feet is permissible. The internal setbacks from interior quarter-quarter sections or subdivision inner boundaries were changed from 330 feet to 130 feet.

- (D) By Order No. R-1287, issued in Cases No. 1508 and 1523 and dated November 21, 1958, the Commission granted the application of El Paso Natural Gas Company, which created and defined the Dakota producing interval in northwest New Mexico, and established special rules and regulations that provided for 320-acre spacing with wells to be located no closer than 790 feet to the boundary line of the unit and no closer than 130 feet to a governmental quarter-quarter section or subdivision inner boundary. This order deleted the distance-between-wells requirement.
- (E) On November 4, 1960, by Order No. R-1670-C issued in Case No. 2095 and made effective February 1, 1961, the Commission on its own motion created and designated the Basin-Dakota Pool. Its horizontal limits were defined and gas prorationing was instituted. This order adopted the same well spacing and location requirements as established by Order No. R-1287.
- (F) On May 22, 1979, by Order No. R-1670-V issued in Case No. 6533, the Commission granted the application of El Paso Natural Gas Company for an optional second well (infill well) on a 320-acre gas spacing and proration unit with both the original and infill well to be located in opposite quarter sections and with wells to be located no closer than 790 feet to the boundary line of the unit and no closer than 130 feet to a governmental quarter-quarter section or subdivision inner boundary. This order reintroduced

- a distance-between-wells requirement, but changed the previous distance of 1320 feet to 920 feet.
- (G) Order No. R-8170, issued in Case No. 8749 and dated March 28, 1986, and Order No. R-8170-H, issued in Case No. 10009 and dated December 10, 1990, are the two primary orders in the R-8170 series issued by the Commission to recodify and amend New Mexico's gas prorationing rules. The well spacing and location requirements for the Basin-Dakota Pool remained intact.
- By Order No. R-10987, issued in Case No. 11705 (H) and dated May 7, 1998, the Commission again recodified and amended the gas prorationing rules but kept the well spacing and location requirements for the Basin-Dakota Pool intact. The special pool rules under this Order are the rules that currently govern the Basin-Dakota Pool [see Finding Paragraph No. (7) above]. In the recodification by Order No. R-10987 the following words of Order No. R-8170, as amended, were inadvertently omitted and should be included in the Special Rules for the Basin-Dakota Pool, attached as Exhibit "A," in the section entitled "Allocation and Granting Allowables": "Forty percent (40 %) of the pool allowable remaining to be allocated to the non-marginal."
- (9) The following is that portion of Division Order No. R-10987 entitled "WELL LOCATION" showing the changes that Burlington proposes. Highlights indicate new material and deletions are crossed out:

#### WELL LOCATION:

- 1) THE INITIAL WELL drilled on a GPU shall be located not closer than 790 660 feet to any outer boundary of the quarter section on which the well is located and not closer than 130 10 feet to any quarter-quarter section line or subdivision inner boundary.
- 2) THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Dakota well, and shall be located with respect to the GPU boundaries as described

in the proceeding paragraph.

Wells located within federal exploratory units shall not be closer than 10 feet to any section, quarter section or interior quarter-quarter section line or subdivision inner boundary, except that wells located within one-half mile of the outer boundary of any such unitized area shall not be closer than permitted by subparagraph (1) above.

No Dakota infill well shall be drilled nearer than 920-feet to an existing Dakota well on the same GPU.

- (10) Burlington presented evidence demonstrating that:
  - (A) An effective and efficient means of drilling and producing new Dakota gas wells is to commingle the Dakota gas stream with gas from other intervals, such as the Mesaverde, Pictured Cliffs, and Fruitland Coal, within the wellbore.
  - (B) To increase the opportunity to locate wells in the optimum position or to accommodate topographical and archaeological conditions, numerous applications for unorthodox gas well locations will have to be processed, unless the exterior and interior footage setback requirements are relaxed.
- (11) The current well location requirements for wells in the Basin-Dakota Pool differ from the current rules governing the Blanco-Mesaverde Pool (see Division Order No. R-10987-A, issued in Case No. 12069 and dated February 1, 1999), Basin-Fruitland Coal (Gas) Pool (see Division Order No. R-8768, issued in Case No. 9420 and dated October 17, 1988, as amended by Division Orders No. R-8768-A, issued in reopened Case No. 9420 and dated July 16, 1991 and R-8768-B, issued in Case No. 12296 and dated February 10, 2000), and gas wells that are spaced on 160 acres and are governed by Division Rule 104.C (3), which includes most of the wells within the Pictured Cliffs formation (see Division Order No. R-11231, issued in Case No. 12119 and dated August 12, 1999).
- (12) It is in the best interests of conservation to establish uniform well location requirements for the gas producing formations currently spaced on 160-acre and 320-acre units in northwest New Mexico.

- (13) Adopting Burlington's proposal to relax the footage setbacks of the pool is in the best interest of conservation, prevention of waste, and protection of correlative rights and provides workable, fair and efficient regulation of well locations.
- (14) To increase the opportunity to locate wells in the optimum position and avoid processing numerous cases for unorthodox well locations, Burlington's request to relax the exterior and interior footage setback requirements within the Basin-Dakota Pool should be approved.
- (15) Burlington did not present sufficient data outlining the existing federal exploratory units and participating areas and their relationship to adjoining proration units to support its request to apply special setback requirements to federal exploratory units.
- (16) Burlington's proposal to allow Basin-Dakota gas wells to be drilled and completed virtually anywhere within a federal exploratory unit is inappropriate within a pool that is not entirely developed, such as the Basin-Dakota Pool, and is not in the best interest of conservation since it will not promote efficient drainage of this pool in an orderly manner.
  - (17) Such unrestricted development in a random manner promotes waste.
- (18) Further, such unrestricted development in a random manner causes unnecessary wells to be drilled and completed to adequately drain the resulting gaps or holes in development. These unnecessary wells will create economic waste and hardship for those non-operating interest owners who contribute to the cost of these wells.
- (19) Burlington has clearly shown by testimony presented at the hearing and by supplemental information provided subsequent to the hearing, that opportunities for correlative rights violations are created by allowing encroachment towards non-participating areas within the unit and/or mineral interest that have not ratified the agreement and who will not receive notice of the encroachment.
- (20) Burlington's request to apply special setback requirements to federal exploratory units should therefore be denied.
- (21) Accordingly, the Division should amend the special rules for the Basin-Dakota Pool to modify well location requirements as follows:

#### WELL LOCATION:

- 1) THE INITIAL WELL drilled on a GPU shall be located not closer than 660 feet to any outer boundary of the quarter section on which the well is located and not closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.
- 2) THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Dakota well and shall be located with respect to the GPU boundaries as described in the proceeding paragraph.

Further, the 920-foot minimum distance requirement between Dakota wells should be deleted.

- (22) The "Special Rules for the Basin-Dakota Pool" set forth in Exhibit "A" of this order should supersede those found in Division Order No. R-10987.
- (23) The "Special Rules for the Basin Dakota Pool" set forth in Exhibit "A" should not apply to Indian lands. As used in this order "Indian lands" are any mineral estate or mineral resources of an Indian Tribe or Pueblo or an Indian allottee, which are held in trust by the United States or which are subject to Federal restrictions against alienation.

# IT IS THEREFORE ORDERED THAT:

- (1) Pursuant to the application of Burlington Resources Oil & Gas Corporation ("Burlington"), the "Special Rules for the Basin-Dakota Pool" set forth in Exhibit "A" of this order shall supersede the special rules for the Basin-Dakota Gas Pool in Division Order No. R-10987, issued in Case No. 11705 and dated May 7, 1998. All other provisions of Order No. R-10987 shall remain in full force and effect until further notice.
- (2) The "Special Rules for the Basin Dakota Pool" set forth in Exhibit "A" do not apply to Indian lands. Until further order, Indian lands in the Basin-Dakota Pool shall continue to be governed by Order No. R-10987, issued in Case No. 11705 and dated May 7, 1998.
- (3) Burlington's request to apply special setback requirements to federal exploratory units is hereby denied.
- (4) Jurisdiction is hereby 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.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

LÓRI WROTENBERY

Director

SEAL

# EXHIBIT "A" Case No. 12290 Order No. R-10987-B

# SPECIAL RULES FOR THE BASIN-DAKOTA POOL

The vertical limits for the Basin-Dakota Pool shall be from the base of the Greenhorn Limestone to a point 400 feet below the base of the said formation and consisting of the Graneros formation, the Dakota formation and the productive upper portion of the Morrison formation.

The Basin-Dakota Pool was created February 1, 1961, and gas proration became effective February 1, 1961.

# WELL ACREAGE AND LOCATION REQUIREMENTS

The STANDARD GPU (Gas Proration Unit) in the Basin-Dakota Pool shall be 320 acres.

#### WELL LOCATION:

- 3) THE INITIAL WELL drilled on a GPU shall be located not closer than 660 feet to any outer boundary of the quarter section on which the well is located and not closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.
- 4) THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Dakota well, and shall be located with respect to the GPU boundaries as described in the preceding paragraph.

The plat (Form C-102) accompanying the Application for Permit to Drill (OCD Form C-101 or federal form) for the subsequent well on a GPU shall have outlined thereon the boundaries of the GPU and shall show the location of all existing Dakota wells on the GPU plus the proposed new well.

In the event an infill well is drilled on any GPU, both wells shall be produced for so long as it is economically feasible to do so.

### ALLOCATION AND GRANTING ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

- Forty percent (40 %) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.
- When calculating the allowable for a GPU containing an infill well, the deliverability of both wells shall be added in calculating the AD Factor and the allowable may be produced from both wells.
- Sixty percent (60%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent the premature abandonment of wells.

A GPU in the BASIN DAKOTA POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F. (2). Any operator in the BASIN DAKOTA POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)