

**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. \_\_\_\_\_**

**APPLICATION OF BURLINGTON RESOURCES  
OIL & GAS COMPANY TO AMEND THE  
SPECIAL RULES AND REGULATIONS FOR  
THE BASIN-DAKOTA GAS POOL,  
RIO ARRIBA AND SAN JUAN COUNTIES, NEW MEXICO**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

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

NOW, on this \_\_day of February, 2000, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS THAT:**

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) Burlington Resources Oil & Gas Company ("Burlington") seeks an order of the Division to amend the Special Rules and Regulations for the Basin-Dakota Gas Pool to (a) change the initial and infill well location boundary requirements to not closer than 660 feet to any outer boundary of a gas proration unit ("GPU") and not closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; (b) delete the 920 foot minimum distances between wells; and (c) add well locations requirements for federal exploratory units.

(3) Burlington is the operator of approximately 1633 wells currently producing from the Basin-Dakota Gas Pool.

(4) In compliance with Division notice rules, Burlington sent approximately 131 copies of its application including its proposed rules and notice of hearing to operators in the Basin-Dakota Gas Pool. Notice of this case was also published in the newspaper and on the Division's hearing docket which is mailed to approximately 300 operators in New Mexico.

(5) No interested person has appeared in opposition to approval of this application.

(6) The Basin-Dakota Gas Pool is currently governed by the "Special Rules and Regulations for the Basin-Dakota Gas Pool" as set forth in Exhibit "B" "Special Rules for Individual Prorated Gas Pools", of Division Order R-10987, dated May 7, 1998. The rules pertaining to well spacing and location requirements are set forth as follows:

#### "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."

(7) The following summarizes the history of the well locations rules applicable for wells in the Basin-Dakota Pool:

(a) Effective January 1, 1950, by Order R-850 (case 189) the Commission adopted General Rules for statewide application which in Rule 104 established well location and spacing rules applicable in the San Juan Basin. Those rules provided:

gas wells will be spaced on 160-acre spacing units with wells located not closer than 660 feet to the outerboundary or closer than 1320 to a well in the same pool.

(b) On December 23, 1952, by Order R-238 (Case 226), the Commission revised Rule 104 of the General Rules to provide:

gas wells will be spaced on 160-acre spacing units with wells located not closer than 660 feet to the outerboundary or closer than 330 to any interior quarter-quarter governmental section line with wells not closer than 1320 feet to a well in the same pool.

(c) On August 10, 1956, by Order R-855 (Case 1104), the Commission revised Rule 104 of the General Rules to provide that gas wells in the San Juan Basin:

gas wells in San Juan, Rio Arriba and Sandoval Counties will be spaced on 160-acre spacing units with wells located not closer than 990 feet to the outerboundary, **but with 200 foot permitted tolerance**, and not closer than 130 to any interior quarter-quarter governmental section line.

(d) On November 21, 1958, by Order R-1287 (Cases 1508 & 1523), the Commission granted the application of El Paso Natural Gas Company for an order establishing 320-acre spacing in the Graneros, Dakota and Upper Morrison formations of the San Juan Basin and provided:

gas wells will be spaced on 320-acre spacing units with wells located in either quarter section but not closer than 790 feet to the outerboundary and not closer than 130 to any interior quarter-quarter governmental section line.

(e) On November 4, 1960, by Order R-1670-C (Case 2095), the Commission, on its own motion, established gas prorationing effective February 1, 1961, for the Dakota gas producing interval of the San Juan Basin, **abolished** some 13 different Dakota pools and **created** the Basin-Dakota Gas Pool covering all of San Juan and Rio Arriba Counties **but excluding** the Barker Creek-Dakota and Ute Dome-Dakota Gas Pools and with requirements including:

gas wells will be spaced on 320-acre spacing units with wells located in either quarter section but not closer than 790 feet to the outerboundary and not closer than 130 to any interior quarter-quarter governmental section line.

(f) Over the years, the Division has excluded other portions of Rio Arriba and San Juan Counties from the Basin-Dakota Gas Pool when it created and expanded other Dakota pools which the Division considers caused the automatic contraction of the Basin-Dakota Gas Pool. Examples include the West Lindrith Gallup-Dakota Pool, and any other current pool which includes "Dakota" in its name.

(g) On May 22, 1979, by Order R-1670-V (Case 6533), the Commission granted El Paso Natural Gas Company's application for an optional second well ("infill well") on a 320-acre gas spacing unit ("GPU") with both the original and infill well to be located in opposite 160-acre portions of the spacing unit section but not closer than 790 feet to the outerboundary of the GPU and not closer than 130 to any interior quarter-quarter governmental section line and with not less than 920 feet between Dakota wells on the same GPU.

(h) On March, 28, 1986, by Order R-8170 (Case 8749), the Commission, on its own motion, amended the General Rules for the Prorated Gas Pools of New Mexico but did not amend the well density or locations requirements for the Basin-Dakota Gas Pool.

(8) Burlington desires that the Division amend the Special Rules and Regulations for the Basin-Dakota Gas Pool to modify well location requirements as follows:

- 1) THE INITIAL WELL drilled on a GPU shall be located not closer than 660 feet to the South and North lines nor closer than 660 feet to the East and West lines of a GPU 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 preceding paragraph.
- 3) 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 boundary of any such unitized area shall not be closer than permitted by subparagraph (1) above.

(9) Burlington presented evidence which demonstrates that:

- (a) one of the most effective and efficient current means of drilling and producing new Dakota gas wells is to do so as wellbores which either downhole commingle to dually complete the Dakota formation with other formations including the Mesa Verde, Basin Fruitland Coal-Gas and Pictured Cliffs formation formations.
- (b) in order to increase the opportunity to locate wells in the optimum position or to accommodate numerous topographical and archaeological conditions, it is either necessary to process numerous cases for unorthodox well locations or to relax the exterior and interior footage setback requirements.
- (c) the Division may relax the well locations requirements in this pool within the interiors of federal exploratory units because these units, whether named or numbered by township, contain provisions in either the unit agreement or the unit operating agreement, or both, which protect correlative rights of all working interest owners and royalty interest owners.

In addition, the underlying lease obligations, in addition to these agreements, provide protection for the royalty interest owners.

(10) The current well location requirements for wells in Basin-Dakota Gas Pool rules are not the same as the current well location regulations for wells in the Blanco-Mesaverde Gas Pool or the Pictured Cliffs pools.

(11) Effective February 1, 1999, Division Order R-10987-A amended the Blanco-Mesaverde Gas Pool Rules to (a) change the initial and infill well location boundary requirements from not closer than 790 feet to not closer than 660 feet to any outer boundary of a quarter section, (b) from not closer than 130 feet to not closer than 10 feet to any quarter-quarter section line or subdivision inner boundary, and (c) relaxed the interior well location requirements within federal exploratory units.

(12) In addition, effective August 31, 1999, the Division entered Order R-11231 which, among other things, amended the well location requirements for certain gas wells spaced on "statewide spacing rules" so they could be located not closer than 660 feet to an outer boundary and not closer than 10 feet to an interior quarter-quarter section line.

(13) As a result of the different well location requirements for each of these pools, the drilling of a Mesaverde well or a Pictured Cliffs well at a standard location can be unorthodox in the Basin-Dakota Gas Pool.

(14) These differences require both the Division and the operator to process administrative non-standard location applications for the Basin-Dakota Gas wells when that well is to be downhole commingled or dual completed with production from the Blanco Mesaverde or Blanco Pictured Cliffs Pools.

(15) These differences require both the Division and the operator to process administrative non-standard location applications for the Basin-Dakota Gas wells which otherwise are not necessary.

(16) To the best of Burlington's knowledge, few, if any, of the administrative applications filed to obtain unorthodox Basin-Dakota gas well locations closer than 790 feet but not closer than 660 feet to the outer boundary of the quarter section have either been protested or denied.

(17) It is an unnecessary administrative burden on both the operators and the Division to process this type of gas well location exception for which there has been few if any objections.

(18) It is in the best interests of conservation to establish uniform well locations requirements for the gas producing formations currently spaced on 160-acre and 320-acre gas spacing units in the Northwestern portion of New Mexico.

(19) Burlington submitted technical evidence which demonstrated that:

(i) because future Dakota wells drilled in this area are expected to be marginal, because, with few exceptions, future development can be economically accomplished if the same well bore is used to produce this pool in combination with other pools.

(ii) in order to increase the recovery of gas from this pool, it is necessary to locate wells in the optimum position to drain those additional reserves and it will be necessary to process numerous cases for unorthodox well locations or relax the exterior and interior footage setback requirements.

(iii) relaxing the footage setbacks will not impair correlative rights due to the low reservoir permeability and low reservoir pressure. Due to the very low reservoir permeability, reservoir drainage is unlikely to exceed 160 acres. Any potential adverse impact that may occur to offsetting GPUs by relaxing the footage setback requirements may be accelerated by only a few months during which time those operators will have an opportunity to best choose when and where to locate their own wells.

(20) Accordingly, the Division should amend the Special Rules and Regulations for the Basin-Dakota Gas Pool to modify well location requirements as follows:

- 1) THE INITIAL WELL drilled on a GPU shall be located not closer than 660 feet to the South and North lines nor closer than 660 feet to the East and West lines of a GPU 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 preceding paragraph.

- 3) 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 boundary of any such unitized area shall not be closer than permitted by subparagraph (1) above.

(21) In accordance with Division Order R-11205, effective July 15, 1999, copies of this application has been sent to all operators in the pool.

(22) The Division finds that adopting Burlington's proposed well location "footage" setback proposal will be in the best interest of conservation, the prevention of waste and the protection of correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) Effective on the first day of the month following the issuance of this order, the Rules and Regulations of the Basin-Dakota Gas Pool are hereby amended to conform to the rule changes as set forth in Exhibit "A" attached hereto and made part of this order.

(2) Jurisdiction of this cause 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 hereinafter designated.

**STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION**

**LORI WROTENBERY, DIRECTOR**

**EXHIBIT "A"**  
**ADOPTED RULE CHANGES**

The Special Rules and Regulations of the Basin-Dakota Gas Pool to modify well location requirements as follows:

- 1) THE INITIAL WELL drilled on a GPU shall be located not closer than 660 feet to the South and North lines nor closer than 660 feet to the East and West lines of a GPU 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 preceding paragraph.
- 3) 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 boundary of any such unitized area shall not be closer than permitted by subparagraph (1) above.