HOLLAND&HART

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February 14, 2011

HAND-DELIVERY

Ms. Jami Bailey, Director **Oil Conservation Division** New Mexico Department of Energy, Minerals and Natural Resources 1220 South Saint Francis Drive Santa Fe, New Mexico 87505

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Re: Case No. 14775: **Request** for Continuance and Amended Application of ConocoPhillips Company, Inc., for Amendment of Division Order No. R-5897 and Special Rules for the East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project Area, Lea County, New Mexico.

Dear Ms. Bailey:

Enclosed in triplicate is the Amended Application of ConocoPhillips Company, Inc., in the above-referenced case, as well as a copy of the legal advertisement. ConocoPhillips Company requests that this matter be continued from the February 16, 2012, Examiner Docket and placed on the Hearing Examiner Docket scheduled for March 29, 2012.

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

AMENDED APPLICATION OF CONOCOPHILLIPS COMPANY FOR AMENDMENT OF DIVISION ORDER NO. R-5897 AND SPECIAL RULES FOR THE EAST VACUUM GRAYBURG-SAN ANDRES UNIT PRESSURE MAINTENANCE PROJECT AREA, LEA COUNTY, NEW MEXICO.

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CASE NO. 14775

AMENDED APPLICATION

ConocoPhillips Company, Inc. ("COP") through its attorneys, Holland & Hart LLP, amends its application for an order amending Oil Conservation Division Order No. R-5897 to revise the injection well completion requirements in the Special Rules and Regulations for the East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project Area provided in that Order, including and the surface injection pressure limitation. In support of its amended application, COP states:

1. Division Order No. R-5871, dated November 27, 1978, approved statutory unitization of the following described 7,025.3 acres, more or less, known as the East Vacuum Grayburg-San Andres Unit Area, Lea County, New Mexico:

Township 17 South, Range 34 East, NMPMSection 24:SE/4

Township 17 South, Range 35 East, NMPM	
Section 18:	Lots 3 & 4 (W/2 SW/4 equivalent) and SE/4 SW/4
Section 19:	Lots $1 - 4$ (W/2 W/2 equivalent), S/2 NE/4, E/2 W/2, and
	SE/4
Section 20:	SW/4 NE/4, W/2 NW/4, SE/4 NW/4, SW/4, W/2 SE/4, and
	SE/4 SE/4
Section 21:	NE/4 SW/4, S/2 SW/4, and SE/4
Section 22:	SW/4, W/2 SE/4, and SE/4 SE/4
Section 23:	S/2 SW/4
Section 24:	SW/4 SW/4

 Section 25:
 W/2 NW/4

 Section 26:
 N/2, SW/4, N/2 SE/4, and SW/4 SE/4

 Section 31:
 N/2 SE/4 and SE/4 SE/4

 Section 32 & 33:
 All

 Section 34:
 N/2, SW/4, and NW/4 SE/4

 Section 35:
 N/2 NW/2

Township 18 South, Range 35 East, NMPM

Section 4:Lots 2, 3, and 4 (NW/4 NE/4 and N/2 NW/4 equivalent)Section 5:Lots 1 - 4 and S/2 S/2 (N/2 equivalent) and NW/4 SW/4

2. Division Order No. R-5897, issued in Case No. 6367 and dated January 16, 1979, authorized COP to institute and operate a pressure maintenance project in the East Vacuum Grayburg-San Andres Unit Area, by the injection of water into the Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, in the above-described Unit. The Order also adopted Special Pool Rules.

3. Division Order No. R-5897 was later amended by Division Order No. R-6856, issued in Case No. 7246 and dated December 16, 1981, authorizing COP to inject carbon dioxide along with water through 45 certain wells within the following described area therein designated a "Qualified Tertiary Project Area" that lies wholly within the East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project Area:

Township 17 South, Range 35 East, NMPM

 Section 26:
 N/2, SW/4, N/2 SE/4, and SW/4 SE/4

 Sections 27 – 29:
 All

 Section 31:
 N/2 SE/4 and SE/4 and SE/4 SE/4

 Sections 32 & 33:
 All

 Section 34:
 N/2, SW/4, and NW/4 SE/4

 Section 35:
 N/2 NW/4

Township 18 South, Range 35 East, NMPMSection 4:Lots 2, 3, and 4 (NW/4 NE/4 and N/2 NW/4
equivalent)Section 5:Lots 1 – 4 and S/2 S/2 (N/2 equivalent) and NW/4
SW/4

Division Order No. R-6856-A, issued in Reopened Case No. 7426 on September
 19, 1990, provided for the reinjection of hydrocarbon contaminated carbon dioxide into said
 Qualified Tertiary Project Area.

5. Division Order No. R-6856-B, issued in Case No. 10779, qualified five individual and separate portions of the East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project Area, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 - 5).

6. Pursuant to Division Order No. R-5897, the Division established Special Rules And Regulations For The East Vacuum Unit Pressure Maintenance Project Area.

7. Those rules include the provision that

Injection shall be accomplished through tubing installed in a packer set within 100 feet of the uppermost perforation. The Injection tubing shall be corrosion protected by a non-reactive internal lining or coating. The casing-tubing annulus in each injection well shall be filled with in inert fluid and a surface pressure gauge or approved leak detection device shall be attached to the annulus. *See* Order No. R-5897, Rule 11.

8. However, once injection packers are released for remedial purposes, it is impossible to regain a packer seal at the same depth due to corrosion. As a consequence, the packer must be reset at a higher depth in the well following each remedial activity. As remedial activities are conducted over time and packers are re-set, this consequence eventually requires packers to be set at depths that will not conform with Rule 11 of Order No. R-5897.

9. COP has identified certain wells within the East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project Area in which packers can no longer be set within 100 feet of the uppermost injection perforation due to the resetting of the packer depths following remedial activities in the well.

10. COP seeks an order modifying Rule 11 as prescribed in Order No. R-5897 to require that the injection packer in all present and future injection wells in this pressure maintenance project be set as close as practically possible to the uppermost injection perforations or casing shoe, provided that the injection packer set point remains within the unitized interval.

11. COP's proposed amendment of Rule 11 does not violate the requirements of the Safe Drinking Water Act's Underground Injection Control Program. *See, e.g.*, EPA 40 C.F.R. §§ 146.8, 146.22.

12. Pursuant to Division Order No. R-5897, the Division also established Special Rules And Regulations For The East Vacuum Unit Pressure Maintenance Project Area limiting the surface injection pressure.

13. The rules include the provision that

The injection wells or system shall be equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 0.2 psi per foot of depth to the uppermost perforation. The Division Director may administratively authorize a pressure limitation in excess of the above showing by the unit operator that such higher pressure will not result in fracturing of the confining strata. *See* Order No. R-5897, Rule 12.

14. COP has determined that a pressure limitation in excess of 0.2 psi per foot of depth to the uppermost perforation will not result in fracturing of the confining strata. It requests that the Division approve a Unit-wide increase in the pressure limitation based on the results of step-rate tests to be presented at the hearing performed in representative injection wells across the Unit.

15. The requested amendments to Order No. R-5897 will provide needed flexibility to COP and will assure that injected fluids are confined to the unitized interval in the East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project Area.

16. COP will provide notice of this amended application pursuant to Oil Conservation Division rules and regulations.

WHEREFORE, COP requests that this matter be continued from the February 16, 2012, Examiner hearing docket and re-set for hearing on March 29, 2012, and, after notice and hearing as required by law, that the Division enters its Order granting this application.

> Respectfully submitted, HOLLAND & HART, LLP

By

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ATTORNEYS FOR CONOCOPHILLIPS COMPANY, INC.

CASE NO. 14775:

Amended Application of ConocoPhillips Company, Inc., for Amendment of Division Order No. R-5897 and Special Rules for the East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project Area, Lea County, New Mexico. Applicant seeks an order amending Order No. R-5897 and the Special Rules and Regulations for the East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project Area to require that the injection packer be set as close as practically possible to the uppermost injection perforations or casing shoe, provided that the injection packer set point remains within the unitized interval, and increasing the surface injection pressure limitation in accordance with the results of step-rate tests to be presented at the hearing performed in representative injection wells across the Unit. The pool is located approximately 20 miles northwest of Hobbs, New Mexico.