



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Bill Richardson
Governor
Joanna Prukop
Cabinet Secretary

May 6, 2003

Lori Wrotenbery
Director
Oil Conservation Division

OXY USA Inc.
P. O. Box 50250
Midland, Texas 79710-0250
Attention: David Stewart
david_stewart@oxy.com

Administrative Order NSL-4873 (SD)

Dear Mr. Stewart:

Reference is made to the following: (i) your application submitted to the New Mexico Oil Conservation Division ("Division") on April 11, 2003 (*administrative application reference No. pKRV0-310427662*); and (ii) the records of the Division in Santa Fe, including the files in Division Cases No. 8190 and 11497 and Division Administrative Orders NSL-3966 (SD), as amended, NSL-3688 (SD), and NSL-4762: all concerning OXY USA, Inc.'s ("OXY") request for twenty-six (26) unorthodox "infill" Bravo Dome carbon dioxide gas (CO₂) well locations all within existing standard 640-acre, more or less, gas spacing units for the Bravo Dome Carbon Dioxide (640-acre) Gas Pool (96010) within its Bravo Dome Carbon Dioxide Gas Unit (BDCDGU), Union and Harding Counties, New Mexico:

- (a) all of Section 5, Township 18 North, Range 35 East, NMPM, Union County, New Mexico, comprising 642.00 acres, which is currently dedicated to the BDCDGU "1835" Well No. 051 (API No. 30-059-20186), located at a standard CO₂ gas well location 1650 feet from the North and East lines (Unit G) of Section 5, is to be simultaneously dedicated to Well No. 051 and to the proposed BDCDGU "1835" Well No. 052 (API No. 30-059-20396) to be drilled at an unorthodox infill CO₂ gas well location 1621 feet from the North line and 941 feet from the West line (Unit E) of Section 5;
- (b) all of Section 11, Township 19 North, Range 33 East, NMPM, Harding County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1933" Well No. 111 (API No. 30-021-20113), located at a standard CO₂ gas well location 1980 feet from the North and East lines (Unit G) of Section 11, is to be simultaneously dedicated to Well No. 111 and to the proposed BDCDGU "1933" Well No. 112 (API No. 30-021-323) to be drilled at an unorthodox infill CO₂ gas well location 1414 feet from the South line and 532 feet from the East line (Unit I) of Section 11;
- (c) all of Section 12, Township 19 North, Range 33 East, NMPM, Harding County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1933" Well No. 121 (API No. 30-021-20066), located at a standard CO₂ gas well location 1980 feet from the North and East lines (Unit G) of Section 12, is to be simultaneously dedicated to Well No. 121 and to the

proposed **BDCDGU "1933" Well No. 122 (API No. 30-021-20324)** to be drilled at an unorthodox infill CO₂ gas well location 1000 feet from the South line and 1980 feet from the West line (Unit N) of Section 12;

(d) all of Section 13, Township 19 North, Range 33 East, NMPM, Harding County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1933" Well No. 131 (**API No. 30-021-20067**), located at a standard CO₂ gas well location 1980 feet from the South and East lines (Unit J) of Section 13, is to be simultaneously dedicated to Well No. 131 and to the proposed **BDCDGU "1933" Well No. 132 (API No. 30-021-20325)** to be drilled at an unorthodox infill CO₂ gas well location 1980 feet from the South line and 676 feet from the West line (Unit L) of Section 13;

(e) all of Section 14, Township 19 North, Range 33 East, NMPM, Harding County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1933" Well No. 141 (**API No. 30-021-20068**), located at a standard CO₂ gas well location 1980 feet from the North and East lines (Unit G) of Section 14, is to be simultaneously dedicated to Well No. 141 and to the proposed **BDCDGU "1933" Well No. 142 (API No. 30-021-20326)** to be drilled at an unorthodox infill CO₂ gas well location 624 feet from the South line and 1975 feet from the East line (Unit O) of Section 14;

(f) all of Section 2, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 637.96 acres, which is currently dedicated to the BDCDGU "1934" Well No. 021X (**API No. 30-059-20074**), located at a standard CO₂ gas well location 1980 feet from the South line and 2055 feet from the West line (Unit K) of Section 2, is to be simultaneously dedicated to Well No. 021X and to the proposed **BDCDGU "1934" Well No. 022 (API No. 30-059-20397)** to be drilled at an unorthodox infill CO₂ gas well location 660 feet from the North line and 990 feet from the East line (Lot 1/Unit A) of Section 2;

(g) all of Section 3, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 637.00 acres, which is currently dedicated to the BDCDGU "1934" Well No. 031 (**API No. 30-059-20049**), located at a standard CO₂ gas well location 1958 feet from the North line and 1980 feet from the East line (Unit G) of Section 3, is to be simultaneously dedicated to Well No. 031 and to the proposed **BDCDGU "1934" Well No. 032 (API No. 30-059-20398)** to be drilled at an unorthodox infill CO₂ gas well location 660 feet from the South and East lines (Unit P) of Section 3;

(h) all of Section 4, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 637.60 acres, which is currently dedicated to the BDCDGU "1934" Well No. 041 (**API No. 30-059-20079**), located at a

standard CO₂ gas well location 1980 feet from the South and West lines (Unit K) of Section 4, is to be simultaneously dedicated to Well No. 041 and to the proposed BDCDGU "1934" Well No. 042 (API No. 30-059-20399) to be drilled at an unorthodox infill CO₂ gas well location 983 feet from the South line and 858 feet from the East line (Unit P) of Section 4;

(i) all of Section 5, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 637.88 acres, which is currently dedicated to the BDCDGU "1934" Well No. 051 (API No. 30-059-20050), located at a standard CO₂ gas well location 1980 feet from the South line and 1969 feet from the East line (Unit J) of Section 5, is to be simultaneously dedicated to Well No. 051 and to the proposed BDCDGU "1934" Well No. 052 (API No. 30-059-20400) to be drilled at an unorthodox infill CO₂ gas well location 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 5;

(j) all of Section 7, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 636.44 acres, which is currently dedicated to the BDCDGU "1934" Well No. 071 (API No. 30-059-20072), located at a standard CO₂ gas well location 1980 feet from the North and West lines (Unit F) of Section 7, is to be simultaneously dedicated to Well No. 071 and to the proposed BDCDGU "1934" Well No. 072 (API No. 30-059-204-1) to be drilled at an unorthodox infill CO₂ gas well location 330 feet from the South line and 1650 feet from the West line (Unit N) of Section 7;

(k) all of Section 10, Township 19 North, Range 34 East, NMPM, comprising 640 acres, which is currently dedicated to the BDCDGU "1934" Well No. 101 (API No. 30-059-20054), located at a standard CO₂ gas well location 1980 feet from the South and East lines (Unit J) of Section 10, is to be simultaneously dedicated to Well No. 101 and to the proposed BDCDGU "1934" Well No. 102 (API No. 30-059-20402) to be drilled at an unorthodox infill CO₂ gas well location 990 feet from the North line and 660 feet from the West line (Unit D) of Section 10;

(l) all of Section 11, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1934" Well No. 111 (API No. 30-059-20051), located at a standard CO₂ gas well location 1980 feet from the North line and 1984 feet from the East line (Unit G) of Section 11, is to be simultaneously dedicated to Well No. 111 and to the proposed BDCDGU "1934" Well No. 112 (API No. 30-059-20403) to be drilled at an unorthodox infill CO₂ gas well location 990 feet from the South line and 2190 feet from the West line (Unit N) of Section 11;

(m) all of Section 12, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the

BDCDGU "1934" Well No. 121 (API No. 30-059-20052), located at a standard CO₂ gas well location 1980 feet from the South line and 1972 feet from the West line (Unit K) of Section 12, is to be simultaneously dedicated to Well No. 121 and to the proposed BDCDGU "1934" Well No. 122 (API No. 30-059-20404) to be drilled at an unorthodox infill CO₂ gas well location 825 feet from the North line and 435 feet from the West line (Unit D) of Section 12;

(n) all of Section 15, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1934" Well No. 151 (API No. 30-059-20056), located at a standard CO₂ gas well location 1980 feet from the South line and 1985 feet from the East line (Unit J) of Section 15, is to be simultaneously dedicated to Well No. 151 and to the proposed BDCDGU "1934" Well No. 152 (API No. 30-059-20405) to be drilled at an unorthodox infill CO₂ gas well location 990 feet from the South line and 330 feet from the West line (Unit M) of Section 15;

(o) all of Section 18, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 635.60 acres, which is currently dedicated to the BDCDGU "1934" Well No. 181X (API No. 30-059-20101), located at a standard CO₂ gas well location 2080 feet from the South line and 1980 feet from the East line (Unit J) of Section 18, is to be simultaneously dedicated to Well No. 181X and to the proposed BDCDGU "1934" Well No. 182 (API No. 30-059-20406) to be drilled at an unorthodox infill CO₂ gas well location 1988 feet from the South line and 460 feet from the West line (Lot 3/Unit L) of Section 18;

(p) all of Section 19, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 635.16 acres, which is currently dedicated to the BDCDGU "1934" Well No. 191 (API No. 30-059-20078), located at a standard CO₂ gas well location 1980 feet from the South line and 1880 feet from the West line (Unit K) of Section 19, is to be simultaneously dedicated to Well No. 191 and to the proposed BDCDGU "1934" Well No. 192 (API No. 30-059-20407) to be drilled at an unorthodox infill CO₂ gas well location 990 feet from the North and East lines (Unit A) of Section 19;

(q) all of Section 20, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1934" Well No. 201 (API No. 30-059-20057), located at a standard CO₂ gas well location 1980 feet from the North line and 1986 feet from the East line (Unit G) of Section 20, is to be simultaneously dedicated to Well No. 201 and to the proposed BDCDGU "1934" Well No. 202 (API No. 30-059-20408) to be drilled at an unorthodox infill CO₂ gas well location 2310 feet from the South line and 330 feet from the West line (Unit L) of Section 20;

(r) all of Section 21, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1934" Well No. 211X (API No. 30-059-20102), located at a standard CO₂ gas well location 1980 feet from the North line and 1874 feet from the East line (Unit G) of Section 21, is to be simultaneously dedicated to Well No. 211X and to the proposed BDCDGU "1934" Well No. 212 (API No. 30-059-20409) to be drilled at an unorthodox infill CO₂ gas well location 1289 feet from the South line and 170 feet from the East line (Unit P) of Section 21;

(s) all of Section 22, Township 19 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1934" Well No. 221 (API No. 30-059-20059), located at a standard CO₂ gas well location 1650 feet from the North line and 1652 feet from the West line (Unit F) of Section 22, is to be simultaneously dedicated to Well No. 221 and to the proposed BDCDGU "1934" Well No. 223 (API No. 30-059-20410) to be drilled at an unorthodox infill CO₂ gas well location 1673 feet from the South line and 1441 feet from the East line (Unit J) of Section 22 [This well will be a replacement well to OXY's BDCDGU "1934" Well No. 222 (API No. 30-059-20384), located at an unorthodox infill CO₂ gas well location 1673 feet from the South line and 1641 feet from the East line (Unit J) of Section 22, which well was the subject of Division Administrative Order NSL-4762, dated July 24, 2002. From the Division's records, OXY encountered drilling problems and the Well No. 222 was plugged and abandoned in August, 2002];

(t) all of Section 4, Township 19 North, Range 35 East, NMPM, Union County, New Mexico, comprising 645.96 acres, which is currently dedicated to the BDCDGU "1935" Well No. 041 (API No. 30-059-20094), located at a standard CO₂ gas well location 1980 feet from the North and East lines (Unit G) of Section 4, is to be simultaneously dedicated to Well No. 041 and to the proposed BDCDGU "1935" Well No. 042 (API No. 30-059-20412) to be drilled at an unorthodox infill CO₂ gas well location 2310 feet from the South line and 330 feet from the West line (Unit L) of Section 4;

(u) all of Section 32, Township 19 North, Range 35 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "1935" Well No. 321 (API No. 30-059-20200), located at a standard CO₂ gas well location 1980 feet from the North line and 1650 from the East line (Unit G) of Section 32, is to be simultaneously dedicated to Well No. 321 and to the proposed BDCDGU "1935" Well No. 322 (API No. 30-059-20414) to be drilled at an unorthodox infill CO₂ gas well location 1760 feet from the South line and 391 feet from the West line (Unit L) of Section 32;

(v) all of Section 15, Township 20 North, Range 34 East, NMPM, Union

County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "2034" Well No. 151 (API No. 30-059-20098), located at a standard CO₂ gas well location 1980 feet from the North and East lines (Unit G) of Section 15, is to be simultaneously dedicated to Well No. 151 and to the proposed BDCDGU "2034" Well No. 152 (API No. 30-059-20415) to be drilled at an unorthodox infill CO₂ gas well location 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 15;

(w) all of Section 16, Township 20 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "2034" Well No. 161 (API No. 30-059-20168), located at a standard CO₂ gas well location 1650 feet from the North and East lines (Unit G) of Section 16, is to be simultaneously dedicated to Well No. 161 and to the proposed BDCDGU "2034" Well No. 162 (API No. 30-059-20416) to be drilled at an unorthodox infill CO₂ gas well location 990 feet from the South and East lines (Unit P) of Section 16;

(x) all of Section 22, Township 20 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "2034" Well No. 221 (API No. 30-059-20104), located at a standard CO₂ gas well location 1980 feet from the South and West lines (Unit K) of Section 22, is to be simultaneously dedicated to Well No. 221 and to the proposed BDCDGU "2034" Well No. 222 (API No. 30-059-20417) to be drilled at an unorthodox infill CO₂ gas well location 990 feet from the North line and 1650 from the West line (Unit C) of Section 22;

(y) all of Section 27, Township 20 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "2034" Well No. 271 (API No. 30-059-20069), located at a standard CO₂ gas well location 1980 feet from the North and East lines (Unit G) of Section 27, is to be simultaneously dedicated to Well No. 271 and to the proposed BDCDGU "2034" Well No. 272 (API No. 30-059-20419) to be drilled at an unorthodox infill CO₂ gas well location 684 feet from the South line and 1980 feet from the East line (Unit O) of Section 27; and

(z) all of Section 34, Township 20 North, Range 34 East, NMPM, Union County, New Mexico, comprising 640 acres, which is currently dedicated to the BDCDGU "2034" Well No. 341 (API No. 30-059-20053), located at a standard CO₂ gas well location 1980 feet from the South and East lines (Unit J) of Section 34, is to be simultaneously dedicated to Well No. 341 and to the proposed BDCDGU "2034" Well No. 342 (API No. 30-059-20421) to be drilled at an unorthodox infill CO₂ gas well location 660 feet from the South and 1650 from the West line (Unit N) of Section 34.

From the information provided by the applicant, the royalty interests in all of the affected offsetting

acreage to the proposed unorthodox locations have either been notified by certified mail or have ratified the Bravo Dome Carbon Dioxide Gas Unit (BDCDGU) Agreement.

By authority granted me under the provisions of Rule 5 of the "*Special Rules and Regulations for the Bravo dome 640-Acre Area*," as promulgated by Division Order No. R-7556, dated June 19, 1984, as amended by Division Order No. R-7556-A, dated June 10, 1987, Decretory Paragraph No. (4) of Division Order No. R-10576, and Division Rule 104.F (2), the above-described BDCDGU "1835" Well No. 052, BDCDGU "1933" Well Nos. 112, 122, 132, and 142, BDCDGU "1934" Well Nos. 022, 032, 042, 052, 072, 102, 112, 122, 152, 182, 192, 202, 212, and 223, BDCDGU "1935" Well Nos. 042 and 322, and BDCDGU "2034" Well Nos. 152, 162, 222, 272, and 342, all to be drilled at unorthodox "infill" CO₂ gas well locations, are hereby approved.

Further, that portion of Division Administrative Order No. NSL-4762 [subparagraph (b)] pertaining to the above-described BDCDGU "1934" Well No. 222 (API No. 30-059-20384), as referenced in subparagraph (s) above, is hereby placed in abeyance until further notice.

Jurisdiction of this matter shall be further retained for the entry of any such subsequent orders, as the Division may deem necessary.

Sincerely,



Lori Wrotenbery
Director

LW/MES/kv

cc: Roy Johnson, District Supervisor - NMOCD, Santa Fe
New Mexico State Land Office - Santa Fe
Danny J. Holcomb, Operations Manager (OXY) - Amistad, New Mexico
File: NSL-4762