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. 12265
ORDER NO. R-11328-A

IN THE MATTER OF CASE NO. 12265 BEING REOPENED PURSUANT TO THE PROVISIONS OF DIVISION ORDER NO. R-11328, WHICH ORDER AUTHORIZED OXY USA INC. TO CONVERT ITS GOVERNMENT "AB" WELL NO. 9 TO A DISPOSAL WELL IN THE OLD MILLMAN RANCH-BONE SPRINGS ASSOCIATED POOL, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 5, 2001, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 21st day of May, 2001, 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 Division has jurisdiction of this case and its subject matter.

(2) By Order No. R-11328 issued in Case No. 12265 on February 16, 2000, the Division authorized Oxy USA, Inc. ("Oxy") to convert its Government "AB" Well No. 9 (**API No. 30-015-27964**) located at a surface location 330 feet from the North line and 230 feet from the East line (Unit A) and a subsurface location 772 feet from the North line and 660 feet from the East line (Unit A) of Section 10, Township 20 South, Range 28 East, NMPM, Eddy County, New Mexico, for disposal of produced water into the Bone Springs formation, Old Millman Ranch-Bone Springs Associated Pool, through the perforated interval from approximately 6,378 feet to 6,619 feet.

(3) Order No. R-11328 stipulated that Oxy:

(a) equip two "Area of Review" wells, the Government "S" Well No. 2, (**API No. 30-015-22999**) located 660 feet from the South line and 1980 feet from the East line (Unit O) of Section 3, and the Government "AB" Well No. 2 (**API No. 30-015-21480**) located 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 10, with a 0-1000 psi pressure gauge between the intermediate and production casing strings;

(b) record baseline pressures on the production/intermediate casing annulus within the Government "S" Well No. 2 and the Government "AB" Well No. 2;

(c) observe and record the pressure on the production/intermediate casing annulus within the Government "S" Well No. 2 and the Government "AB" Well No. 2 once a week;

(d) observe and record the injection pressure and injection rate on the Government "AB" Well No. 9 once a week;

(e) perform and record monthly well tests on the following-described wells to monitor produced volumes of gas, oil and water:

i) the Government "S" Well No. 3 (**API No. 30-015-27839**) located in Unit O of Section 3;

ii) the Government "S" Well No. 7 (**API No. 30-015-28504**) located in Unit P of Section 3;

iii) the Government "AB" Well No. 7 (**API No. 30-015-27847**) located in Unit C of Section 10; and

iv) the Government "AB" Well No. 8 (**API No. 30-015-27863**) located in Unit B of Section 10; and

(f) report all observations to the Division's Artesia District Office by the 15th day of the month following the month in which the data is recorded.

(4) Order No. R-11328 further stipulated that:

(a) if any pressure increase is detected above baseline on the production/intermediate casing annulus within the Government "S" Well No. 2 or the Government "AB" Well No. 2, the operator shall notify the Division's Artesia District Office immediately; and

(b) if water breakthrough of 100 BWPD or more occurs within the Government "S" Well No. 3, the Government "S" Well No. 7, the Government "AB" Well No. 7 or the Government "AB" Well No. 8 **or** a pressure increase of 50 psi or more above baseline is detected on the production/intermediate casing annulus within the Government "S" Well No. 2 or the Government "AB" Well No. 2, the operator shall cease injection operations into the Government "AB" Well No. 9 and notify the Division's Artesia District Office immediately.

(5) These provisions were incorporated into Order No. R-11328 in order to ensure that the Government "S" Well No. 2 and the Government "AB" Well No. 2, both "Area of Review" wells that do not have cement across the Bone Spring formation, will not provide an avenue for escape of injected fluid from the Bone Spring formation.

(6) Pursuant to the provisions of Order No. R-11328, this case was reopened to allow Oxy to appear and show cause why the Government "S" Well No. 2 and the Government "AB" Well No. 2 should not be properly cemented across and above the injection zone.

(7) Oxy appeared at the hearing and presented technical evidence to support continuation of the well monitoring program approved by Order No. R-11328.

(8) Oxy presented evidence that demonstrates:

(a) injection into the Government "AB" Well No. 9 commenced in January, 2001;

(b) the Government "AB" Well No. 9 is currently taking water on a vacuum at an average rate of approximately 135 barrels per day;

(c) since commencement of injection into the Government "AB" Well No. 9, there has been no increase in pressure from baseline on the production/intermediate casing annulus within the Government "S" Well No. 2 and the Government "AB" Well No. 2;

(d) since commencement of injection operations into the Government "AB" Well No. 9, there has been no significant increase in water production within the Government "S" Well No. 3, the Government "S" Well No. 7, the Government "AB" Well No. 7 or the Government "AB" Well No. 8; and

(e) the Bone Springs reservoir within the vicinity of the Government "AB" Well No. 9 is depleted due to production, and it may be some time before reservoir fill-up is achieved with a resulting increase in Bone Spring reservoir pressure.

(9) The evidence presented by Oxy demonstrates that the well monitoring program established by Division Order No. R-11328 is adequate to detect any fluid migration problems that may result from injection into the Government "AB" Well No. 9, and that Oxy has complied with the provisions set forth by the order.

(10) It is unnecessary at this time to require Oxy to perform remedial cement operations on the Government "S" Well No. 2 and the Government "AB" Well No. 2.

(11) All provisions contained within Division Order No. R-11328 should remain in full force and effect until further order of the Division.

IT IS THEREFORE ORDERED THAT:

(1) Oxy USA Inc. is hereby authorized to continue water disposal operations within its Government "AB" Well No. 9 (**API No. 30-015-27964**) located at a surface location 330 feet from the North line and 230 feet from the East line (Unit A) and a subsurface location 772 feet from the North line and 660 feet from the East line (Unit A) of Section 10, Township 20 South, Range 28 East, NMPM, Eddy County, New Mexico, **provided however** that all well monitoring provisions and reporting requirements as well as other conditions set forth by Division Order No. R-11328 shall remain in full force and effect until further order of the Division.

(2) Copies of all well monitoring reports shall hereafter be sent to both the Santa Fe and Artesia Offices of the Division.

(3) Oxy is not required, at this time, to conduct remedial cement operations on the Government "S" Well No. 2, (**API No. 30-015-22999**) located 660 feet from the South line and 1980 feet from the East line (Unit O) of Section 3, and the Government "AB" Well No. 2 (**API No. 30-015-21480**) located 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 10, both in Township 20 South, Range 28 East, NMPM.

(4) Remedial action may be required in the future if it becomes apparent that injection into the Government "AB" Well No. 9 is causing fluid migration from the Bone Springs formation within any "Area of Review" well.

(5) 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.

SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenbery

LORI WROTENBERY
Director