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. 10095 Order No. R-9316

APPLICATION OF TEXACO INC. FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 19, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 9th day of October, 1990, 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) The applicant, Texaco Inc., seeks authority to dispose of produced salt water into the Moore-Devonian and Moore Permo-Pennsylvanian Pools through the perforated interval from approximately 10,440 feet to 10,700 feet in its New Mexico "BO" State Well No. 2 located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 24, Township 11 South, Range 32 East, NMPM, Lea County, New Mexico.

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- (3) At the time of the hearing, the applicant testified that injection into the above-described well will be limited to the perforated interval from approximately 10,550 feet to 10,599 feet and to the open hole interval from approximately 10,600 feet to 10,800 feet, and will be limited to the Devonian formation only.
- (4) The subject well, which was drilled and completed in 1953 as a Moore-Devonian Pool producing well, is currently capable of producing approximately 9 barrels of oil per day.
- (5) The evidence and testimony indicates that the applicant currently operates four wells within the Moore-Devonian Pool which are capable of producing large volumes of water in conjunction with oil production.
- (6) The proposed disposal well is needed in order to continue to economically produce the wells within the Moore-Devonian Pool, which currently averages a total of approximately 160 barrels of oil per day.
- (7) Injection into the Moore-Devonian Pool should have no detrimental effect on producing wells within said pool.
- (8) Injection should be accomplished through 3 1/2-inch plastic-lined tubing installed in a packer located within 100 feet of the uppermost injection perforation; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.
- (9) Prior to commencing injection operations, the casing in the subject well should be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.
- (10) The injection well or system should be equipped with a pressure limiting switch or other acceptable device which will initially limit the wellhead pressure on the injection well to no more than 2110 psi.

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- (11) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected fluid from the Devonian formation.
- (12) The operator should notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity pressure test in order that the same may be witnessed.
- (13) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.
- (14) Approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Texaco Inc., is hereby authorized to utilize its New Mexico "BO" State Well No. 2 located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 24, Township 11 South, Range 32 East, NMPM, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation, injection to be accomplished through 3 1/2-inch tubing installed in a packer located approximately within 100 feet of the uppermost injection perforation, with injection into the perforated interval from approximately 10,550 feet to 10,599 feet and into the open hole interval from approximately 10,600 feet to 10,800 feet.

PROVIDED HOWEVER THAT, the tubing shall be internally plasticlined; the casing-tubing annulus shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, and/or packer. CASE NO. 10095 Order No. R-9316 Page -4-

<u>PROVIDED FURTHER THAT</u>, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's district office at Hobbs.

- (2) The injection well or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 2110 psi.
- (3) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Devonian formation.
- (4) The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity pressure test in order that the same may be witnessed.
- (5) The operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.
- (6) The applicant shall conduct disposal operations and submit monthly reports in accordance with Rules 702, 703, 704, 705, 706, 708, and 1120 of the Division Rules and Regulations.
- (7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

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STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director