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. 10613 Order No. R-9802

APPLICATION OF WJC 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 December 3, 1992, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 11th day of December, 1992, 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, WJC Inc., seeks authority to dispose of produced salt water into the San Andres and Bone Spring formations through the open hole interval from approximately 5,000 feet to 8,360 feet in its J. G. Cox Well No. 1 located 660 feet from the North line and 1980 feet from the West line (Unit C) of Section 13, Township 17 South, Range 38 East, NMPM, Lea County, New Mexico.
- (3) The applicant proposes to dispose of approximately 2,000 barrels of water per day (5,000 barrels maximum) into the subject well originating from Devonian producing wells in this area.
- (4) The evidence presented by the applicant indicates that there are two wells within the "area of review" which may not be cemented adequately to confine the injected fluid to the proposed injection formations.

- (5) Prior to commencing injection operations into the subject well, the applicant should be required to demonstrate to the supervisor of the Division's Hobbs District Office that the F & M Oil and Gas Company W. F. Cone Well No. 2 located in Unit O of Section 12, and the A.E.N. Energy Inc. V. F. Cox Well No. 1 located in Unit F of Section 13, both in Township 17 South, Range 38 East, NMPM, are cased and cemented in such a manner so as to confine the injected fluid to the proposed injection interval.
- (6) Upon a determination by the supervisor of the Division's Hobbs District Office that such wells are not adequately cemented, the applicant, prior to commencing injection operations, should be required to perform remedial cement operations in a manner prescribed by the Division.
- (7) Injection should be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer located at approximately 4,900 feet; 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.
- (8) 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.
- (9) The injection well or system should be equipped with a pressure limiting switch or other acceptable device which will limit the surface pressure on the injection well to no more than 1,000 psi.
- (10) 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 San Andres and Bone Spring formations.
- (11) 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, the conductance of the mechanical integrity pressure test, and the conductance of remedial cement operations in order that the same may be witnessed.
- (12) 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.
- (13) 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, WJC Inc., is hereby authorized to dispose of produced salt water into the San Andres and Bone Spring formations through the open hole interval from approximately 5,000 feet to 8,360 feet in its J. G. Cox Well No. 1 located 660 feet from the North line and 1980 feet from the West line (Unit C) of Section 13, Township 17 South, Range 38 East, NMPM, Lea County, New Mexico.

PROVIDED HOWEVER THAT prior to commencing injection operations into the subject well, the applicant shall demonstrate to the supervisor of the Division's Hobbs District Office that the F & M Oil and Gas Company W. F. Cone Well No. 2 located in Unit O of Section 12, and the A.E.N. Energy Inc. V. F. Cox Well No. 1 located in Unit F of Section 13, both in Township 17 South, Range 38 East, NMPM, are cased and cemented in such a manner so as to confine the injected fluid to the proposed injection interval.

PROVIDED FURTHER THAT upon a determination by the supervisor of the Division's Hobbs District Office that such wells are not adequately cemented, the applicant, prior to commencing injection operations, shall perform remedial cement operations in a manner prescribed by the Division.

- (2) Injection shall be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer set at approximately 4,900 feet; the casing-tubing annulus shall be filled with an inert fluid and a pressure gauge or approved leak detection device shall be attached to the annulus in order to determine leakage in the casing, tubing or packer.
- (3) Prior to commencing injection operations, the casing in the subject well shall be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.
- (4) The injection well or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the surface pressure on the injection well to no more than 1,000 psi.
- (5) The Director of the Division shall 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 San Andres and Bone Spring formations.
- (6) 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, the conductance of the mechanical integrity pressure test, and the conductance of remedial cement operations in order that the same may be witnessed.

- (7) The operator shall 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.
- (8) 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.
- (9) The applicant shall conduct disposal operations and submit monthly reports in accordance with Rules 702 through 706, 708 and 1120 of the Division Rules and Regulations.
- (10) The injection authority granted herein shall terminate one year after the effective date of this order if the applicant has not commenced injection operations into the subject well, provided however, the Division, upon written request by the applicant, may grant an extension thereof for good cause shown.
- (11) 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

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