

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL IRICHARDSON Governor Joarnn Prukop Cabi metSecretary Mark E. Fesmire, P.E. Director Oil Conservation Division

ADMINISTRATIVE ORDER SWD-1050

APPLICATION OF MESQUITE SWD, INC. FOR PRODUCED WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Mesquite SWD, Inc. made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its Carthel Federal Well No. 2 (API No. 30-015-23389) located 2030 feet from the North line and 2080 feet from the East line of Section 5, Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

(1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;

(2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;

(3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and

(4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant is hereby authorized to utilize its Carthel Federal Well No. 2 (API No. 30-015-23389) located 2030 feet from the North line and 2080 feet from the East line of Section 5, Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Delaware and Bone Spring formations through perforations from 6040 feet to 9622 feet and through plastic-lined tubing set in a packer located within 100 feet of the top of the injection interval.

PRIOR TO INJECTION

The operator shall notify the district office of the Division of the date and time of the following operations so that the same may be inspected and witnessed.

Operations required on wells within the $\frac{1}{2}$ mile area of review:

- Re-enter and re-plug the Carthel Federal Well No. 1 API No. 30-015-26446 located 2310 feet from the South line and 1650 feet from the East line of Section 5, Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico.
 - Objective: Place cement or plugs to isolate the two, offset proposed injection intervals (Delaware from 6040 feet to 6430 feet and the Bone Spring from 6830 feet to 9622 feet) and also to plug the upper portion of the well in accordance with the latest Potash protection rules as contained in Order R-111-P.
 - Methods: Plugging procedure to be supplied by the district office.

Operations, equipping and testing the approved injection well.

- Plug back the well to within 300 feet of the lowermost injection perforation.
- Swab test the Delaware and the Bone Spring and supply the Division with water analysis and all test results for each of these formations.
- The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer.
- The casing-tubing annulus shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The operator shall provide written verification to the engineering bureau in the Santa Fe office of the Division of completion of the foregoing requirements. The operator shall not commence injection until the Division issues written confirmation that these pre-injection requirements have been completed.

IT IS FURTHER ORDERED THAT:

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.

The wellhead injection pressure on the well shall be limited to **no more than 1208 psi**. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well. 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 injection formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this

Administrative Order SWD-1050 Mesquite SWD, Inc. October 17, 2006 Page 3 of 3

office.

The operator shall provide written notice of the date of commencement of injection to the district office of the Division. The operator shall report the estimated initial static reservoir pressure of the injection interval on a sundry report. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

· . ę.

The operator shall immediately notify the district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

Approved at Santa Fe, New Mexico, on October 17, 2006.

MARK E. FESMIRE, P.E. Director

MEF/wvjj

cc: Oil Conservation Division – Artesia Bureau of Land Management – Carlsbad