

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

ADMINISTRATIVE ORDER SWD-1031

APPLICATION OF CHESAPEAKE OPERATING INC. FOR PRODUCED WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Chesapeake Operating Inc. made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its Smith 4 Federal Well No. 2 Well No. 1 (API No. 30-025-36730) located 990 feet from the North line and 395 feet from the East line of Section 4, Township 20 South, Range 33 East, NMPM, Lea 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.
- (5) This well is being permitted to only take Yates formation waters from the offset producing well, the Smith 4 Federal Well No. 1. The Capitan Reef is just below the depth of this well and the Salt interval is approximately 200 feet above the top of the Yates perforations with poor cement through the salt.

IT IS THEREFORE ORDERED THAT:

The applicant is hereby authorized to utilize its Smith 4 Federal Well No. 2 Well No. 1

(API No. 30-025-36730) located 990 feet from the North line and 395 feet from the East line of Section 4, Township 20 South, Range 33 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Yates formation through perforations from 3215 feet to 3264 feet and through plastic-lined tubing set in a packer located within 100 feet of the top of the injection interval.

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.

Prior to beginning commercial injection operations, the operator shall report the initial static fluid level in the well or the initial reservoir pressure to the Division referencing this permit number.

Prior to any other waters other than from the offsetting Smith 4 Federal Well No. 1 being disposed into this well, the operator shall inform the Division in writing of its intentions. Within six months after commencing injection from any other well or wells, the operator shall supply the Division with a suitable injection profile log.

After installing injection tubing, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

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 wellhead injection pressure on the well shall be limited to **no more than 643 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 office.

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 any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs 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.

PROVIDED FURTHER THAT, 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.

The operator shall provide written notice of the date of commencement of injection to the Hobbs district office of the Division.

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.

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.

Approved at Santa Fe, New Mexico, on May 24, 2006.

MARK E. FESMIRE, P.E.
Director

MEF/wvjj

cc:

Oil Conservation Division – Hobbs Bureau of Land Management – Carlsbad