New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



Administrative Order SWD-1133 July 9, 2008

APPLICATION OF MACK ENERGY CORP FOR PRODUCED WATER DISPOSAL, LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Mack Energy Corp (OGRID 13837) made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its proposed Dogz SWD Well No. 1 (API No. 30-025-38963) to be located 1980 feet from the South line and 360 feet from the East line of Section 17, Township 18 South, Range 37 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;

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

(5) The operator is in compliance with the Division's Rule 40.

IT IS THEREFORE ORDERED THAT:

Mack Energy Corp is hereby authorized to utilize its proposed Dogz SWD Well No. 1 (API No. 30-025-38963) to be located 1980 feet from the South line and 360 feet from the East line of Section 17, Township 18 South, Range 37 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of produced water for

disposal purposes into the Abo Reef formation through perforations from approximately 7990 feet to 8540 feet and through plastic-lined tubing set with a packer located within 100 feet of the top of the injection interval. The extent of the Abo Reef and the injection interval depths shall be determined by the Mack geologist with approval from the Division's district geologist after open-hole logs are run and available for interpretation.

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 operator shall provide proof of the cement placement depths behind the long casing string to the Division in the form of a cement bond log or other acceptable means as determined by the Hobbs district. The operator shall provide copies and results to the Hobbs district office of any and all hydrocarbon diagnostic tests run on this well such as mudlogs, electric logs, drillstem tests, swab tests, pressure tests, and stimulation treatment records.

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

The wellhead injection pressure on the well shall be limited to **no more than 1,600 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.

<u>PROVIDED FURTHER THAT</u>, 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 received by the Division prior to the termination date, may grant an extension thereof for good cause shown.

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/MARK E. FESMIRE, P.E. Director

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cc: Oil Conservation Division – Hobbs State Land Office – Oil, Gas, and Minerals Division