



# 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 NO. WFX-814*

***APPLICATION OF ST. MARY LAND & EXPLORATION COMPANY TO EXPAND ITS  
WATERFLOOD PROJECT IN THE EAST SHUGART-DELAWARE POOL IN EDDY AND  
LEA COUNTIES, NEW MEXICO***

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-11254, St. Mary Land & Exploration Company has made application to the Division on July 27, 2005 for permission to expand its East Shugart Delaware Unit Waterflood Project in the East Shugart-Delaware Pool in Eddy and Lea Counties, New Mexico.

**THE DIVISION DIRECTOR FINDS THAT:**

- (1) The application was filed in due form.
- (2) Satisfactory information was provided to demonstrate that all offset operators were provided notice of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection well is eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above-referenced waterflood project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

**IT IS THEREFORE ORDERED THAT:**

The applicant, St. Mary Land & Exploration Company is hereby authorized to inject water into the East Shugart-Delaware Pool through the perforated interval from 5,030 feet to 5,310 feet

using 2-3/8-inch plastic-lined tubing set in a packer located at a depth of approximately 5,000 feet in the following-described well for purposes of secondary recovery to wit:

**East Shugart Delaware Unit Well No. 25**  
API No. 30-015-34212  
250' FNL & 1125' FEL, Unit A,  
Section 24, Township 18 South, Range 31 East  
Maximum Surface Injection Pressure: 1006 PSIG

**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 commencing injection operations into the well, 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 at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure to the maximum surface injection pressure described above.

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 Delaware 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 Artesia District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia 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 subject well shall be governed by all provisions of Division Order No. R-11254, and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

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 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.

DONE at Santa Fe, New Mexico, on this 22nd day of September, 2005.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



MARK E. FESMIRE, P.E.  
Director

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