



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**BETTY RIVERA**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

*ADMINISTRATIVE ORDER SWD-859*

## ***APPLICATION OF APACHE CORPORATION FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO***

### **ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Apache Corporation made application to the New Mexico Oil Conservation Division on November 4, 2002, for permission to re-complete for produced water disposal its Argo Well No. 6 (API 30-025-06603) located 1650 feet from the South line and 2310 feet from the West line (Unit K) of Section 15, Township 21 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; and
- (4) No objections have been received within the waiting period prescribed by said rule.

#### **IT IS THEREFORE ORDERED THAT:**

Apache Corporation is hereby authorized to re-complete for produced water disposal its Argo Well No. 6 (API 30-025-06603) located 1650 feet from the South line and 2310 feet from the West line (Unit K) of Section 15, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of produced water for disposal purposes into the San Andres formation from a depth of approximately 4,000 feet to 5,000 feet through 2 3/8 inch plastic-lined tubing set in a packer located at approximately 3,900 feet.

**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.

As preparation and prior to any injection, the following remedial work shall be done and witnessed by the Hobbs District office of the Division at their discretion.

- 1) A CIBP with 35 feet of cement on top shall be set at a depth of 7,400 feet.
- 2) A CIBP with 35 feet of cement on top shall be set at a depth of 6,400 feet.
- 3) The 5 1/2" casing cement top shall be raised by squeeze cementing operations from the existing top (approximately 5,250 feet) to the surface.
- 4) Cap the CICR with 2 sacks of cement.

In addition, and prior to commencing injection operations into the Argo Well No. 6, Apache Corporation shall perform remedial cement operations on the following-described wells in order to cement above, across and below the proposed injection interval in these wells:

**NEDU Well No. 604 (API No. 30-025-06591) 2310' FNL & 990' FWL (Unit E)**

**Section 15, T-21S, R-37E**

**NEDU Well No. 705 (API No. 30-025-06602) 330' FSL & 2310' FWL (Unit N)**

**Section 15, T-21S, R-37E**

The casing-tubing annulus 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 on the injection well to no more than 800 psi.

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: i) remedial cement operations are conducted on the Argo Well No. 6; ii) disposal equipment is installed and mechanical integrity test is conducted on the Argo Well No. 6; and iii) remedial cement operations are conducted on the NEDU Wells No. 604 and 705; so that these operations 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 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 this 21<sup>st</sup> day of November 2002.

*Lori Wrotenbery*

LORI WROTENBERY

Director

LW/DRC

cc: Oil Conservation Division – Hobbs