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-953

APPLICATION OF SDX RESOURCES, INC. FOR PRODUCED WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), SDX Resources, Inc. made application to the New Mexico Oil Conservation Division on September 27, 2004, for permission to utilize for produced water disposal its Santa Nina Well No. 1 (API No. 30-015-04594) located 330 feet from the North line and 330 feet from the West line of Section 7, Township 19 South, Range 30 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 Santa Nina Well No. 1 (API No. 30-015-04594) located 330 feet from the North line and 330 feet from the West line of Section 7, Township 19 South, Range 30 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Queen formation through perforations from 2,212 feet to 2,232 feet and through plastic-lined tubing set with 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 the installation of injection tubing:

(1) The casing plug at 2,335 feet shall be pressure tested, the casing above the perforations shall be pressure tested and any holes isolated.

(2) If the operator still wants to convert this well to injection, the casing plug at 2,335 feet shall be drilled out, the wellbore cleaned out to approximately the total depth (4,022 feet), a cement bond log run from the 7-inch casing shoe to the top of any cement (estimated at 2,135 feet), and cased hole porosity logs run as needed. The bond log shall be supplied to the Division's engineering bureau and the Artesia district office.

(3) After consultation with the Division, and with direction from the Artesia district office, the wellbore shall be plugged back to the intended injection depth and a new casing plug installed, capped with cement, and pressure tested.

(4) Depending on the extent of cement and the type of cement bond, the intended injection interval may require additional squeeze operations.

(5) The annulus behind the 7-inch casing shall be squeezed with cement, beginning as close as possible to the upper cement top, with the intention of raising cement to the surface.

The operator shall estimate the initial reservoir pressure of the injection interval, i.e. from stable fluid levels, and submit this in writing to the Division (referencing SWD-953).

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 442 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 Artesia 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 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.

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 Artesia 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 this 1st day of December 2004.

MARK E. FESMIRE, P.E.
Director

MEF/wvjj

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