NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

ADMINISTRATIVE ORDER NO. PMX-224

APPLICATION OF CBS OPERATING CORPORATION TO EXPAND ITS PRESSURE MAINTENANCE PROJECT IN THE SQUARE LAKE-GRAYBURG SAN ANDRES POOL IN EDDY COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No R-11435-A issued in Case No 12112, CBS Operating Corporation has made application to the Division on August 21, 2003 and October 8, 2003, for permission to expand its North Square Lake Unit Pressure Maintenance Project in the Square Lake-Grayburg San Andres Pool in Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

(1) The application has been filed in due form.

(2) Satisfactory information has been provided that all offset operators have been duly notified of the application.

(3) No objection has been received within the waiting period as prescribed by Rule 701(B).

(4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.

(5) The proposed expansion of the above-referenced pressure maintenance project will not cause waste nor impair correlative rights.

IT IS THEREFORE ORDERED THAT:

The applicant, CBS Operating Corporation, is hereby authorized to utilize the following eleven wells to inject water for purposes of pressure maintenance into the Grayburg and San Andres formations through 2 3/8-inch plastic lined tubing set in packers located within 100 feet of the uppermost perforation or open hole injection interval.

North Square Lake Unit Well No. 23, API No. 30-015-04906
810 FNL & 1980 FWL, (Unit C) Section 29, Township 16 South, Range 31 East, NMPM
Open Hole Interval: 3150 - 3445, Packer at 3050, Maximum Injection Pressure 630 psi.

North Square Lake Unit Well No. 24, API No. 30-015-04912
660 FNL & 1980 FEL, (Unit B) Section 29, Township 16 South, Range 31 East, NMPM
Perforated Interval: 3311 - 3514, Packer at 3215, Maximum Injection Pressure 662 psi.

North Square Lake Unit Well No. 25, API No. 30-015-04913
810 FNL & 990 FEL, (Unit A) Section 29, Township 16 South, Range 31 East, NMPM
Perforated Interval: 3311 - 3514, Packer at 3275, Maximum Injection Pressure 662 psi.

North Square Lake Unit Well No. 3, API No. 30-015-20183
1980 FSL & 1980 FEL, (Unit J) Section 19, Township 16 South, Range 31 East, NMPM
Perforated Interval: 3145 - 3263, Packer at 3045, Maximum Injection Pressure 629 psi.

North Square Lake Unit Well No. 5, API No. 30-015-10322
1650 FSL & 990 FWL, (Unit L) Section 20, Township 16 South, Range 31 East, NMPM
Perforated Interval: 3291 - 3441, Packer at 3191, Maximum Injection Pressure 658 psi.

North Square Lake Unit Well No. 20, API No. 30-015-04936
660 FNL & 1980 FEL, (Unit B) Section 30, Township 16 South, Range 31 East, NMPM
Perforated Interval: 3111 - 3250, Packer at 3011, Maximum Injection Pressure 622 psi.

North Square Lake Unit Well No. 22, API No. 30-015-04905
760 FNL & 560 FWL, (Unit D) Section 29, Township 16 South, Range 31 East, NMPM
Open Hole Interval: 3060 - 3391, Packer at 3010, Maximum Injection Pressure 612 psi.

North Square Lake Unit Well No. 62, API No. 30-015-04892
1980 FSL & 660 FWL, (Unit L) Section 28, Township 16 South, Range 31 East, NMPM
Open Hole Interval: 3337 - 3598, Packer at 3287, Maximum Injection Pressure 667 psi.

North Square Lake Unit Well No. 83, API No. 30-015-04915
550 FSL & 550 FEL, (Unit P) Section 29, Township 16 South, Range 31 East, NMPM
Perforated Interval: 3343 - 3550, Packer at 3243, Maximum Injection Pressure 668 psi.

North Square Lake Unit Well No. 85, API No. 30-015-04895
560 FSL & 1880 FWL, (Unit N) Section 28, Township 16 South, Range 31 East, NMPM
Open Hole Interval: 3352 - 3625, Packer at 3302, Maximum Injection Pressure 670 psi.

North Square Lake Unit Well No. 111, API No. 30-015-04979
660 FNL & 1980 FEL, (Unit B) Section 33, Township 16 South, Range 31 East, NMPM
Open Hole Interval: 3381 - 3684, Packer at 3331, Maximum Injection Pressure 676 psi.

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 injection into each of these wells, the following remedial work shall be completed to the satisfaction of the Division representative from the Artesia district office of the Division as well as other remedial work as identified and required by the Artesia district office. Cement bond logs are required on each well prior to conversion and another bond log is required if remedial cementing is done. Supply all new logs, including cement bond logs to the Artesia District office.

Casing shoe on all wells: If the injection will be through perforations, ensure cement is adequate below and across the injection interval and for at least 300 feet above this interval. If injection is to be open hole, ensure cement above the injection-casing shoe is adequate in height and competency – at least 300 feet of good cement. If necessary, squeeze additional cement.

Surface Cement Sheath on all wells: Ensure competent cement is in place in the annulus behind the injection casing from the surface to below the cement top of the next larger casing, unless this next larger casing cement was already circulated. If necessary, squeeze additional cement.

Prior to commencing injection operations into the wells, 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 wells or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to no more than 0.2 psi per foot to the uppermost injection perforation or open-hole interval.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells, 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 injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

Upon failure of the tubing, casing or packer in any of these wells, the operator shall immediately notify the supervisor of the Artesia district office of the Division and shall take such steps as may be timely and necessary to correct such failure or leakage.

The operator of these new injection wells shall obey Division Rules 702 through 706, and all provisions of Division Order No R-11435-A as amended, and 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 for each well shall terminate one year after the effective date of this order if the operator has not commenced injection operations into that 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 31st day of March 2004.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Will Jones, Engineer

JOANNA PRUKOP
Acting Division Director

JP/wvjj
cc: Oil Conservation Division - Artesia
Bureau of Land Management – Roswell
Case File No. 12112