State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

David Martin Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary David R. Catanach, Division Director Oil Conservation Division



Administrative Order SWD-1509-A November 5, 2015

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of 19.15.26.8B. NMAC, COG Operating, LLC (the "operator") seeks an administrative order to utilize its Lakewood SWD Well No. 2 with a surface location of 1470 feet from the North line and 1980 feet from the West line, Unit letter F of Section 9, Township 19 South, Range 26 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes. This order supersedes Administrative Order SWD-1509 approved on December 1, 2014.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8B. NMAC; however, notification of affected parties as defined in said rule was not required since the amendment is not a major modification. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

The operator petitioned the Division to amend Administrative Order SWD-1509 for approval to change the injection interval as submitted in the application dated October 8, 2015. As a result of testing and well-log analysis performed on the interval, the operator has requested a change in the injected interval from 7908 feet to 8150 feet. This change removes the Cisco formation and increases the injection interval in the Canyon formation. The injection pressure from the amended interval increases to a maximum surface injection pressure to 1582 psi. This Order approves both these modifications. Further, the original and amended application is for the Cisco formation; however, the depth interval of the original and amended application includes both the Cisco and Canyon formations, as seen on the well log submitted as part of this application.

IT IS THEREFORE ORDERED THAT:

COG Operating, LLC (OGRID 229137), is hereby authorized to utilize its Lakewood SWD Well No. 2 (API 30-015-40718) with a surface location of 1470 feet from the North line and 1980 feet from the West line, Unit letter F of Section 9, Township 19 South, Range 26 East, NMPM, Eddy County, for disposal of oil field produced water (UIC Class II only) into the Cisco formation through perforations from approximately 7908 to 8150 feet. Injection will occur through internally-coated, 31/2-inch and 3¹/2-inch tubing and a packer set within 100 feet of the top perforation in the permitted interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed and described in the application.

After installing 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 well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 1582 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formations. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test. Any approved increase for the maximum surface injection pressure shall require the use of the same specific tubing configuration employed during the Step-Rate Test.

The operator shall notify the supervisor of the Division's District I office of the date and time of the installation of disposal equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District I office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District I office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

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 or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.

DAVID R. CATANACH Director

DRC/mam

cc: Oil Conservation Division – Artesia Well File 30-015-41780