State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

John Bemis Cabinet Secretary

3

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey Division Director Oil Conservation Division



Administrative Order SWD-1411 April 05, 2013

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of 19.15.26.8B NMAC, COG Operating LLC, seeks an administrative order to utilize its Bebidas 16 State SWD Well No. 2 (API No. Pending) to be drilled 1980 feet from the North line and 1980 feet from the East line, Unit letter G of Section 16, Township 23 South, Range 33 East, NMPM, Lea County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, COG Operating LLC, is hereby authorized to utilize its Bebidas 16 State SWD Well No. 2 (**API No. Pending**) to be drilled 1980 feet from the North line and 1980 feet from the East line, Unit letter G of Section 16, Township 23 South, Range 33 East, NMPM, Lea County, New Mexico, for disposal of produced water into the Delaware formation through openhole interval from 5050 feet to 7400 feet through internally coated tubing and a packer set within 100 feet of the permitted interval.

IT IS FURTHER ORDERED THAT:

The operator shall run mud logs, and open-hole logs in the Delaware formation to detect any potential hydrocarbon productive interval. If a potential hydrocarbon productive interval is encountered, the operator shall run a 7-inch casing across the Delaware formation, cement it from total depth to 500 feet above the 9-5/8-inch casing shoe, and selectively perforate the Delaware to prevent injection into a potential productive zone. The operator shall report the results of the mud and open-hole logs to the Engineering Bureau as soon as this formation evaluation is completed.

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.

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 wire-line verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 1010 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 formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable 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 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

Administrative Order SWD-1411 COG Operating LLC April 05, 2013 Page 3 of 3

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.

JAMI BAILEY

Director

JB/re

cc: Oil Conservation Division – Hobbs District Office