

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



Administrative Order SWD-1710
December 15, 2017

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8(B) NMAC, Santo Operating LLC (the "operator") seeks an administrative order for its proposed Ocotillo Sunrise SWD Well No. 1 ("proposed well") with a location of 2630 feet from the South line and 2310 feet from the East line, Unit letter J of Section 15, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico, for the purpose of produced water disposal.

THE DIVISION DIRECTOR FINDS THAT:

The supplemental application has been duly filed under the provisions of Division Rule 19.15.26.8(B) NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified. One objection was received within the prescribed waiting period by EOG Resources, Inc. This objection was resolved through a negotiated agreement between Santo Operating LLC and EOG Resources, Inc. for the operation of the proposed well. 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.

IT IS THEREFORE ORDERED THAT:

The applicant, Santo Operating LLC (OGRID 371502), is hereby authorized to utilize its Ocotillo Sunrise SWD Well No. 1 (API 30-025-pending) with a location of 2630 feet from the South line and 2310 feet from the East line, Unit letter J of Section 15, Township 25 South, Range 34 East, NMPM, Lea County, for disposal of oil field produced water (UIC Class II only) through perforations into an interval consisting of the Bell Canyon and upper Cherry Canyon formations of the Delaware Mountain Group from 5462 feet to 7156 feet. Injection will occur through internally-coated, 3½-inch or smaller tubing with a packer set within 100 feet of the top perforation of the disposal interval.

Sources of the UIC Class II fluids for disposal in the subject well shall be limited to the production from wells operated by Santo Operating LLC. Sources of UIC Class II fluids from other operators or from wells not operated by Santo Operating LLC shall not be permitted for disposal in the proposed well.

The injection authority granted under this order is not transferable except upon approval of the Division Director. The Director shall only approve a change of operator if the conditions

regarding the sources of UIC Class II fluids, identified in the preceding paragraph of this order, are maintained by the new operator. If the new operator does not comply with these conditions, then the injection authority granted under this order shall terminate ipso facto. The Division may require the operator to demonstrate mechanical integrity of this injection well that will be transferred prior to approving transfer of authority to inject.

The operator shall supply the Division with a copy of a mudlog over the permitted disposal interval and an estimated insitu water salinity based on open-hole logs. If significant hydrocarbon shows occur while drilling, the operator shall notify the Division's District I and the operator shall be required to receive written permission prior to commencing injection.

Prior to commencing injection, the operator shall conduct a step-rate test acceptable to Division and provide the results of the test to the Division's District I office and the Engineering Bureau in Santa Fe. The operator may apply for an injection pressure increase above the administratively approved maximum surface injection pressure using the results of the step-rate test.

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 completion and construction of the well as described in the application with the following modifications and, if necessary, as modified by the District Supervisor.

The well completion shall incorporate the following changes in the Application for Permit to Drill for the review and approval of the District Supervisor:

- 1. the surface casing shall have the shoe of the 13 $\frac{3}{8}$ -inch casing placed above the top of salt as to isolate the Salado formation; and*
- 2. the cement for the 7-inch production casing shall be circulated to surface. If the cement fails to circulate, then the operator shall run a cement bond log to determine the top of cement and quality of cement seal. This log shall be provided to the Division's District I office for assessment prior to the installation of the tubing and packer.*

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 procedures and schedules shall follow the requirements in Division Rule 19.15.26.11(A) 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 1092 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.

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 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.

The Division may revoke this injection order after notice and hearing if the operator is in violation of Rule 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/prg

cc: Oil Conservation Division – Hobbs District Office