

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-1379-B
February 7, 2017

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8B. NMAC, Apache Corporation (the "operator") seeks an administrative order to utilize its proposed Barnsdall Federal SWD Well No. 1 located 330 feet from the North line and 1880 feet from the East line, Unit letter B of Section 27, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes.

Administrative Order SWD-1379-A was approved with a modified injection interval on October 21, 2014. This Order expired on October 21, 2016, without the operator submitting a written request for an extension of the two-year period in which injection was to commence. Subsequently, the operator petitioned for re-instatement of the injection authority as provided in Order SWD-1379-A. The operator has drilled and completed the Barnsdall Federal SWD Well No. 1, but has been unsuccessful to operate the disposal well due to reservoir conditions that are still being assessed.

THE DIVISION DIRECTOR FINDS THAT:

The amended application has been duly filed under the provisions of Division Rule 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 operator has provided sufficient documentation that the affected parties are identical to the parties identified for Order SWD-1379-A. The operator has also demonstrated no additional penetrating wells for the Area of Review as submitted in the application for Order SWD-1379-A.

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, Apache Corporation (OGRID 873), is hereby authorized to utilize its Barnsdall Federal SWD Well No. 1 (API 30-015-42468) to be located 330 feet from the North line and 1880 feet from the East line, Unit letter B of Section 27, Township 17 South, Range 29 East,

NMPM, Eddy County, for disposal of oil field produced water (UIC Class II only) through perforations in the Wolfcamp and Cisco formations from 7700 feet to 9500 feet. Injection will occur through internally-coated, 4½-inch or smaller tubing and a packer set within 100 feet of the top perforation.

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 except as noted in specific conditions.

The operator shall limit (either by plugging back or by setting casing shallower) the 7-inch production casing exposed below the bottom depth of the permitted disposal interval to a length no greater than 200 feet (9700 feet or less).

The operator shall run a cement bond log (or equivalent) to determine the top of cement and the quality of cement placement for the 7-inch production casing.

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 II and the operator shall be required to receive written permission prior to commencing disposal. The operator shall supply both the Division's District II office and Santa Fe Bureau office with a copy of the log.

The operator shall run an initial injection survey (tracer/temperature or equivalent) of the entire injection interval within two (2) years after commencing disposal into this well. The operator shall supply both the Division's District II office and Santa Fe Bureau office with a copy of the survey log.

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 19.15.26.11A. 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 1540 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 II 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 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 II 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 Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate one (1) year 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 – Artesia District Office
Bureau of Land Management – Carlsbad Field Office