

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

Heather Riley, Division Director
Oil Conservation Division



Administrative Order SWD-1681-B
March 28, 2018

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8B, NMAC, Mesquite SWD, Inc. (the “operator”) seeks an administrative order for its Deep Purple SWD Well No. 1 (“proposed well”) with a location of 270 feet from the South line and 380 from the West line, Lot 4 (SW/4 SW/4 equivalent) of Section 30, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico, for the purpose of commercial disposal of produced water.

This amended administrative order addresses an increase in tubing size requested by the operator. This order supersedes administrative order SWD-1681-A, but retains the original conditions of approval including the deadline to commence injection of November 9, 2019. Administrative order SWD-1681-A is void.

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 and no objections have been received within the prescribed waiting period. 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.

Application for Disposal in Devonian and Silurian Formations: Due to the potential for the projected injection volume of the proposed well to impact an area greater than the one-half mile radius applied in Division Form C-108 and Division rule, the applicant has provided the following supplementary information:

1. Notification following Division Rule 19.15.26.8(B) NMAC for a radius of one mile from the surface location of the proposed well;
2. An expanded Area of Review for wells penetrating the disposal interval for a radius of one mile from the surface location of the proposed well; and
3. A statement by a qualified person assessing the potential of induced-seismic events associated with the disposal activities for the predicted service life of the proposed well.

IT IS THEREFORE ORDERED THAT:

The applicant, Mesquite SWD, Inc. (OGRID 161968), is hereby authorized to utilize its Deep Purple SWD Well No. 1 (API 30-025-44106) with a location of 270 feet from the South line and 380 from the West line, Lot 4 (SW/4 SW/4 equivalent) of Section 30, Township 22 South, Range 32 East, NMPM, Lea County, for disposal of oil field produced water (UIC Class II only) through an open-hole interval consisting of the Devonian and Silurian formations from approximately 16975 feet to approximately 18135 feet.

Injection will occur through either an internally-coated, 5½-inch or smaller tubing inside the liner and all casings. Further, a packer shall be set within 100 feet of the top of the open-hole interval.

This permit does not allow disposal into the Ellenburger formation (lower Ordovician) or lost circulation intervals directly on top and obviously connected to this formation.

Prior to commencing disposal, the operator shall submit a mudlog and geophysical logs information, to the Division's District geologist and Santa Fe Bureau Engineering office, showing evidence agreeable that only the permitted formation is open for disposal including a summary of depths (picks) for contacts of the formations which the Division shall use to amend this order for a final description of the depth for the injection 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 completion and construction of the well as proposed in the application and, if necessary, as modified by the District Supervisor.

The operator shall circulate the cement behind the casing to surface for all surface and intermediate casings.

The operator shall run a CBL (or equivalent) across the 7⅞-inch liner from 500 feet above the liner to the bottom of the liner to demonstrate good cement across the liner and good cement bond across the 9⅝-inch casing.

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 disposal.

Within two years after commencing disposal, the operator shall conduct an injection survey, consisting of a temperature log or equivalent, over the entire injection interval using representative disposal rates. Copies of the survey results shall be provided to the Division's District I office and Santa Fe Engineering Bureau office.

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 3395 psi**, but may be modified by the Division Director following the completion of the initial Step-Rate Test. 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 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 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 original effective date of Administrative Order SWD-1681-A (November 9, 2017), 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.

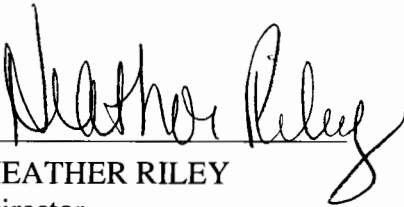
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Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.

A handwritten signature in black ink, appearing to read "Heather Riley", is written over a horizontal line.

HEATHER RILEY

Director

HR/prg

cc: Oil Conservation Division – Hobbs District Office
Bureau of Land Management – Carlsbad Field Office
Well File 30-025-44106