State of New Mexico
Energy, Minerals and Natural Resources Department

Administrative Order SWD-1693
September 1, 2017

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of Division Rule 19.15.26.8 (B) NMAC, Hadaway Consulting and Engineering, LLC (the "operator") seeks an administrative order for its proposed Hank State 1P SWD Well No. 1 ("proposed well") to be located 330 feet from the North line and 330 feet from the West line, Unit D of Section 16, Township 8 South, Range 28 East, NMPM, Chaves County, New Mexico, for disposal of produced water.

THE DIVISION DIRECTOR FINDS THAT:

The 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 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 Division Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Division Rule 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

Hadaway Consulting and Engineering, LLC (OGRID 371985), is hereby authorized to utilize its Hank State 1P SWD Well No. 1 (API 30-005-pending) at a location 330 feet from the North line and 330 feet from the West line, Unit D of Section 16, Township 8 South, Range 28 East, NMPM, Chaves County, for disposal of oil field produced water (UIC Class II only) into the Devonian and Silurian formations through a perforated interval from approximately 7420 feet to approximately 7800 feet. Disposal shall occur through internally-coated tubing and a packer set within 100 feet of the permitted disposal interval. Injection will occur through internally-coated, 4-1/2-inch or smaller tubing and a packer set within 100 feet of the top of the open-hole interval.

This permit does not allow disposal into formations below the Silurian including the Montoya formation and the Ellenburger formation (lower Ordovician) or lost circulation intervals directly on top and obviously connected to these formations.

Prior to commencing disposal, the operator shall submit mudlog and geophysical logs information, to the Division's District geologist and Santa Fe Engineering Bureau 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. The well construction shall be as proposed and described 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, intermediate, and production casings.

Operator shall supply to the Artesia District Office and Santa Fe Engineering Bureau a cross-section that includes the Mississippian, Woodford, Siluro-Devonian, Montoya, Ellenburger formations, and Basement that includes well logs from the proposed injection well. Further, the cross-section shall include the R C Graves Well No. 1 (API 30-005-61865). The Artesia District Office and Santa Engineering Bureau must be in accordance with the correlations ***prior to commencing injection****.*

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 1484 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 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 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 or disposal well that will be transferred prior to approving transfer of authority to inject.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced disposal 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

DAVID R. CATANACH
Director

DRC/mam

cc: Oil Conservation Division – Artesia District Office
State Land Office – Oil, Gas, and Minerals Division
Administrative Application: pKSC1722633320