State of New Mexico Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham Governor

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Todd E. Leahy, JD, PhD Deputy Secretary

Adrienne Sandovat, Director Oil Conservation Division



Administrative Order SWD-2224 August 1, 2019

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of Division Rule 19.15.26.8(B) NMAC, NGL Permian Water Solutions, LLC (the "Operator") seeks an administrative order to authorize the Paduca 6 SWD Well No. 1Y with a surface location of 2650 feet from the South line and 1175 feet from the West line, Lot 3 of Section 6, and a bottom hole location of surface location of 2662 feet from the South line and 1327 feet from the West line, Lot 2 of Section 6, both in Township 26 South, Range 32 East, NMPM, Lea County, New Mexico, for commercial disposal of produced water.

This order was issued for approval of an increase in tubing diameter which allows for greater injection rate. This order supersedes administrative order SWD-1607-A issued on August 17, 2016. All of the original conditions of approval contained in order SWD-1607-A remain in effect.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8(B) NMAC. The relocation of the proposed well does not change the notice of affected parties provided for the original application; therefore, no additional notice is required. 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, NGL Water Solutions Permian, LLC (OGRID 372338), is hereby authorized to utilize its Paduca 6 SWD Well No. 1Y (API 30-025-43379) a surface location of 2650 feet from the South line and 1175 feet from the West line, Lot 3 of Section 6, and a bottom hole location of surface location of 2662 feet from the South line and 1327 feet from the West line, Lot 2 of Section 6, both in Township 26 South, Range 32 East, NMPM, Lea County, for commercial disposal of oil field produced water (UIC Class II only) through an open-hole interval within Devonian and Silurian formations from 17310 feet to 18881 feet below surface. Injection shall occur through 5½-inch or smaller, internally-coated tubing within the 7½-inch sidetracked (39 pound per foot) liner with a packer set a maximum of 100 feet above 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. The operator 1220 South St. Francis Drive • Santa Fe, New Mexico 87505

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shall provide logs and a mudlog over the proposed interval which verify that only the permitted interval is completed for disposal.

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.

Prior to commencing disposal, the operator shall submit to the Division's District geologist and Santa Fe Bureau Engineering office, evidence showing 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.

Prior to commencing disposal, 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 openhole 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 to commence disposal.

The operator shall run a CBL (or equivalent) across the 7%-inch liner through both the 7%-inch liner and the 9%-inch casing to the surface to demonstrate a good cement bond between the liners and casing.

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.

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.

If the disposal well fails a MIT or if there is evidence that the mechanical integrity of said well is impacting correlative rights, the public health, any underground sources of fresh water, or the environment, the Division Director shall require the well to be shut-in within 24 hours of discovery and the operator shall redirect all disposal waters to another facility. The operator shall take the necessary actions to address the impacts resulting from the mechanical integrity issues in accordance with Division Rule 19.15.26.10 NMAC, and the well shall be tested pursuant to Rule 19.15.26.11 NMAC prior to returning to injection.

The wellhead injection pressure on the well shall be limited to **no more than 3462 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 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 1 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 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 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.

ANDRIENNE SANDOVAL

Director

AS/prg

cc: Oil Conservation Division - Hobbs District Office

Well file 30-025-43379