NM1-66

Permit Approval

5/20/21

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Cabinet Secretary

Adrienne Sandoval
Director, Oil Conservation Division

May 20, 2021

Mr. Doug White
NGL Waste Services, LLC
3773 Cherry Creek Drive
Denver, Colorado 80209
doug.white@nglep.com

RE: Commercial Surface Waste Management Facility Permit NM1-66, North Ranch Surface Waste Management Facility, Sections 9 and 10, Township 25 South, Range 34 East NMPM, Lea County, New Mexico

Mr. White,

Pursuant to applicable parts of the Oil Conservation Commission regulations 19.15.36 NMAC, the Oil Conservation Division (OCD) has completed its review of your application for a commercial waste management facility at the location described above. OCD hereby approves permit NM1-66 with conditions. Attached are the general and specific conditions.

If you have any questions, please contact Emily Hernandez of my staff by email at *Emily.Hernandez@state.nm.us*. On behalf of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this permit review.

Respectfully,

Adrienne Sandoval
Director

Attachment – NM1-66 Permit Conditions

SURFACE WASTE MANAGEMENT FACILITY PERMIT CONDITIONS
NM1-66
NGL Waste Services, LLC
Sections 9 and 10, Township 25 South, Range 34 East NMPM

May 20, 2021

NGL Waste Services, LLC of 3773 Cherry Creek Drive, Suite 1000, in Denver, Colorado 80209 (Operator) is permitted to construct and operate a surface waste management facility (Facility) as described in the Application filed by the Operator and in accordance with (a) the terms of this Permit, (b) the rules governing solid waste management facilities (19.15.36 NMAC), and (c) all other applicable provisions of the Oil and Gas Act (Act) and the rules promulgated under the Act. The Operator is responsible for ensuring any oil and gas operations located within the overall facility area do not interfere with the proper operation of the facility as described in the Application and authorized by this Permit. Any change to the operations proposed, or any change to the area covered, will require a modification to the Permit, including any necessary changes to the amount of financial assurance. The Oil Conservation Division (OCD) of the Energy, Minerals, and Natural Resources Department (EMNRD) will determine if any Permit changes constitute a "major modification" under 19.15.36 NMAC.

1. GENERAL PROVISIONS

A. Permittee and Permitted Facility. OCD issues surface oil field waste management permit NM1-66 to NGL Waste Services, LLC (3773 Cherry Creek Drive, Suite 1000, Denver, Colorado 80209 and to NGL Water Solutions Permian, LLC 1509 W. Wall Street, Suite 306, Midland, Texas 46401 (Operator) for the construction, operation, and eventual closure of a commercial facility located upon a 313-acre tract in an unincorporated portion of Lea County, New Mexico, approximately 16 miles west of Jal.

B. The waste management facility is intended for the permanent disposal of Resource Conservation and Recovery Act (RCRA) exempt and non-exempt/non-hazardous oil field waste and will include a landfill (~205.0 acres), evaporation pond (~2.2 acres), Underground Injection Control (UIC) Class II disposal well for the injection of slurry into the subsurface (~2.2 acres), and associated infrastructure (~95.8 acres). The landfill will have a waste capacity of approximately 40,264,324 cubic yards. An associated surface facility will be used for the processing of the waste before injection. Residual waste materials not injected will be transported for proper disposal elsewhere and not permanently stored at the facility.

C. Scope of Permit. OCD regulates the disposition of water produced or used in connection with the exploration and production of oil and gas and to direct disposal of that water in a manner which will afford reasonable protection against contamination of fresh water supplies pursuant to authority granted in the Oil & Gas Act (Chapter 70, Article 2 NMSA 1978). Under that Act, OCD also regulates the disposition of nondomestic wastes resulting from exploration, production, or storage of crude oil and natural gas to protect public health and the environment. Similarly, OCD regulates the disposition of nondomestic wastes resulting from the oil field service industry, the transportation of crude oil and natural gas, the treatment of natural gas, and the refinement of crude oil to protect public health and the environment pursuant to jurisdiction and authority granted by the same Act.

This permit does not convey any property rights of any sort or any exclusive privilege to the Operator and does not authorize any injury to property or persons, any invasion of other private rights, or any infringement of state, federal, or local laws, rules, or regulations.

D. Owner/Operator Commitments. The Operator must ensure all operations are consistent with the terms and conditions of this permit and in conformance with all pertinent rules and regulations under the Oil & Gas Act. Furthermore, the Operator shall abide by the approval conditions

contained herein, along with all commitments submitted in its permit application of October 3, 2019, including any attachments and/or amendments, all of which are incorporated into this Permit by reference.

E. Modifications. The Operator must notify the OCD in advance of any further increase in the land area the facility occupies, any changes in the design capacity, any changes in the nature of the oil field waste streams, or any additions of a new treatment process. As a result, the OCD Director may require a modification to the permit conditions.

F. Definitions. Terms not specifically defined in the permit shall have the same meanings as those in the Oil & Gas Act, or the rules adopted pursuant to the Act, as the context requires.

G. General Performance Standards. The Operator must operate in accordance with the permit conditions, comply with the Oil & Gas Act and rules issued pursuant to the Act, protect public health and the environment, prevent the waste of oil and gas, and prevent the contamination of fresh waters.

H. Effective Date, Expiration, Renewal, and Penalties for Operating Without a Permit. This permit is effective on May 20, 2021 and will expire ten years thereafter on May 20, 2031.

If it so desires, the Owner/Operator may submit an application for renewal to OCD no later than 120 calendar days before the expiration date. If the operator submits such a renewal application before the required date and is in compliance with the existing permit, then that existing permit will not expire until the OCD approves or denies the renewal application. Operating with an expired permit will subject the owner/operator to civil and/or criminal penalties (see Section 70-2-31 NMSA 1978).

I. Financial Assurance. The Operator has provided financial assurance in a form acceptable to OCD for the waste management facility's estimated closure and post-closure cost. The estimated amount currently required is $5,004,946.00, which includes the cost of closure construction and post-closure operations for Phase I described in the application. On an annual basis, or prior to development of each phase of the Facility, or should unforeseen conditions arise, the Operator will update the closure/post-closure estimate and, thus, the amount of financial assurance.

2. GENERAL FACILITY OPERATIONS

A. Labeling. The Operator must clearly label all tanks, drums, and other containers to identify the contents and to provide emergency notification information. The Operator may use a tank coding system if the coding system is incorporated into their emergency response planning.

B. Inspections and Maintenance of Secondary Containment Systems. The Operator must inspect all secondary containment systems and sumps at least monthly to ensure proper operation and to prevent over filling or system failure. The Operator must empty all secondary containment systems of any fluids within 48 hours of discovery, notify the OCD of the discovery, and initiate corrective actions. The Operator must keep written records of its inspections and of any fluid analyses. The Operator shall maintain and make the documentation available for OCD inspection.

C. Release Reporting and Corrective Action for Releases. The Operator must comply with the spill reporting and corrective action provisions of the Oil & Gas Regulations (19.15.29 and 19.15.30 NMAC) as may be amended from time to time.

D. Annual Report. The Operator must submit a comprehensive annual report to the OCD by September 1st of each year detailing the Operator's activities during the preceding year (where a year is defined as July 1st through June 30th). The annual report must include the following

information for the preceding year: (1) all inspection forms, including those for leak detection systems; (2) all analytical results, (3) hydrogen sulfide monitoring results, (4) process piping integrity test results, (5) training records, (6) complaint logs and resolutions, and (7) a summary of the nature, amount, and any related remediation of any reportable releases.

3. MATERIAL STORAGE

A. Process, Maintenance, and Material Storage Areas. The operator must pave and curb all process, maintenance, and material storage areas at the Facility, excluding evaporation ponds, below-grade tanks, and sumps, or incorporate another appropriate spill collection device for these areas as approved by the OCD.

B. Above Ground Tanks. The Operator must place above ground tanks on impermeable pads and surround the tanks with lined berms or with other impermeable secondary containment system having a capacity of at least one and one-third times the capacity of the largest tank, or the combined volume of any interconnected tanks. This does not apply to tanks containing fresh water.

4. WASTE MANAGEMENT

A. Waste Streams. This permit authorizes the Operator to handle the RCRA-exempt waste streams. OCD approval must be obtained to receive any waste stream not specified in the application prior to its collection, storage, treatment, or disposal.

B. Waste Storage. The Operator must store wastes at the Facility only in clearly marked storage areas that have been specified in the application, except for any waste that may be generated during emergency response operations. However, such emergency waste may be stored elsewhere for no more than 72 hours. OCD may approve additional storage on a case-by-case basis.

The Operator must not store non-oil field waste generated at the Facility by the Operator for more than 180 calendar days from the date any container is filled without OCD approval.

C. Class V Wells. Leach fields and other wastewater disposal systems at OCD-regulated facilities which inject non-hazardous fluids into or above an underground source of drinking water are Underground Injection Control Class V wells pursuant to 20.6.2.5002 NMAC. This permit does not authorize the use of a Class V injection well for the disposal of industrial waste at the Facility. Other Class V wells, including wells used only for the injection of domestic wastes, must be permitted by the New Mexico Environment Department.

5. BELOW GRADE TANKS AND SUMPS

A. Below grade tanks and sumps must have secondary containment systems with leak detection and meet the construction and operating requirements of 19.15.17 NMAC.

6. FACILITY-SPECIFIC CONDITIONS, EXCEPTIONS, WAIVERS, AND ALTERNATIVES

A. The Operator shall determine that all abandoned oil wells within the area are properly plugged in accordance with OCD regulations prior to the initiation of construction activities within the Facility. If any wells are found to be unplugged or improperly plugged, the Operator shall take the appropriate corrective actions.

B. The Operator shall provide a survey plat of the surface waste management facility boundary, prepared by a registered professional surveyor in New Mexico, to the OCD upon the final approval of the permit.

C. The Operator shall furnish OCD with a complete set of construction drawings, including a major milestone schedule for construction, at least 30 days prior to the start of construction of the landfill units, evaporation ponds, stabilization areas, and mud dry-out and wash pad areas. The construction drawings must substantially comply with the engineering design provided with the application.

The major milestone schedule shall be regularly updated throughout construction activities.

An updated project-specific construction quality assurance (CQA) plan shall be submitted with the construction drawings and major milestone schedule. The CQA plan shall include a concrete section detailing the mix design, placement, and cracking control.

D. The Operator shall consult with the New Mexico Department of Transportation (NMDOT) concerning the potential need for acceleration and deceleration lanes on Battle Axe Road (New Mexico Highway 2). Should NMDOT determine there is a need for additional lanes on Battle Axe Road, the Operator shall notify the OCD and provide a schedule for construction.

E. The request for an alternative to the migratory bird control requirements of 19.15.36.13.I and 19.15.36.17.C.(3) NMAC by performing daily inspections of the evaporation ponds for the presence of either oil or birds and removing all oil present in the water discharged to or stored in the evaporation ponds is adequately addressed and supported in the application and hereby approved. If a consistent bird presence is noted, the Operator will be required to implement more aggressive protective actions, which may include the use of netting or screens.

F. The request for waiving the landfill gas control requirements of 19.15.36.13.O NMAC is adequately addressed and supported in the application and hereby approved. Based upon the nature of the waste material and the lack of moisture or oxygen, the Operator has stated the production of landfill gas should be negligible, and, thus, no gas control system is required. The operator shall construct Facility buildings, such as the scale house, with precautionary passive vapor mitigation systems consisting of a spray applied asphaltic membrane/geomembrane composite underlain by a low-profile gas vent system vented at the roof. The operator shall monitor hydrogen sulfide gas at the scale house/administration building and any future occupied structures at the Facility using continuous monitors with a 10-ppm alarm threshold.

If OCD determines landfill gases are unreasonably problematic, a gas control system/plan will need to be implemented with OCD approval.

G. The request for an exemption to the intermediate cover vegetation stabilization requirements of 19.15.36.14.A (7) NMAC by conducting an inspection and maintenance program rather than vegetating the intermediate cover that has been placed over oil field waste but has yet to reach final grade is adequately addressed and supported in the application and hereby approved.

H. The request for an alternative to the groundwater monitoring requirements of 19.15.36.14.B NMAC by incorporation of a vadose zone monitoring system around the landfill, evaporation ponds, and stabilization areas is adequately addressed and supported in the application and hereby approved. The Operator shall notify the OCD 30 days prior to installation of the vadose zone monitoring wells and system. Final vadose zone monitoring well locations may be modified based on geotechnical field conditions. The Operator shall furnish OCD with maps detailing the final vadose zone monitoring well locations and logs. The vadose zone monitoring system shall be installed and operational prior to the commencement of operations in the new landfill units, evaporation ponds, and of stabilization areas.

The Operator shall inspect and monitor the vadose zone monitoring wells on a regular basis for the presence of liquids, along with gaseous hydrogen sulfide and methane. If liquids or gases are found to be present, the Operator shall notify the OCD immediately. If liquids are present, the Operator shall also gather representative samples for analysis. All groundwater samples must be analyzed for the parameters outlined in the application. In addition, all samples must be analyzed for volatile organic compounds using EPA Method 8260 (full list).

I. The request for an alternative to the base layer compacted soil requirements of 19.15.36.14.C (1) NMAC is adequately addressed and supported in the application and hereby approved.

J. The request for an alternative to the geonet detection and drainage layers requirements of 19.15.36.14.C (3) and 19.15.36.14.F NMAC is adequately addressed and supported in the application and hereby approved.

K. The request for an alternative to the geonet leachate and removal system layer requirements of 19.15.36.14.C (5) and 19.15.36.14.F NMAC is adequately addressed and supported in the application and hereby approved.

L. The request for an alternative to the leachate collection system and removal protective cover requirements of 19.15.36.14.C (6) NMAC is adequately addressed and supported in the application and hereby approved.

M. The request for an alternative to the final cover requirements of 19.15.36.14.C (8) and 19.15.36.14.C (9) NMAC has been adequately addressed and supported in the application and hereby approved.

The Operator shall submit pre-construction testing results to the OCD as part of the construction quality assurance (CQA) plan.

The final cover requirements otherwise specified in 19.15.36.14.C (8) and 19.15.36.14.C (9) NMAC shall incorporate one (1) of the following three (3) options.

Option 1 – Three layers with a total thickness of 60 inches consisting of the required vegetative cover layer (Layer 1) being 12 inches in thickness having hydraulic conductivity of 1.0×10^{-5} cm/sec or less, the evapotranspiration layer (Layer 2) being 36 inches in thickness having hydraulic conductivity of 1.0×10^{-5} cm/sec or less, and the required intermediate cover layer (Layer 3) being 12 inches in thickness having hydraulic conductivity of 1.0×10^{-5} cm/sec or less.

Option 2 – Three layers with a total thickness of 52 inches consisting of the required vegetative cover layer (Layer 1) being 12 inches in thickness having hydraulic conductivity of 5.2×10^{-4} cm/sec, the evapotranspiration layer (Layer 2) being 28 inches in thickness having hydraulic conductivity of 1.9×10^{-4} cm/sec, and the required intermediate cover layer (Layer 3) being 12 inches in thickness having hydraulic conductivity of 1.9×10^{-4} cm/sec.

Option 3 – Three layers with a total thickness of 48 inches consisting of the required vegetative cover layer (Layer 1) being 12 inches in thickness having hydraulic conductivity of 3.3×10^{-5} cm/sec, the evapotranspiration layer (Layer 2) being 24 inches in thickness having hydraulic conductivity of 1.0×10^{-5} cm/sec, and the required intermediate cover layer (Layer 3) being 12 inches in thickness having hydraulic conductivity of 1.0×10^{-5} cm/sec.

The Operator shall notify the OCD as to which final cover option is selected prior to final cover construction. The Operator may utilize their submitted 60-inch final cover system with all hydraulic conductivity values of 1.0×10^{-5} cm/sec, provided the soils proposed for the final cap meet the submitted specifications. The Operator may select Option 2 or Option 3 above (i.e. lower values

of hydraulic conductivity) provided the soils used for construction of the final cover system meet the specifications above.

N. The request for an alternative to the leachate pond leak detection layer requirements of 19.15.36.17.B NMAC has been adequately addressed and supported in the application and hereby approved.

O. The Operator shall provide an updated list of emergency coordinators for the contingency plan and hydrogen sulfide monitoring plan to the OCD before waste can be accepted into the Facility. The updates shall include the addresses, phone numbers, and other contact information for the emergency coordinators.

P. The Operator shall submit as-built drawings of the Facility to OCD within 30 days of the completion of construction of landfill cells, evaporation ponds, vadose zone monitoring system, stabilization areas, or process areas.

Q. Naturally Occurring Radioactive Material (NORM) waste cannot be accepted at the Facility unless in compliance with 19.15.35 NMAC.

R. The Operator shall monitor the leak detection sumps for the presence of liquids at least monthly. If liquids are present, the Operator shall notify the OCD immediately and shall sample and test the liquid as directed by the OCD.

S. If disposal wells are incorporated into facility operations at a later date, those wells must be separately permitted under provisions of the New Mexico Underground Injection Control (UIC) program.