NM2 - 24

PERMITS, RENEWALS, & MODS

State of New Mexico Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham Governor

Sarah Cottrell Propst Cabinet Secretary Designate

Todd E. Leahy, JD, PhD Deputy Secretary Gabriel Wade, Acting Director Oil Conservation Division



January 25, 2019

Randy Thompson Black Hills Gas Resources, Inc. 3200 North 1st Street Bloomfield, New Mexico 87413

RE: Surface Waste Management Facility Permit NM2-24 for East Blanco Produced Water Facility.

Black Hills Gas Resources, Inc.

Permit NM2-024

Location: Units B, C, F and G of Section 13, Township 30 North, Range 4 West NMPM, Rio Arriba County, New Mexico

Mr. Thompson,

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 surface waste management facility at the location described above. OCD hereby approves permit NM2-24 with conditions. Attached are the general and specific conditions.

If you have any questions, please contact Jim Griswold of my staff at (505) 476-3465 or by email at jim.griswold@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,

Gabriel Wade Acting Director

GW/jg

Attachment - NM2-24 Permit Conditions

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SURFACE WASTE MANAGEMENT FACILITY PERMIT CONDITIONS NM2-024 Black Hills Gas Resources, Inc. East Blanco Produced Water Facility Units B, C, F, and G of Section 13, Township 30 North, Range 4 West NMPM

January 25, 2019

Black Hills Gas Resources, Inc. of 3200 N. 1st Street, Bloomfield, New Mexico 87413 (the operator) is permitted to construct and operate a surface waste management 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 and the rules promulgated under the Act. The operator is responsible for insuring 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, if applicable. The Oil Conservation Division (OCD) of the Energy, Minerals, and Natural Resources Department 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 facility permit NM2-24 to Black Hills Gas Resources, Inc. (operator), 3200 N. 1st Street, Bloomfield, New Mexico 87413 for the construction, operation, and eventual closure of a centralized facility to be located upon 11.7 acres of land in an unincorporated portion of Rio Arriba County, New Mexico, approximately 11.6 miles southwest of Dulce, New Mexico.

The surface waste management facility is intended for the storage and reuse of produced water (RCRA exempt oil field waste) and will include three independent ponds that are designed to function as three separate ponds. Each individual pond has a total volume of 9.99 acre-feet including three feet of freeboard (7.46 acre-feet excluding freeboard). The total capacity of the three ponds within the facility is 22.38 acrefeet. The facility boundary encompasses 11.7 acres and incorporates the three ponds, a topsoil and excess excavation stockpile area, associated infrastructure and buffer areas.

B. 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.

C. 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. The permit application consists of a fully revised application dated February 20, 2014 and hand-delivered to OCD on December 1, 2015; Form C-137 dated

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March 3, 2017 and received by OCD on April 25, 2017; the April 17, 2017 amendments and supplemental information; and the August 22, 2017 liner compatibility demonstration and exception request.

- **D. Modifications.** Any change to the operations proposed or any change to the area covered by the Permit will require a modification to the Permit including any necessary changes to the amount of financial assurance, if applicable. The OCD will determine if any Permit changes constitute a "minor modification" or "major modification" under 19.15.36 NMAC.
- **E. 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.
- **F. 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.
- G. Effective Date, Expiration, Renewal, and Penalties for Operating Without a Permit. This permit is effective as of January 25, 2019 and will expire ten years hereafter on January 24. 2029. 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).
- H. Financial Assurance. Pursuant to 19.15.36.11 A NMAC, "Upon notification by the division that it has approved a permit but prior to the division issuing the permit, an applicant for a new centralized facility permit shall submit acceptable financial assurance in the amount of \$25,000 per centralized facility, or a statewide "blanket" financial assurance in the amount of \$50,000 to cover all of that applicant's centralized facilities, unless such applicant has previously posted a blanket financial assurance for centralized facilities." This permit approval is conditional upon receipt and approval, by the Director, of financial assurance in the amount of \$25,000. The operator shall provide financial assurance on a division-prescribed form or in a form acceptable to OCD for the surface waste management facility.

2. GENERAL FACILITY OPERATIONS

- **A. Labeling.** The operator must clearly label all tanks, drums, and other containers to identify the contents along with other emergency notification information. The operator may use a tank coding system if it 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, 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 an annual report to the OCD by September 1st of each year providing the following information for the preceding year: 1) all inspection forms including those for leak detection systems along with analytical results, 2) hydrogen sulfide monitoring results, 3) process piping integrity test results, 4) training records, 5) complaint logs and resolutions, and 6) a summary of the nature and amount of any reportable releases.

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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 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 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 its application prior to 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 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

Below grade tanks and sumps must have secondary containment systems with leak detection and meet construction and operating requirements of 19.15.36.17 NMAC.

6. ADDITIONAL FACILITY-SPECIFIC CONDITIONS

- **A.** Prior to construction activities within the facility, the operator shall determine that all abandoned oil wells within the area are properly plugged in accordance with OCD regulations. If any wells are found to be unplugged or improperly plugged, the operator shall take the appropriate corrective actions.
- **B.** Naturally Occurring Radioactive Material (NORM) waste cannot be accepted at the facility unless in compliance with 19.15.35 NMAC.
- **C**. At least 30 days prior to the start of construction of the evaporation ponds the operator shall furnish OCD with a complete set of construction drawings including a major milestone schedule for construction. These construction drawings must substantially comply with the engineering design provided with the application and show the location of pond discharge for the purposes of identifying the location of the sacrificial liner. The major milestone schedule shall be updated throughout construction activities.

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- **D.** If disposal wells are to be incorporated into facility operations at a later date, those wells must be separately permitted under provisions of the New Mexico Underground Injection Control program.
- **E.** The operator has proposed that the produced water stored at this facility is considered a RCRA exempt oil field waste and will only originate from Black Hills Gas Resources, Inc.'s operations.
- **F.** The operator has proposed to use the gas/water separators at the gas well locations to serve as the primary treatment method for the produced water. Prior to storage at the facility, the operator has proposed that produced water will be treated with an oil skimmer and particulate filter at the adjacent existing tank battery facility. Skimmer pits and oil separators are not included in the facility design.
- **G.** The operator has proposed that transporters with authorization to move liquid waste, a division approved Form C-133, will not be used to transport waste to and from the proposed facility. The operator has proposed that produced water will be transported to and from the proposed facility via pipelines connected to the existing tank battery facility located approximately 450 feet east of the proposed facility.
- H. Given the shallow depth to the uppermost aquifer beneath the facility, a groundwater monitoring program relative to that aquifer is proposed by the operator. The operator has proposed, Appendix F, Page 5, Ground Water Monitoring Wells, "After construction (of the facility) is completed, a permanent monitoring well will be installed at this location (B-4), and sampling will occur on a semi-annual basis." "A comparison of the current quality and background water quality will be performed", as provided in the application. The operator shall notify the OCD prior to the installation of groundwater monitoring wells not already in place. The final number and location of such wells may be modified by conditions encountered in the field, if applicable. All groundwater samples must also be analyzed by EPA Method 8260 (full list) for volatile organic compounds in addition to those parameters outlined in the Table 1 of Appendix F of the application.
- I. The operator has proposed an alternative pond design which incorporates a geonet layer rather than compacted soil within the leak detection system (19.15.36.17 B.(9) NMAC). The OCD hereby approves this alternative as it is supported by manufacturer specification data sheets, that demonstrate equivalency to the saturated hydraulic conductivity standard of "1 x 10-5 cm/sec or greater to facilitate drainage", provided within the application and appear to provide equivalent protection of fresh water, public health and the environment.
- J. The operator in its application requested an exception to 19.15.36.17 B.(3) NMAC with respect to the liner compatibility demonstration. That exception is hereby granted based upon a conditional approval that the proposed liner material for construction of the ponds demonstrate compatibility to the proposed pond contents. The operator was only able to locate and provide liner compatibility demonstrations for salts, acidic and alkaline solutions for the proposed high-density polyethylene (HDPE) liner material to construct the proposed ponds, but was unable locate any documentation demonstrating resistant to exposure to petroleum hydrocarbons. The operator has proposed to obtain water samples from the Black Hills Gas Resources, Inc.'s tank battery adjacent to the proposed East Blanco facility and perform the specified EPA SW-846 Method 9090A tests using the water samples and the specific liner that will be installed. The operator has proposed to submit the test results to OCD for review and obtain OCD approval prior to installation of the proposed liner material.

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State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 120648

CONDITIONS

Operator:	OGRID:
BLACK HILLS GAS RESOURCES, INC.	13925
7001 Mt Rushmore Rd	Action Number:
Rapid City, SD 57702	120648
	Action Type:
	[C-137] Non-Fee SWMF Submittal (SWMF NON-FEE SUBMITTAL)

CONDITIONS

Created By	Condition	Condition Date
bjones	None	6/27/2022