WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL & GAS

GENERAL WATER POLLUTION CONTROL PERMIT Permit Number: GP-WV-1-88

Subject:

Industrial Wastes,

Issue Date:

July 1, 2021

Oil and Gas Exploratory/ Developmental Drilling, Effective Date:

Expiration Date:

July 1, 2021 June 30, 2026

Reworking of Wells.

Well Treatment Operations, and Plugging Operations.

To Whom It May Concern:

This is to certify that any oil and/or gas entity or other person agreeing to be regulated under the terms of this general permit (the permittee) is hereby granted a General Water Pollution Control Permit to acquire, construct, install, modify and operate a system or parts thereof for the discharge to land of treated wastewaters generated during exploratory and/or developmental drilling, well treatment operations, plugging operations and reworking of wells.

This permit is subject to the following terms and conditions: (1) The information submitted on and with the fluids/cuttings disposal and reclamation plan (Form WW-9) and Groundwater Protection Plan (GPP) will hereby be made terms and conditions of the permit with like effect as if all such information were set forth herein; (2) the approval of such form, plans, specifications and procedures by the Office of Oil and Gas; and (3) other conditions set forth in Sections A, B, C, D, E, F, and G of this permit. Site registrations submitted for pits which are not in conjunction with a well work permit shall include a letter of explanation detailing the proposed work for which the pit will be used. The Office of Oil and Gas reserves the right to require a site-specific permit for any such work.

Operators may apply for coverage under this general permit by submitting to the Office of Oil and Gas a fluids/cuttings disposal and reclamation plan form and a GPP containing the information required by the Office of Oil and Gas. Upon approval of such registration by the Office of Oil and Gas, the permittee may begin discharging in accordance with this permit. Because of the nature of the operations, it is recognized that in some instances it will be impossible to provide all data requested on the fluids/cuttings disposal and reclamation plan form at the time of its initial filing. In other cases, the information may change before the discharge takes place. Any changes or additions to information contained on the fluids/cuttings disposal and reclamation plan form shall be noted at the time of the filing of a discharge monitoring report (DMR); however, should a permittee elect to conduct a land application operation that was not indicated on the original fluids/cuttings disposal and reclamation plan form, the permittee shall file a revised site

DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS FOR DRILLING PIT WASTE WATERS. તં

The permittee is authorized to discharge from outlet number(s) 001 treated wastewaters generated during exploratory/developmental drilling, reworking of wells, plugging operations and well treatment operations. Such discharges shall be limited and monitored by the permittee as specified below:

	Limitations for Land Application	Monitoring Requirements	
Effluent Characteristics	Discharge	Measurement Frequency	Sample Type
Volume, gallons	Monitor	Just Before Discharge	Estimate
		Upon Occurrence	
Total Iron, mg/1 (Max.)	0.9	>>	Composite
Dissolved Oxygen, mg/1 (Min.)	2.5 (a)	29	99
Settleable Solids mg/1 (Max.)	0.5	59	77
Chloride, mg/1 (Max.)	12,500	29	
Total Aluminum	Monitor (b)	59	3
Oil and Grease, mg/1 (Max.)	Monitor (d)	>>	3 3
Total Manganese, mg/1 (Max.)	Monitor	22	ÿ
Flow, gallons/minute	Monitor	23	Estimate
Free or floating Oil	(c)	"	Composite

The pH shall not be less than 6.0 standard units and not greater than 10.0 standard units for land application and shall be monitored by using a composite sample. The pH shall be measured on site.

Samples taken in compliance with the predischarge monitoring requirements specified above shall be taken from various locations in the pit. Refer to Section E.7. for records retention requirement. Refer to Section G. for other requirements. The permittee must comply with all conditions of this permit. Permit noncompliance constitutes a violation of Section 7, Article 6, Chapter 22 of the West Virginia Code and is grounds for enforcement action; for permit modification, revocation and reissuance, suspension or revocation; or for denial of a fluids/cuttings disposal and reclamation plan form.

2. Duty to mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit.

3. Permit Actions

Authority to operate under this permit may be modified, suspended or revoked for cause. The filing of a request by the permittee for a change in its authorization or a notification of planned changes or anticipated noncompliance does not stay any permit condition. In addition, this permit may be modified, revoked and reissued, suspended, or revoked for any individual permittee without affecting the status of this permit as it applies to other individual permittees.

4. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege. (See also G.10.)

5. Signatory Requirements

All fluids/cuttings disposal and reclamation plan forms and GPPs, reports or information submitted to the Chief shall be signed and certified as follows:

- (a) Applications. All permit applications shall be signed as follows:
 - (1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: DEP does not require specific assignments or delegations of authority to responsible corporate offices identified above. The Agency will presume that these responsible corporate officers have company representative or a contractor hired for the purpose of treating and discharging a drilling pit. If a company plans to designate a contractor to be its authorized representative for purposes of completing discharge monitoring reports, that company will provide a letter to the Chief in advance of the filing of a DMR indicating that the contractor will be the company's authorized representative for that purpose. It will be acceptable for a company to provide one letter to the agency identifying a contractor as an authorized agent for purposes of multiple discharges and completion of these reports for those sites.

(e) Certification. Any person signing a document under paragraph (a), (b) or (d) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

6. Transfers

This permit is not transferable to any person, except after approval by the Chief. The Chief may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.

7. Duty to Provide Information

The permittee shall furnish to the Chief, within a specified time, any information which the Chief may request to determine whether cause exists for modifying, revoking and reissuing, suspending, or revoking this permit, or to determine compliance with this permit. The permittee shall also furnish to the Chief, upon request, copies of records required to be kept by this permit.

8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a fluids/cuttings disposal and reclamation plan form, or submitted incorrect information in a fluids/cuttings disposal and reclamation plan form or in any report to the Chief, it shall promptly submit such facts or information, except as noted on page 1 of this permit.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. Unless otherwise required by Federal or State law, this provision requires the operation of back-up auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass

(a) Definitions

- (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility; and
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations.

If required for essential maintenance to assure efficient operation, the permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded. Such bypass is not subject to the provisions of D.3.c. and D.3.d. of this permit.

(c) Notification of need for bypass

- (1) If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) If the permittee does not know in advance of the need for a bypass, notice shall be submitted as required in F.2.b. of this permit.

(d) Prohibition of bypass

- (1) An upset occurred and that the permittee can identify the specific causes(s) of the upset;
- (2) The permitted facility was at the time being properly operated;
- (3) The permittee submitted notice of the upset as required in F.2.b. of this permit; and
- (4) The permittee complied with any remedial measures required under C.2. of this permit.
- (d) Burden of proof. In any enforcement proceedings the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from violating water quality standards.

E. MONITORING AND REPORTING

1. Representative Sampling

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples required to be analyzed under this permit, unless otherwise noted, shall be analyzed by a West Virginia Certified Laboratory pursuant to Title 47, Series 32 of the West Virginia Legislative Rules.
- (b) In incidences where a specific test method is not defined, the permittee shall utilize an EPA-approved method with a method detection limit (MDL) sensitive enough to confirm compliance with the permit effluent limit for that parameter. If an MDL is not sensitive enough to confirm compliance, the most sensitive approved method must be used. If a more sensitive EPA-approved method becomes available, that method shall be used. Should the current and/or new method not be sensitive enough to confirm compliance with the permitted effluent limit, analytical results reported as "not detected" at the MDL of the most sensitive method available will be deemed compliant for purposes of permit compliance. Results shall be reported on the Discharge Monitoring Reports as a numeric value less than the MDL.

2. Protection of standards

- (2) Any upset which exceed any effluent limitation in the permit; and
- (3) Violation of maximum daily discharge limitation for any of the pollutants listed by the Chief in the permit to be reported immediately. This list shall include any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous waste.
- (c) The Chief may waive the written report on a case-by-case basis if the oral report has been received in accordance with the above.
- (d) Compliance with the requirements of F.2. of this section shall not relieve a person of compliance with Title 35, Series 1, Section 3 of West Virginia Legislative Rules.

3. Reporting Requirements

- (a) Planned changes. The permittee shall give notice to the Chief as soon as possible of any planned physical alterations or additions to the permitted facility which may affect the nature or quantity of the discharge and of any planned changes in the method of operating the facility which may affect the nature or quantity of the discharge.
- (b) Anticipated noncompliance. The permittee shall give advance notice to the chief of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

4. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under the above paragraphs at the time monitoring reports are submitted. The reports shall contain the information listed in F.2.a.

G. OTHER REQUIREMENTS

- 1. The discharge of treated and untreated pit wastewater or sludge, caused by any reason such as, but not necessarily limited to, leaking, overflowing or an unstable, breached or un-reclaimed pit, into waters of the State is prohibited.
- 2. A temporary fence or suitable barrier shall be constructed surrounding the pit(s), as needed, to prevent vandalism or inadvertent livestock intrusion.
- 3. Before treating the pit, free-floating oil shall be skimmed off and removed from the pit. Then, a representative sample for D.O. shall be taken, analyzed and reported on the DMR as the pretreatment D.O. value for that site. This D.O. value is to be

- (f) Residues left in the pit shall be covered promptly with adequate soil within 30 days to prevent contact with the surface runoff and reduce the potential for pollution of surface water. Pit reclamation methods specified in DEP's technical manual are to be followed. In no case is the reclamation method to result in inadequate cover for the residues. Inadequately covered residues represent a violation of the terms and conditions of this general permit.
- (g) Category 2 and Category 3 pit wastewaters must be aerated equivalent to a minimum of two pit volume turnovers. The individual companies must supply to the Chief exact details of the aeration technique employed. The description may contain diagrams and/or narrative, but it must have sufficient detail so as to allow another party to duplicate the methodology.

More than one aeration technique may be used. DEP strongly encourages the use of more than one aeration technique on different pits. The DMR shall contain the information on aeration utilized for that site. DEP, after reviewing an individual company's aeration techniques and results, may require individual companies to employ other aeration techniques on a case-by-case basis.

- 5. (a) Notification shall be given to the district oil and gas inspector at least 48 hours prior to treatment.
 - (b) Each discharge shall require at least 48 hours prior notification to a representative of the Chief in the district where the site is located.
 - (c) The inspector may allow a period of less than the 48 hours for notification at his/her discretion.

6. Land Application Measures:

- (a) Land application shall not be carried out when the ground is saturated, frozen or impermeable for other reasons.
- (b) Land application shall be carried out only on vegetated land (including the drilling site).
- (c) No land application shall be made to cultivated garden plots regardless of season.
- (d) The wastewater shall be applied at a rate that, given the characteristics of the land, shall not cause ponding, erosion or run-off into the waters of the State.
- (e) There shall be no discharge of floating solids or visible foam or free oil in other than trace amounts.

(f) The dumping of radioactive materials or wastes containing radioactive materials into the pit.

8. Best Management Practices (BMPs):

- (a) All appropriate precautions shall be taken to prevent release of sediment and toxic materials into waters of the State during various phases of drilling activities such as, but not necessarily limited to, site planning and preparation, drilling and maintenance practices, materials and waste materials handling, pit construction, erosion and sediment control practices and reclamation of the drilling site.
- (b) Waste oils, or other potentially harmful materials if left on site, temporarily, shall be stored in acceptable containers and handled in a manner that shall prevent them from entering the pit or waters of the State. Final disposal of these oils and other materials shall be conducted in an environmentally acceptable manner.
- (c) Equipment maintenance shall be performed in a manner that shall minimize the contribution of waste to the drilling area.
- (d) During drilling operations, empty solvent or oil containers left onsite shall be stored in a manner that prevents or minimizes the waste contribution to the site. After drilling, any such containers shall be disposed of properly.
- 9. Nothing in this general permit shall relieve the permittee of any obligations to comply with all applicable requirements relating to CWA Section 208, area wide waste treatment management practices and other requirements of law.
- 10. Nothing in this general permit shall be deemed in any way to create new, or enlarge existing rights of riparian owners or others. Neither does anything in this general permit create new, or enlarge existing, obligations or duties of an operator pursuant to the requirements of West Virginia Code § 22B-1-1 et seq. The issuance of this general permit does not convey any property rights of any sort, nor shall the issuance of this general permit give any presumptions of law or findings of fact inuring to or for the benefits of persons other than the State of West Virginia.
- 11. To be covered by this general permit, the operator of a facility or discharge site shall file a fluids/cuttings disposal and reclamation plan form and a GPP along with a \$100.00 filing fee with the Office of Oil and Gas. The operator shall be responsible for completing the fluids/cuttings disposal and reclamation plan form and serving it on the surface owner of record as listed on the oil and gas drilling well work permit along with the other oil and gas permit documents that are otherwise served on that surface owner. When the fluids/cuttings disposal and reclamation plan form is filed with the Office of Oil and Gas it shall be

be required in all cases. A fluids/cuttings disposal and reclamation plan form (WW-9) and a GPP must be approved by the Chief no later than 15 days prior to discharge.

In addition, any proposed land application on the tract of land with the associated well must have prior approval of the Chief or his authorized representative. Approval shall not be given where a land application has occurred on a particular site within the past six months preceding the date of discharge unless specifically allowed by the Chief.

- 14. When oil and grease exceed 15 mg/1 (max), the operator shall submit, along with the DMR, an explanation of the cause of oil and grease at such a level, steps to be taken to reduce oil and grease below 15 mg/1, and prevent future exceedances.
- 15. This general permit will be reviewed by the Chief at time of reissuance, or earlier, for possible revisions. Based upon such review, revisions may be more or less stringent than the limitations, standards and conditions contained in this general permit.

The herein described activity is to be constructed or installed and operated, used and maintained strictly in accordance with the terms and conditions of this permit, with any plans, specifications, and information submitted with the individual fluids/cuttings disposal and reclamation plan form and a GPP, with any plan of maintenance and method of operation thereof submitted, and with any applicable rules and regulations promulgated by WVDEP.

Failure to comply with the terms and conditions of this permit and all relevant plans, specifications and information submitted which therein become provisions of this permit, shall constitute grounds for revocation or suspension and may result in the invocation of enforcement procedures set forth in Article 6, Chapter 22 of the West Virginia Code.

This permit is issued in accordance with the provisions of Article 6, Chapter 22 of the West Virginia Code.

This permit is issued in accordance with the provisions of Article 6, Chapter 22 of the Code of West Virginia and may be modified, suspended, or revoked in accordance with said Article 6.

James Martin, Chief Office of Oil and Gas