AUTHORIZATION TO DISCHARGE UNDER THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT NUMBER: OK0043320
ID NUMBER: I-60000470

In compliance with the Oklahoma Pollutant Discharge Elimination System (OPDES) Act, 27A O.S. § 2-6-201 *et seq.*, Oklahoma Uniform Environmental Permitting Act, 27A O.S. § 2-14-101 *et seq.*, and the rules of the Oklahoma Department of Environmental Quality promulgated thereunder,

Greenfield Environmental Multistate Trust, LLC
P.O. Box 1189
East Helena, MT 59635

is authorized to discharge wastewater from their facility, located at:

NW¼, SW¼, NE¼, Section 27, Township 18N, Range 5EIM
Payne County, Oklahoma
or at 1005 East Deep Rock Road, Cushing, OK 74023

to receiving waters: Skull Creek (WBID 620900010360_00) in Stream Segment 620900 of the Upper Arkansas River Basin

from Outfall 007 located at: Latitude 36.011236° N, Longitude 96.756623° W (GPS: NAD83)
SW¼, NW¼, NE¼, Section 27, Township 18N, Range 5EIM, Payne County, Oklahoma

and Outfall 008 located at: Latitude 36.010240° N, Longitude 96.757425° W (GPS: NAD83)
NW¼, SW¼, NE¼, Section 27, Township 18N, Range 5EIM, Payne County, Oklahoma

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III, hereof.

The above-referenced facility is authorized to retain wastewater in two flow-through surface impoundments (F07 & F08) as described in the Appendix. Surface impoundments shall be maintained in accordance with Parts I, II, and IV hereof.

Issuance of this permit in no way or in any respect affects the permittee's civil or criminal responsibility regarding disposal of wastewater, except with respect to the permittee's legal responsibility under the OPDES Act and Department Rules.

This permit replaces and supersedes the previous permit issued on April 29, 2021.

The issuance date of this permit is Month Date Year.

This permit shall become effective Month Date Year.

This permit and authorization to discharge shall expire at midnight Month Date Year.

For the Oklahoma Department of Environmental Quality:

Brian Clagg, P.E., Environmental Programs Manager
Industrial Wastewater Group
Water Quality Division

George Russell IV, Director
Water Quality Division

PART I
EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Effluent Limitations and Monitoring Requirements for Outfalls 007 and 008

During the period beginning on the effective date of the permit and lasting through the expiration date, the permittee is authorized to discharge from Outfalls 007 and 008.

The discharge from the Outfalls consists of remediated recovered groundwater, stormwater, purge and development water from groundwater monitoring wells, and water from remediation activities, including decontamination water. Such discharge shall be limited and monitored by the permittee as specified below:

Mass and Concentration Limitations

PARAMETERS	DISCHARGE LIMITATIONS			
	MASS LOADING LIMITS (lbs/day unless otherwise specified)		CONCENTRATION LIMITS (mg/L unless otherwise specified)	
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM
Flow STORET: 50050	Report (MGD)	Report (MGD)	---	---
Total Organic Carbon (TOC) STORET: 00680	56.30	71.31	75	95
Total Suspended Solids (TSS) STORET: 00530	22.52	33.78	30	45
Chemical Oxygen Demand (COD) STORET: 00340	135.11	270.22	180	360
Oil & Grease STORET: 00552	7.51	11.26	10	15
Sulfates, total STORET:00945	1098	1193	1463	1589
Selenium, total STORET: 01147	0.0145	0.0276	19.30 (µg/L)	36.76 (µg/L)
Lead, total STORET: 01051	---	---	---	Report (µg/L)
Residual Chlorine, total (TRC) STORET: 50060	---	---	---	ND [1]

[1] ND is Not Detectable (defined as <0.10 mg/L instantaneous maximum) as measured by approved EPA 40 C.F.R. 136 methods for total residual chlorine.

Mass and Concentration Limitations (Continued)

PARAMETERS	DISCHARGE LIMITATIONS			
	MASS LOADING LIMITS (lbs/day unless otherwise specified)		CONCENTRATION LIMITS (mg/L unless otherwise specified)	
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM
Phenolic Compounds, total STORET: 70029	---	---	Report (µg/L) [2]	Report (µg/L) [2]
Chromium, total STORET: 01034	---	---	Report (µg/L) [2]	Report (µg/L) [2]
Cadmium, total STORET: 01027	---	---	Report (µg/L) [2]	Report (µg/L) [2]
Manganese, total STORET: 01055	---	---	Report [2]	Report [2]
pH STORET: 00400	---		Between 6.5 - 9.0 (s.u.)	

[2] Requirements are established in this permit for the purpose of collecting at least 12 data points only. Due the nature of the infrequent discharges from the facility, effluent monitoring for these pollutants will be done during the entirety of permit term.

NOTE: See Parts II and III for Additional Requirements.

There shall be no discharge of a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses.

Surface waters of the state shall be maintained free from oil and grease and taste and odors.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

The discharge shall not contain chemical, physical, or biological substances in concentrations that are irritating to skin or sense organs or are toxic or cause illness upon ingestion by human beings.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:

Outfall 007: At the end of the discharge pipe from F07 prior to discharge to Skull Creek at Latitude 36.011236° N, Longitude 96.756623° W (GPS: NAD83) in the SW¼, NW¼, NE¼, Section 27, Township 18N, Range 5EIM, Payne County, Oklahoma.

Outfall 008: At the end of the discharge pipe from F08 prior to discharge to Skull Creek at Latitude 36.010240° N, Longitude 96.757425° W (GPS: NAD83) in the NW¼, SW¼, NE¼, Section 27, Township 18N, Range 5EIM, Payne County, Oklahoma.

Monitoring Requirements and Sample Types

PARAMETERS	MEASUREMENT FREQUENCY [1]	SAMPLE TYPE
Flow	Continuous	Totalize
Total Organic Carbon (TOC)	1 per 2 months	Grab
Total Suspended Solids (TSS)	1 per 2 months	Grab
Chemical Oxygen Demand (COD)	1/month	Grab
Oil & Grease	1/month	Grab
Sulfates, total	2/month [2]	Grab
Selenium, total	1/month	Grab
Lead, total	1/month	Grab
Residual Chlorine, total (TRC)	1/month	Grab
Phenolic Compounds, total	1/month [3]	Grab [3]
Chromium, total	1/month [3]	Grab [3]
Manganese, total	1/month [3]	Grab [3]
Cadmium, total	1/month [3]	Grab [3]
pH	1/week	Grab

[1] When discharging.

[2] If the permittee only discharges once per month, then one sample must be taken at the beginning of the discharge and one near the end.

[3] Requirements are established in this permit for the purpose of collecting at least 12 data points only. Due the nature of the infrequent discharges from the facility, effluent monitoring for these pollutants will be done during the entirety of permit term.

SECTION B. BACKGROUND MONITORING REQUIREMENTS – OUTFALL 999 (UPSTREAM)

None.

SECTION C. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule: None

SECTION D. REPORTING OF MONITORING RESULTS

Monitoring results shall be reported in accordance with the provisions of Part III, Section E(4) of the permit. Monitoring results obtained during the previous month shall be summarized and electronically reported on an electronic Discharge Monitoring Report (eDMR) form due to the Oklahoma Department of Environmental Quality, Water Quality Division, Wastewater Compliance Tracking Section no later than the 15th day of the month following the completed monthly test. If no discharge occurs during the reporting period, an eDMR form stating "No Discharge" shall be electronically submitted according to the above schedule. Instructions on how to register as a "Preparer" or "Signatory" for eDMRs, as well as how to prepare and submit eDMRs, can be found on DEQ's website at:

https://oklahoma.gov/deq/divisions/water-quality/wastewater-stormwater/electronic-reporting.html.

Assistance is also available by contacting DEQ at (405) 702-8100 or deqreporting@deq.ok.gov.

The first report is due on _____.

PART II
OTHER PERMIT REQUIREMENTS

A. REGULATORY NOTICE

The permittee is hereby given notice that this Permit is in all respects subject to compliance with and actions under any and all applicable and relevant terms, conditions, provisions and requirements and any and all amendments of the laws of the State of Oklahoma, the rules of the Oklahoma Department of Environmental Quality, and Oklahoma's Water Quality Standards. The absence of any express reference within this Permit of any particular statutory requirement, rule(s), regulation(s), or standard(s) shall in no respect be deemed or construed to exempt or preclude the application of such requirement, rule(s), regulation(s), or standard(s) to this Permit or the permittee. By the Director's approval, grant and issuance of this Permit, permittee acknowledges receipt of true, correct, and current copies of Oklahoma's Water Quality Standards and the rules of the Oklahoma Department of Environmental Quality.

B. REOPENER CLAUSE

This Permit may be reopened for modification or revocation and reissuance to require additional monitoring and/or effluent limitations where actual or potential exceedances of state water quality criteria are determined to be the result of the permittee's discharge to the receiving water(s), or a Total Maximum Daily Load is established for the receiving stream(s), or when required as technology advances. Modification or revocation and reissuance of the Permit shall follow regulations listed at 40 C.F.R. § 124.5.

C. LABORATORY ACCREDITATION

All laboratory analyses for the parameters specified in this permit must be performed by a laboratory accredited by the Oklahoma Department of Environmental Quality for those parameters.

D. ANALYTICAL REQUIREMENTS

Unless otherwise specified in this Permit, effluent and/or upstream monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed in 40 C.F.R. Part 136. Appendices A, B, and C to 40 C.F.R. Part 136 are specifically referenced as part of this requirement. Amendments to 40 C.F.R. Part 136 promulgated and incorporated by reference in OAC 252:606-1-3(b)(7) after the effective date of this Permit shall supersede these requirements as applicable.

E. MINIMUM QUANTIFICATION LEVEL (MQL)

If any individual analytical test result taken for compliance with this permit is a non-detect, then the detection limit shall be used for DMR calculations. Any time a non-detect value is used for DMR calculations, the value reported on the DMR shall use the less than sign (<).

F. SURFACE IMPOUNDMENT REQUIREMENTS

1. A minimum freeboard of 3 feet shall be maintained for surface impoundments F07 (both cells) and F08.

2. The permit may be reopened to implement and/or require impoundment modifications, additions, extensions, and/or operational changes; monitoring and reporting; reclassification of wastes; sludge management plans; best management practices; closure plans; and/or other appropriate actions.

3. At such time as any of the impoundments (F07 and/or F08) are to be permanently taken out of service or at such time as the contents of any of the impoundments (F07 and/or F08) pose a risk to the environment or waters of the state, the owner or operator of the facility shall be required to follow all closure requirements contained in OAC 252:616-13.

4. The facility shall develop and maintain a written MOP that discusses maintenance, operational, and monitoring procedures as specified in OAC 252:616-5-2 for impoundments F07 and F08 that contain Class I wastewater. The written MOP is due six months following the effective date of the permit. The MOP shall be kept on site and made available to DEQ upon request. The MOP must be followed and updated annually, if necessary. The following shall be addressed in the MOP.

    a. Maintenance procedures including methods to protect impoundments and liner integrity
    b. Operation procedures used to protect surface impoundments and liner integrity
    c. The name and telephone number of personnel responsible for maintenance, operation and monitoring

5. In all other respects, surface impoundments F07 and F08 shall be subject to standard conditions for surface impoundments contained in OAC 252:616, Subchapters 5, 7, and 13, including but not limited to requirements for construction, operation, maintenance, monitoring and closure.

G. OTHER DISPOSAL METHODS

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewater shall be disposed of at a state-approved industrial waste disposal site or to a company for recycling.

If any such industrial wastes are removed from the facility, the permittee shall keep accurate records which include the following information:

a. Name and address of company hauling waste;
b. The type and amount of waste hauled; and
c. The final disposal site of waste hauled.

Upon request, the above records shall be made available to the staff of DEQ for inspection, review, and copying.

APPENDIX A

Description of Wastewater Treatment/Disposal Surface Impoundments (S.I.s)

Classification [1] OAC 252:616-1-2		Liner Type [2]	Holding Capacity [2] or Dimensions OAC 252:616-7-1(6)	WASTEWATER Destination
S.I.	Wastewater			
F07 Cell 2	Remediated recovered groundwater, stormwater, purge and development water from groundwater monitoring wells, and water from remediation activities, including decontamination water - Class I	Native Clay	~840,000 gallons 140' x 275' x 7' Sides sloped to bottom	Outfall 007 or 008
F07 Cell 3	Remediated recovered groundwater, stormwater, purge and development water from groundwater monitoring wells, and water from remediation activities, including decontamination water - Class I	Native Clay	~840,000 gallons 140' x 275' x 7' Sides sloped to bottom	Outfall 007 or 008
F08 Cell 1	Remediated recovered groundwater, stormwater, purge and development water from groundwater monitoring wells, and water from remediation activities, including decontamination water - Class I	Native Clay	~870,000 gallons 75' x 230' x 7' Sides sloped to bottom	Outfall 007 or 008

(1) Wastewater Classification according to OAC 252:616-1-2.
(2) Based on information contained in the application.
(3) Designation F refers to flow-through surface impoundment.

Location of Surface Impoundments

S.I.	Legal Location	Relative Location of Impoundments
F07 Cell 2	NW¼, SW¼, NE¼ Section 27, Township 18N, Range 5EIM Payne, Oklahoma	Northeast of F08 Cell 1 and Southwest of F07 Cell 3; in the middle of the three cells
F07 Cell 3	NE¼, SW¼, NE¼ Section 27, Township 18N, Range 5EIM Payne, Oklahoma	Northeast of F07 Cell 2; Northernmost of the three cells
F08 Cell 1	NW¼, SW¼, NE¼ Section 27, Township 18N, Range 5EIM Payne, Oklahoma	Southwest of F07 Cell 2; Southernmost of the three cells