

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0132489

Owner: POET Biorefining – Laddonia, LLC
Address: 809 North Pine, Laddonia, MO 63352

Continuing Authority: Same as above
Address: Same as above

Facility Name: Poet Biorefining – Laddonia, LLC
Facility Address: 809 North Pine, Laddonia, MO 63352

Legal Description: Audrain County; See following page
UTM Coordinates: See following page

Receiving Stream: Tributary to Tributary to Middle Lick Creek
First Classified Stream and ID: 8-20-13 MUDD V1.0; WBID #3069
USGS Basin & Sub-watershed No.: East Lick Creek; 07110007-0102

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION


Manufactures ethanol for fuel SIC # 2969, 2048; NAICS # 325193
Sludge is retained in the basins.
This facility does not require a certified wastewater operator.
Domestic wastewater is managed by sending to a POTW.

This permit authorizes only wastewater and stormwater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Sections 640.013, 621.250, and 644.051.6 of the Law.

October 1, 2019
Effective Date


Edward B. Galbraith, Director, Division of Environmental Quality

September 30, 2024
Expiration Date


Chris Wieberg, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

OUTFALL #001 – eliminated 2019; internal monitoring point for non-contact cooling tower blowdown; recycled; discharges to outfall #007 then outfall #004

Legal Description: NE ¼, NW ¼, NW ¼, Sec. 36, T52N, R7W
UTM Coordinates: X = 617298, Y = 4345458
Design Flow: 0.265 MGD
Average Flow: 0 MGD

OUTFALL #002 – eliminated 2019; internal monitoring point for reverse osmosis reject water; recycled; discharges to outfall #007 then #004.

Legal Description: NE ¼, NW ¼, NW ¼, Sec. 36, T52N, R7W, Audrain County
UTM Coordinates: X = 617307, Y = 4345464
Design Flow: 0.143 MGD
Average Flow: 0 MGD

OUTFALL #003 – eliminated 2019; internal monitoring point for water softener system and cooling tower filter backwash; recycled; discharges to outfall #007 then outfall #004.

Legal Description: NE ¼, NW ¼, NW ¼, Sec. 36, T52N, R7W
UTM Coordinates: X = 617298, Y = 4345454
Design flow: 3,000 gpd
Average Flow: 0 gpd

OUTFALL #004 – wastewater and stormwater; includes discharge from outfalls #001, #002, #003, and #007; stormwater from the plant site; settling in collection basin, pH adjustment prior to discharge.

Legal Description: NW ¼, NE ¼, NW ¼, Sec. 36, T52N, R7W
UTM Coordinates: X = 617488, Y = 4345551
Design Flow: 8.0 MGD
Average Flow: 0.0864 MGD

OUTFALL #005 – eliminated 2011; stormwater outfall does not receive industrial stormwater from this site.

UTM Coordinates: X = 617666, Y = 4345140

OUTFALL #006 – greensand filter backwash; settling, pH adjustment.

Legal Description: NE ¼, SE ¼, NW ¼, Sec. 36, T52N, R7W
UTM Coordinates: X = 617620, Y = 4345068
Design Flow: 0.057 MGD
Average Flow: 0.057 MGD

OUTFALL #007 – eliminated 2019 renewal: wastewater; combined discharges from internal outfalls #001, #002, & #003; non-continuous; no treatment until basin at outfall #004, then discharges through outfall #004

Legal Description: NE ¼, NW ¼, NW ¼, Sec. 36, T52N, R7W
UTM Coordinates: X = 617308, Y = 4345466
Design Flow: 0.411 MGD
Average Flow: 0.235 MGD

OUTFALL #008 – removed 2019 renewal; see fact sheet.

UTM Coordinates: X = 617488, Y = 4345551

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

EFFLUENT PARAMETERS	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
OUTFALL #004 <i>main outfall</i>						
TABLE A-1 INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS						
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. In accordance with 10 CSR 20-7.031, the final effluent limitations outlined in Tables A-2 must be achieved as soon as possible but no later than October 1, 2020 . These interim effluent limitations are effective beginning October 1, 2019 and remain in effect through September 30, 2020 or as soon as possible. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:						
LIMIT SET: M						
PHYSICAL						
Flow	MGD	*		*	once/month	24 hr. total
CONVENTIONAL						
Biochemical oxygen Demand – 5 Day	mg/L	*		36	once/month	grab
Chemical Oxygen Demand	mg/L	90		*	once/month	grab
Oil & Grease	mg/L	15		10	once/month	grab
pH †	SU	*		*	once/month	grab
Total Suspended Solids	mg/L	100		50	once/month	grab
METALS						
Aluminum, Total Recoverable	µg/L	*		*	once/month	grab
NUTRIENTS						
Ammonia as N	mg/L	*		*	once/month	grab
OTHER						
Chloride	mg/L	*		*	once/month	grab
Sulfate	mg/L	*		*	once/month	grab
Chloride plus Sulfate	mg/L	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>NOVEMBER 28, 2019</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
LIMIT SET: Q						
NUTRIENTS						
Nitrogen, Total (TN)	mg/L	*		*	once/quarter ◊	grab
Phosphorus, Total (TP)	mg/L	*		*	once/quarter ◊	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2020</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
LIMIT SET: WA						
OTHER						
Whole Effluent Toxicity, Acute See Special Condition #1	TUa	*			once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2021</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE		
		OUTFALL #004 <i>main outfall</i>						
TABLE A-2 FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS								
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on October 1, 2020 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:								
LIMIT SET: M								
PHYSICAL								
Flow	MGD	*		*	once/month	24 hr. total		
CONVENTIONAL								
Biochemical oxygen Demand – 5 Day	mg/L	*		36	once/month	grab		
Chemical Oxygen Demand	mg/L	90		*	once/month	grab		
Oil & Grease	mg/L	15		10	once/month	grab		
pH †	SU	6.5 to 9.0		6.5 to 9.0	once/month	grab		
Total Suspended Solids	mg/L	100		50	once/month	grab		
METALS								
Aluminum, Total Recoverable	µg/L	*		*	once/month	grab		
NUTRIENTS								
Ammonia as N	mg/L	*		*	once/month	grab		
OTHER								
Chloride	mg/L	*		*	once/month	grab		
Sulfate	mg/L	*		*	once/month	grab		
Chloride plus Sulfate	mg/L	*		*	once/month	grab		
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY ; THE FIRST REPORT IS DUE NOVEMBER 28, 2020 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.								
LIMIT SET: Q								
NUTRIENTS								
Nitrogen, Total (TN)	mg/L	*		*	once/quarter ◊	grab		
Phosphorus, Total (TP)	mg/L	*		*	once/quarter ◊	grab		
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY ; THE FIRST REPORT IS DUE JANUARY 28, 2021 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.								
LIMIT SET: WA								
OTHER								
Whole Effluent Toxicity, Acute See Special Condition #1	TUa	*			once/year	grab		
MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY ; THE FIRST REPORT IS DUE JANUARY 28, 2022 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.								

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

EFFLUENT PARAMETERS	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<p>OUTFALL #006 <i>greensand filter</i></p> <p style="text-align: center;">TABLE A-3 INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</p> <p>The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. In accordance with 10 CSR 20-7.031, the final effluent limitations outlined in Tables A-4 and A-5 must be achieved as soon as possible but no later than October 1, 2021. These interim effluent limitations are effective beginning October 1, 2019 and remain in effect through September 30, 2020 or as soon as possible. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:</p>						
LIMIT SET: M						
PHYSICAL						
Flow	MGD	*		*	once/month	24 hr. total
CONVENTIONAL						
Chlorine, Total Residual †	µg/L	17 (ML130)		8 (ML130)	once/month	grab
pH †	SU	*		*	once/month	grab
Settleable Solids	mL/L/hr	1.0		1.0	once/month	grab
METALS						
Iron, Total Recoverable	µg/L	*		*	once/month	grab
OTHER						
Chloride	mg/L	*		*	once/month	grab
Sulfate	mg/L	*		*	once/month	grab
Chloride plus Sulfate	mg/L	*		*	once/month	grab
<p>MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u>; THE FIRST REPORT IS DUE <u>NOVEMBER 28, 2019</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.</p>						
LIMIT SET: WA						
OTHER						
Whole Effluent Toxicity, Acute See Special Condition #1	TUa	*			once/year	grab
<p>MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u>; THE FIRST REPORT IS DUE <u>JANUARY 28, 2021</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.</p>						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

EFFLUENT PARAMETERS	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
		OUTFALL #006 <i>greensand filter</i>				
<p>The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. In accordance with 10 CSR 20-7.031, the final effluent limitations outlined in Table A-5 must be achieved as soon as possible but no later than October 1, 2021. These interim effluent limitations are effective beginning October 1, 2020 and remain in effect through September 30, 2021 or as soon as possible. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:</p>						
LIMIT SET: M						
PHYSICAL						
Flow	MGD	*		*	once/month	24 hr. total
CONVENTIONAL						
Chlorine, Total Residual †	µg/L	17 (ML130)		8 (ML130)	once/month	grab
pH †	SU	6.5 to 9.0		6.5 to 9.0	once/month	grab
Settleable Solids	mL/L/hr	1.0		1.0	once/month	grab
METALS						
Iron, Total Recoverable	µg/L	*		*	once/month	grab
OTHER						
Chloride	mg/L	*		*	once/month	grab
Sulfate	mg/L	*		*	once/month	grab
Chloride plus Sulfate	mg/L	*		*	once/month	grab
<p>MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE NOVEMBER 28, 2020. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.</p>						
LIMIT SET: WA						
OTHER						
Whole Effluent Toxicity, Acute See Special Condition #1	TUa	*			once/year	grab
<p>MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE JANUARY 28, 2022. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.</p>						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE		
		OUTFALL #006 <i>greensand filter</i>						
TABLE A-5 FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS								
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on October 1, 2021 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:								
LIMIT SET: M								
PHYSICAL								
Flow	MGD	*		*	once/month	24 hr. total		
CONVENTIONAL								
Chlorine, Total Residual †	µg/L	17 (ML130)		8 (ML130)	once/month	grab		
pH †	SU	6.5 to 9.0		6.5 to 9.0	once/month	grab		
Settleable Solids	mL/L/hr	1.0		1.0	once/month	grab		
METALS								
Iron, Total Recoverable	µg/L	1831		721	once/month	grab		
OTHER								
Chloride	mg/L	*		*	once/month	grab		
Sulfate	mg/L	*		*	once/month	grab		
Chloride plus Sulfate	mg/L	*		*	once/month	grab		
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>NOVEMBER 28, 2021</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.								
LIMIT SET: WA								
OTHER								
Whole Effluent Toxicity, Acute See Special Condition #1	TUa	*			once/year	grab		
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2023</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.								

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

* Monitoring and reporting requirement only

‡ Chlorine, Total Residual. This permit contains a Total Residual Chlorine (TRC) limit.

- (a) This effluent limit is below the minimum quantification level (ML) of the most sensitive EPA approved CLTRC methods. The Department has determined the current acceptable ML for total residual chlorine to be 130 µg/L when using the DPD Colorimetric Method #4500 – CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 130 µg/L will be considered violations of the permit and values less than the minimum quantification level of 130 µg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- (b) Do not chemically dechlorinate if it is not needed to meet the limits in your permit.

† pH: the facility will report the minimum and maximum values; pH is not to be averaged.

◇ Quarterly sampling

MINIMUM QUARTERLY SAMPLING REQUIREMENTS			
QUARTER	MONTHS	QUARTERLY EFFLUENT PARAMETERS	REPORT IS DUE
First	January, February, March	Sample at least once during any month of the quarter	April 28 th
Second	April, May, June	Sample at least once during any month of the quarter	July 28 th
Third	July, August, September	Sample at least once during any month of the quarter	October 28 th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 th

B. SCHEDULE OF COMPLIANCE

Schedules of compliance are allowed per 40 CFR 122.47. The facility shall attain compliance with final effluent limitations established in this permit as soon as reasonably achievable:

1. Within six months of the effective date of this permit, the permittee shall report progress made in attaining compliance with the final effluent limits.
2. The permittee shall submit interim progress reports detailing progress made in attaining compliance with the final effluent limits every 12 months from effective date. The first report is due OCTOBER 1, 2020.
3. Within 1 year of the effective date of this permit, the permittee shall attain compliance with the final effluent limits at outfalls #004 and #006 to meet pH limitations.
4. Within 2 years of the effective date of this permit, the permittee shall attain compliance with the final effluent limits at outfall #006, for total recoverable iron.

All permittees using the eDMR system must submit progress reports via the electronic reporting system.

C. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated August 1, 2014, and hereby incorporated as though fully set forth herein.

D. SPECIAL CONDITIONS

1. Acute Whole Effluent Toxicity (WET) Test shall be conducted as follows:
 - (a) Freshwater Species and Test Methods: Species and short-term test methods for estimating the acute toxicity of NPDES effluents are found in the most recent edition of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA/821/R-02/012; Table IA, 40 CFR Part 136). The permittee shall concurrently conduct 48-hour, static, non-renewal toxicity tests with the following species:
 - The fathead minnow, *Pimephales promelas* (Acute Toxicity EPA Test Method 2000.0).
 - The daphnid, *Ceriodaphnia dubia* (Acute Toxicity EPA Test Method 2002.0).
 - (b) Chemical and physical analysis of the upstream control sample and effluent sample shall occur immediately upon being received by the laboratory, prior to any manipulation of the effluent sample beyond preservation methods consistent with federal guidelines for WET testing that are required to stabilize the sample during shipping. Where upstream receiving water is not available or known to be toxic, other approved control water may be used.
 - (c) Test conditions must meet all test acceptability criteria required by the EPA Method used in the analysis.
 - (d) The Allowable Effluent Concentration (AEC) is 100%; the dilution series is: 6.25%, 12.5%, 25%, 50%, and 100%.
 - (e) All chemical and physical analysis of the effluent sample performed in conjunction with the WET test shall be performed at the 100% effluent concentration.
 - (f) The facility must submit a full laboratory report for all toxicity testing. The report must include a quantification of acute toxic units ($TU_a = 100/LC_{50}$) reported according to the test methods manual chapter on report preparation and test review. The Lethal Concentration 50 Percent (LC_{50}) is the effluent concentration that would cause death in 50 percent of the test organisms at a specific time.

2. Electronic Discharge Monitoring Report (eDMR) Submission System
 - (a) Discharge Monitoring Reporting Requirements. The permittee must electronically submit compliance monitoring data via the eDMR system. Standard Conditions Part I, Section B, #7 indicates the eDMR system is currently the only Department approved reporting method for this permit.

Programmatic Reporting Requirements. The following reports (if required by this permit) must be electronically submitted as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data: Any additional report required by the permit excluding bypass reporting. After such a system has been made available by the Department, required data shall be directly input into the system by the next report due date.
 - (b) The following shall be submitted electronically after such a system has been made available by the Department:
 - (1) General Permit Applications/Notices of Intent to discharge (NOIs);
 - (2) Notices of Termination (NOTs);
 - (3) No Exposure Certifications (NOEs);
 - (4) Low Erosivity Waivers, and Other Waivers from Stormwater Controls (LEWs); and
 - (5) Bypass reporting.
 - (c) Electronic Submission: access the eDMR system via: <https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx>
 - (d) Electronic Reporting Waivers. The permittee must electronically submit compliance monitoring data and reports unless a waiver is granted by the Department in compliance with 40 CFR Part 127. The permittee may obtain an electronic reporting waiver by first submitting an eDMR Waiver Request Form: <http://dnr.mo.gov/forms/780-2692-f.pdf>. The Department will either approve or deny this electronic reporting waiver request within 120 calendar days. Only permittees with an approved waiver request may submit monitoring data and reports on paper to the Department for the period the approved electronic reporting waiver is effective.

3. The facility's SIC code or description is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) and hence the facility shall implement a Stormwater Pollution Prevention Plan (SWPPP) which must be prepared and implemented upon permit effective date. The SWPPP must be kept on-site and should not be sent to the Department unless specifically requested. The SWPPP must be reviewed and updated annually or if site conditions affecting stormwater change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf. The purpose of the SWPPP and the Best Management Practices (BMPs) listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective at preventing pollution [10 CSR 20-2.010(56)] to waters of the state. Corrective action describes the steps the facility took to eliminate the deficiency.

The SWPPP must include:

 - (a) A listing of specific contaminants and their control measures (or BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater.
 - (b) A map with all outfalls and structural BMPs marked.

D. SPECIAL CONDITIONS (CONTINUED)

- (c) A schedule for at least once per month site inspections and brief written reports. The inspection report must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
- i. Operational deficiencies must be corrected within seven (7) calendar days.
 - ii. Minor structural deficiencies must be corrected within fourteen (14) calendar days.
 - iii. Major structural deficiencies (deficiencies projected to take longer than 14 days to correct) must be reported as an uploaded attachment through the eDMR system with the DMRs. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including proposed timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. If required by the Department, the permittee shall work with the regional office to determine the best course of action. The permittee should consider temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.
 - iv. All actions taken to correct the deficiencies shall be included with the written report, including photographs, and kept with the SWPPP. Additionally, corrective action of major structural deficiencies shall be reported as an uploaded attachment through the eDMR system with the DMRs.
 - v. BMP failure causing discharge through an unregistered outfall is considered an illicit discharge and must be reported in accordance with Standard Conditions Part I.
 - vi. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to Department personnel upon request. Electronic versions of the documents and photographs are acceptable.
- (d) A provision for designating an individual to be responsible for environmental matters and a provision for providing training to all personnel involved in housekeeping, material handling (including but not limited to loading and unloading), storage, and staging of all operational, maintenance, storage, and cleaning areas. Proof of training shall be submitted upon request by the Department.
4. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
- (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, warehouse activities, and other areas and thereby prevent the contamination of stormwater from these substances.
 - (b) Ensure adequate provisions are provided to prevent and to protect embankments from erosion.
 - (c) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - (a) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater. Spill records should be retained on-site.
 - (b) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
 - (c) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property
5. Any spill, overflow, or other discharge(s) not specifically authorized above are unauthorized discharges. Should an unauthorized discharge cause or allow any contaminants to discharge or enter waters of the state, the unauthorized discharge must be reported to the regional office as soon as practicable but no more than 24 hours after the discovery of the discharge. If the spill or overflow occurred after hours or on the weekend, the facility must call the Department's 24 hour spill line at 573-634-2436.
6. Before releasing water accumulated in petroleum secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen to protect the general criteria found at 10 CSR 20-7.031(4). If odor or sheen is found, the water shall not be discharged without treatment and shall be disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility.

If the facility wishes to discharge the accumulated stormwater with hydrocarbon odor or presence of sheen, the water shall be treated using an appropriate method. Following treatment and before release, the water shall be tested for oil and grease, benzene, toluene, ethylbenzene, and xylene using 40 CFR part 136 methods. All pollutant levels must be below the most protective, applicable standards for the receiving stream, found in 10 CSR 20-7.031 Table A before discharge is authorized. Records of all testing and treatment of water accumulated in secondary containment shall be stored in the SWPPP and be available on demand to the Department.

D. SPECIAL CONDITIONS (CONTINUED)

7. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Clean Water Act Sections 301(b)(2)(C) and (D), §304(b)(2), and §307(a) (2), if the effluent standard or limitation so issued or approved contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, termination, notice of planned changes, or anticipated non-compliance does not stay any permit condition.
8. All outfalls must be clearly marked in the field. Report no discharge when a discharge does not occur during the report period. It is a violation of this permit to report no-discharge when a discharge has occurred.
9. **Changes in Discharges of Toxic Pollutant**
In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
 - (a) That an activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
 - (3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
 - (4) One milligram per liter (1 mg/L) for antimony;
 - (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - (6) The notification level established by the Department in accordance with 40 CFR 122.44(f).
 - (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - (1) Five hundred micrograms per liter (500 µg/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
 - (4) The level established by the Director in accordance with §122.44(f).
10. **Reporting of Non-Detects**
 - (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated.
 - (b) The permittee shall not report a sample result as “non-detect” without also reporting the detection limit of the test or the reporting limit of the laboratory. Reporting as “non-detect” without also including the detection/reporting limit will be considered failure to report, which is a violation of this permit.
 - (c) The permittee shall report the non-detect result using the less than “<” symbol and the laboratory’s detection/reporting limit (e.g. <6).
 - (d) See sufficiently sensitive method requirements in Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
 - (e) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the “<MDL” shall be reported as indicated in item (C).
11. Failure to pay fees associated with this permit is a violation of the Missouri Clean Water Law (644.055 RSMo).
12. This permit does not cover land disturbance activities.
13. This permit does not authorize the placement of fill materials in flood plains, placement of solid materials into any waterway, the obstruction of stream flow, or changing the channel of a defined drainage course. The facility must contact the U.S. Army Corps of Engineers (Corps) to obtain a CWA §404 Department of Army permit.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0132489
POET BIOREFINING – LADDONIA (FORMERLY MISSOURI ETHANOL)

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified for less.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)(A)2.] a factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (MSOP or operating permit) listed below. A factsheet is not an enforceable part of an operating permit.

PART I. FACILITY INFORMATION

Facility Type: Industrial >1 MGD
 SIC Code(s): 2869
 NAICS Code(s): 325193
 Application Date: 05/02/2016; 07/11/2016; 03/05/2019
 Expiration Date: 11/17/2016
 Last Inspection: 05/26/2016

FACILITY DESCRIPTION:

Manufactures ethanol from corn distillation. Poet Biorefining, LLC, is a dry mill ethanol plant. The installation's processes include the receiving of corn; substrate conditioning; batch fermentation; distillation/dehydration; dried distiller's grain & solubles (DDGS) processing; storage and loading of denatured ethanol (five percent gasoline) and loading of DDGS. This facility began operations in September of 2006. The ethanol production facility produces 68 million gallons of ethanol annually as well as 155,000 tons per year of Dakota Gold brand livestock feed for regional, national and international markets. Process wastewater is treated and recycled back into the process. Utility wastewater including non-contact cooling tower blowdown, water softener and cooling tower filter backwash, and reverse osmosis wastewater are discharged. The facility has been providing a sample to the department from outfall #007 even through a discharge was not planned for the wastewater system. Outfalls #001 and #003 are valved and only released when necessary. The facility uses this wastewater and recycles it back into the plant for reuse. Outfall #002 is discharged intermittently when the tank is full. The largest discharge the facility had in the last 500 days was 180 gallons per minute for 3 hours which was a total of 32,400 gallons. The stormwater and wastewater holding basin has a very large capacity and also discharges infrequently; typically only during large precipitation events. The basin associated with outfall #004 captures all of the stormwater at the site.

The charter number for the continuing authority for this facility is LC0646355; this number was verified by the permit writer to be associated with the facility. Domestic wastewater is sent to the city of Laddonia.

In accordance with 40 CFR 122.21(f)(6), the Department evaluated other permits currently held by this facility. This facility has the following permits: Air permit 042019-015 and OP2008-043. The installation has accepted federally enforceable emission limits of less than one hundred tons of volatile organic compounds (VOC) and Carbon Monoxide (CO) per year, fifty tons of particulate matter less than ten microns (PM10) per year, ten tons of any individual hazardous air pollutant (HAP) per year and twenty-five tons of combined HAP per year to qualify for an Intermediate State Operating Permit.

PERMITTED FEATURES TABLE:

OUTFALL	AVERAGE FLOW	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#004	0.0864 MGD	8.0 MGD	reuse, settling	wastewater from outfalls #001, #002, #003, and #007, and site stormwater
#006	0.057 MGD	0.057 MGD	settling	greensand filter backwash wastewater and incidental stormwater

FACILITY PERFORMANCE HISTORY & COMMENTS:

The electronic discharge monitoring reports were reviewed for the last five years. The facility reported no-discharge from outfalls #001, #002, and #003 for the last 5 years. In 2010, the facility requested to recover and reuse cooling tower blow down water (outfall #001), reverse osmosis reject water (outfall #002), and cooling tower backwash/softening regeneration water (outfall #003) to effectively eliminate discharges from these sources. An additional corrosion inhibitor will be used as part of the water recovery project; however, that chemical use can be stopped if a discharge is necessary. After review of the water recovery proposal, the Department agreed no modification to permit #MO-0132489 was needed at that time.

The 2016 full Class II compliance inspection indicated the facility was out of compliance but returned to compliance the month after the letter of warning was written.

FACILITY MAP:



PART II. RECEIVING WATERBODY INFORMATION

RECEIVING WATERBODY’S WATER QUALITY:

The receiving waterbody has no concurrent water quality data available. The EDU for this facility is Central Plains/Cuivre/Salt. The ecoregion is Plains/Mississippi tributary between Des Moines and MO River Des Moines Drainage.

303(d) LIST:

Section 303(d) of the federal Clean Water Act requires each state identify waters not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of impaired waters not addressed by normal water pollution control programs. <http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm>

✓ Not applicable; this facility does not discharge to an impaired segment of a 303(d) listed stream.

TOTAL MAXIMUM DAILY LOAD (TMDL):

A TMDL is a calculation of the maximum amount of a given pollutant a water body can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan or TMDL may be developed. The TMDL shall include the WLA calculation. <http://dnr.mo.gov/env/wpp/tmdl/>

✓ Not applicable; this facility does not discharge to a waterbody/watershed with a TMDL.

UPSTREAM OR DOWNSTREAM IMPAIRMENTS:

The permit writer has reviewed upstream and downstream stream segments of this facility for impairments.

✓ This facility is located at the top of the watershed therefore no upstream is present at this location. There are no known downstream impairments.

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

Per Missouri’s Effluent Regulations [10 CSR 20-7.015(1)(B)], waters of the state are divided into seven categories. This facility is subject to effluent limitations derived on a site specific basis which are presented in each outfall’s effluent limitation table and further discussed in Part IV: Effluents Limits Determinations

✓ All Other Waters

RECEIVING WATERBODY TABLE:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	DISTANCE TO SEGMENT	12-DIGIT HUC
#004, #006	8-20-13 MUDD V1.0	C	3960	GEN, HHP, IRR, LWW, SCR, WBC-B, WWH (ALP)	0 mi 0 mi (pumped)	East Lick Creek; 07110007-0102

n/a not applicable

Classes are hydrologic classes as defined in 10 CSR 20-7.031(1)(F). L1: Lakes with drinking water supply - wastewater discharges are not permitted to occur to L1 watersheds per 10 CSR 20-7.015(3)(C); L2: major reservoirs; L3: all other public and private lakes; P: permanent streams; C: streams which may cease flow in dry periods but maintain pools supporting aquatic life; E: streams which do not maintain surface flow; and W: wetland. Losing streams are defined in 10 CSR 20-7.031(1)(O) and are designated on the Losing Stream dataset or determined by the Department to lose 30% or more of flow to the subsurface.

WBID = Waterbody Identification: Missouri Use Designation Dataset per 10 CSR 20-7.031(1)(Q) and (S) as 8-20-13 MUDD V1.0 or newer; data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip; New C streams described on the dataset per 10 CSR 20-7.031(2)(A)3. as 100K Extent Remaining Streams.

Per 10 CSR 20-7.031, the Department defines the Clean Water Commission’s water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1st classified receiving stream’s beneficial water uses are to be maintained in the receiving streams in accordance with [10 CSR 20-7.031(1)(C)]. Uses which may be found in the receiving streams table, above:

10 CSR 20-7.031(1)(C)1.: **ALP** = Aquatic Life Protection (formerly AQL; current uses are defined to ensure the protection and propagation of fish shellfish and wildlife, further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses ALP effluent limitations in 10 CSR 20-7.031 Table A1-A2 for all habitat designations unless otherwise specified.

10 CSR 20-7.031(1)(C)2.: Recreation in and on the water

WBC = Whole Body Contact recreation where the entire body is capable of being submerged;

WBC-A = whole body contact recreation supporting swimming uses and has public access;

WBC-B = whole body contact recreation not supported in WBC-A;

SCR = Secondary Contact Recreation (like fishing, wading, and boating)

10 CSR 20-7.031(1)(C)3. to 7.:

HHP (formerly HHF) = Human Health Protection as it relates to the consumption of fish and drinking of water;

IRR = irrigation for use on crops utilized for human or livestock consumption

LWW = Livestock and Wildlife Watering (current narrative use is defined as LWP = Livestock and Wildlife Protection);

DWS = Drinking Water Supply

IND = industrial water supply

10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Tables A1-B3 currently does not have corresponding habitat use criteria for these defined uses): WSA = storm- and flood-water storage and attenuation; WHP = habitat for resident and migratory wildlife species; WRC = recreational, cultural, educational, scientific, and natural aesthetic values and uses; WHC = hydrologic cycle maintenance.

10 CSR 20-7.031(6): **GRW** = Groundwater

RECEIVING WATERBODY MONITORING REQUIREMENTS:

No receiving water monitoring requirements are recommended at this time.

MIXING CONSIDERATIONS:

For all outfalls, mixing zone and zone of initial dilution are not allowed per 10 CSR 20-7.031(5)(A)4.B.(I)(a) and (b), as the base stream flow does not provide dilution to the effluent.

PART III. RATIONALE AND DERIVATION OF PERMIT CONDITIONS

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:

As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

- ✓ Not applicable; the facility does not discharge to a losing stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], and is an existing facility.

ANTIBACKSLIDING:

Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(l)] require a reissued permit to be as stringent as the previous permit with some exceptions. Backsliding (a less stringent permit limitation) is only allowed under certain conditions.

- ✓ Limitations in this operating permit for the reissuance conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
 - ✓ Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) which would have justified the application of a less stringent effluent limitation.
 - Outfall #004:
 - Benchmarks were removed at this outfall as this outfall contains wastewater; wastewater is not eligible to have benchmarks.
 - Monitoring for precipitation was removed as this is not data required to be submitted to the department although the facility may still need to keep the data for SWPPP purposes.
 - Dissolved oxygen monitoring with a benchmark was removed; results support removal of monitoring as all data are well above the 5.0 mg/L minimum. 6.66 was the minimum reported and all other values were above 9 mg/L.
 - Outfall #006
 - Monitoring for oil and grease was removed; the facility reported all non-detections and this basin does not collect stormwater runoff from the site therefore potential for oils and greases to be in this wastewater is highly limited.
 - Monitoring for dissolved oxygen was removed; the facility's data show no reasonable potential per reasonable potential determination (RPD).
 - ✓ The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
 - The previous permit limited internal monitoring points without completing a proper Best Professional Judgment assessment or antidegradation review. Monitoring for outfalls #001, #002, #003, and #007 was removed. The facility is required to meet effluent limitations prior to entering waters of the state. Water quality limits were assessed at outfall #004 which is a combination of outfalls #001, #002, #003, and #007.
 - The previous permit required the facility mix samples from outfalls #004 and #006 for the purposes of conducting a WET test; this was named outfall #008. The permit writer has determined this condition was unlawful therefore the conditions and the outfall were removed during the 2019 renewal. This action is unlawful because the receiving stream is classified now and outfalls #004 and #006 enter the stream at different locations. WET testing was applied appropriately in this renewed permit.
 - The previous permit special condition stated: "An annual operating report must be submitted to the appropriate Regional Office by October 28th of each year (notwithstanding any reporting requirements contained in the attached "Standard Conditions"). The report shall detail any unusual occurrences such as spills, tank failures or overflows, ruptured piping, fish kills, fire fighting activities, or other upsets which resulted in any loss of product. Product includes, but is not limited to, ethanol, fuels, oils, and paints. The report shall also detail any remedial work undertaken to recover product or clean up the site. The report must also indicate if nothing unusual has occurred."

The permit writer has determined this requirement is not needed for this facility as this facility has maintained compliance with permit limits, therefore was removed.

- The previous permit special condition stated: “Effluent shall not elevate or depress the temperature of the first classified receiving stream more than five degrees Fahrenheit.”
The permit writer has determined this permit condition was not enforceable as stated. This facility is at the top of the watershed therefore there is no upstream from which to sample. The permit did not maintain there was reasonable potential to cause or contribute to in-stream temperature; if there was reasonable potential, then the permit should have contained an effluent limitation. The facility currently does not discharge thermally impacted wastewater to the receiving stream therefore the condition was removed.
- The previous permit special condition stated: “All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.”
The permit writer has determined SPCC conditions are outside the scope of the NPDES program therefore was removed.
- The previous permit special condition stated: “Substances, regulated by federal law under the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), that are transported, stored, or used for maintenance, cleaning or repair, shall be managed according to RCRA and CERCLA.”
The permit writer has determined CERCLA and RCRA conditions are outside the scope of the NPDES program therefore was removed.
- The previous permit special condition stated: “Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 et. seq.) and the use of such pesticides shall be in a manner consistent with its label.”
The permit writer has determined this special condition was outside the scope of NPDES permitting and was removed.
- The previous permit special condition stated: In accordance with, and in addition to, Standard Conditions Part I, the permittee is to notify the Department by telephone within 24 hours of becoming aware of any event that may endanger health or the environment. Leaving a message on a Department staff member’s voicemail does not satisfy this reporting requirement. During holidays, during the weekends, after normal business hours, or if the permit holder cannot reach regional office staff for any reason, the permit holder is instructed to report the situation to the Department’s 24 hour Environmental Emergency Response hotline at (573) 634-2436. In addition, the permittee shall submit to the Department a written report with five (5) days of the time the permittee becomes aware of the circumstances. The written report shall include a description of the discharge or situation and cause of any noncompliance, the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge. These events include but are not limited to (a) any spill, of any material, that leaves the property of the facility and (b) any spill, of any material outside of secondary containment and exposed to precipitation, greater than 25 gallons or an equivalent volume of solid material. Federal Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.
The permit writer has determined a condition for this requirement is found in the standard conditions; additional requirements are not needed in the special conditions of the permit.
- The previous permit special condition stated: “The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards. A method is “sufficiently sensitive” when (1) the method quantitation level is at or below the level of the applicable water quality criterion for the pollutant or (2) the method quantitation level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough that the method detects and quantifies the level of pollutant in the discharge. These methods are even required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established.”
The permit writer has determined a condition for this requirement is found in the standard conditions; additional requirements are not needed in the special conditions of the permit.
- The previous permit special condition stated: “APPENDIX A TO 40 CFR PART 423—126 PRIORITY POLLUTANTS
If the facility uses biocides or chemicals other than chlorine in the cooling tower water, the facility must sample outfall #001 from the first blowdown after adding biocides or chemicals and there shall be no detectable amount of the 126 Priority Pollutants contained in chemicals added for cooling tower maintenance as listed in Appendix A to Part 423 [40 CFR 423.15(j)(1)], except as allowed in the regulation for Total Chromium (0.2 mg/L) and zinc (1.0 mg/L). The sample results or report of “No biocides or chemical used” shall be included in an annual report submitted to the Department by October 28th of each year, and shall be for the reporting period of October 1st to September 30th.”
The permit writer has determined these conditions only apply to the steam-electric point source category at 40 CFR 423; therefore were removed from the permit.
- The previous permit special conditions contained a specific set of prohibitions related to general criteria (GC) found in 10 CSR 20-7.031(4); however, there was no determination as to whether the discharges have reasonable potential to cause or contribute to excursion of those general water quality criteria in the previous permit. This permit assesses each

general criteria as listed in the previous permit's special conditions. Federal regulations 40 CFR 122.44(d)(1)(iii) requires instances where reasonable potential (RP) to cause or contribute to an exceedance of a water quality standard exists, a numeric limitation must be included in the permit. Rather than conducting the appropriate RP determination, the previous permit simply placed the prohibitions in the permit. These conditions were removed from the permit. Appropriate reasonable potential determinations were conducted for each general criterion listed in 10 CSR 20-7.031(4)(A) through (I) and effluent limitations were placed in the permit for those general criteria where it was determined the discharge had reasonable potential to cause or contribute to excursions of the general criteria. Specific effluent limitations were not included for those general criteria where it was determined the discharges will not cause or contribute to excursions of general criteria. Removal of the prohibitions does not reduce the protections of the permit or allow for impairment of the receiving stream. The permit maintains sufficient effluent limitations, monitoring requirements and best management practices to protect water quality while maintaining permit conditions applicable to permittee disclosures and in accordance with 10 CSR 20-7.031(4) where no water contaminant by itself or in combination with other substances shall prevent the water of the state from meeting the following conditions:

- (A) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.
- For both outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates putrescent wastewater would be discharged from the facility.
 - For both outfalls, there is RP for unsightly or harmful bottom deposits preventing full maintenance of beneficial uses because discharges have the potential to discharge solids which may harm benthic organisms; solids limits are provided on both outfalls.
- (B) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.
- For outfall #006, there is no RP for oil in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates oil will be present in sufficient amounts to impair beneficial uses.
 - For outfall #004, the permit writer has determined there is RP for oils and greases to be present in the stormwater at the site therefore the outfall contains an effluent limitations for the pollutant of concern.
 - For all outfalls, there is no RP for scum and floating debris in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates scum and floating debris will be present in sufficient amounts to impair beneficial uses.
- (C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.
- For color or turbidity, see (A) above.
 - For all outfalls, there is no RP for offensive odor in sufficient amounts preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates offensive odor will be present in sufficient amounts to impair beneficial uses.
- (D) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life.
- The permit writer considered specific toxic pollutants when writing this permit. Numeric effluent limitations are included for those pollutants could be discharged in toxic amounts. These effluent limitations are protective of human health, animals, and aquatic life.
- (E) There shall be no significant human health hazard from incidental contact with the water.
- This criterion is very similar to (D) above. See Part IV, Effluent Limits Derivation below.
- (F) There shall be no acute toxicity to livestock or wildlife watering.
- This criterion is very similar to (D) above. See Part IV, Effluent Limits Derivation below.
- (G) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community.
- For all outfalls, there is no RP for physical changes impairing the natural biological community because nothing disclosed by the permittee indicates this is occurring.
 - It has been established any chemical changes are covered by the specific numeric effluent limitations established in the permit.
 - For all outfalls, there is no RP for hydrologic changes impairing the natural biological community because nothing disclosed by the permittee indicates this is occurring.
- (H) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- There are no solid waste disposal activities or any operation which has reasonable potential to cause or contribute to the materials listed above being discharged through any outfall.

ANTIDegradation REVIEW:

Process water discharges with new, altered, or expanding flows, the Department is to document, by means of antidegradation review, if the use of a water body's available assimilative capacity is justified. In accordance with Missouri's water quality regulations for antidegradation [10 CSR 20-7.031(3)], degradation may be justified by documenting the socio-economic importance of a discharge after determining the necessity of the discharge. Facilities must submit the antidegradation review request to the Department prior to establishing, altering, or expanding discharges. See <http://dnr.mo.gov/env/wpp/permits/antideg-implementation.htm>

✓ Not applicable; the facility has not submitted information proposing expanded or altered process water discharge; no further degradation proposed therefore no further review necessary.

This permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) which must include an alternative analysis (AA) of the BMPs. The SWPPP must be developed, implemented, updated, and maintained at the facility. Failure to implement and maintain the chosen alternative, is a permit violation. The AA is a structured evaluation of BMPs to determine which are reasonable and cost effective. Analysis should include practices designed to be 1) non-degrading, 2) less degrading, or 3) degrading water quality. The chosen BMP will be the most reasonable and cost effective while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The analysis must demonstrate why "no discharge" or "no exposure" are not feasible alternatives at the facility. Existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address BMP failures or benchmark exceedances. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.015(9)(A)5 and 7.031(3). For stormwater discharges with new, altered, or expanding discharges, the stormwater BMP chosen for the facility, through the AA performed by the facility, must be implemented and maintained at the facility. Failure to implement and maintain the chosen BMP alternative is a permit violation; see SWPPP.

✓ Applicable; the facility must review and maintain stormwater BMPs as appropriate.

CHANGES IN DISCHARGES OF TOXIC POLLUTANT:

This special condition reiterates the federal rules found in 40 CFR 122.44(f) and 122.42(a)(1). In these rules, the facility is required to report changes in amounts of toxic substances discharged. Toxic substances are defined in 40 CFR 122.2 as "...any pollutant listed as toxic under section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing section 405(d) of the CWA." Section 307 of the clean water act then refers to those parameters found in 40 CFR 401.15. The permittee should also consider any other toxic pollutant in the discharge as reportable under this condition.

COMPLIANCE AND ENFORCEMENT:

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

✓ Not applicable; the permittee/facility is not currently under Water Protection Program enforcement action.

DOMESTIC WASTEWATER, SLUDGES, AND BIOSOLIDS:

Domestic wastewater is defined as wastewater (i.e., human sewage) originating primarily from the sanitary conveyances of bathrooms and kitchens. Domestic wastewater excludes stormwater, animal waste, process waste, and other similar waste.

✓ Not applicable, this facility discharges domestic wastewater to an off-site permitted wastewater treatment facility (POTW).

EFFLUENT LIMITS:

Effluent limitations derived and established for this permit are based on current operations of the facility and applied per 10 CSR 20-7.015(9)(A). Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. Future permit action due to facility modification may contain new operating permit terms and conditions which supersede the terms and conditions, including effluent limitations, of this operating permit. Daily maximums and monthly averages are required per 40 CFR 122.45(d)(1) for continuous discharges (not from a POTW).

EFFLUENT LIMITATION GUIDELINE:

Effluent Limitation Guidelines, or ELGs, are found at 40 CFR 400-499. These are limitations established by the EPA based on the SIC code and the type of work a facility is conducting. Most ELGs are for process wastewater and some address stormwater. All are technology based limitations which must be met by the applicable facility at all times.

✓ The facility does not have an associated ELG.

ELECTRONIC DISCHARGE MONITORING REPORT (EDMR) SUBMISSION SYSTEM:

The U.S. Environmental Protection Agency (EPA) promulgated a final rule on October 22, 2015, to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. The final rule requires regulated entities and state and federal regulators to use information technology to electronically report data required by the National Pollutant Discharge Elimination System (NPDES) permit program instead of filing paper reports. To comply with the federal rule, the Department is requiring all permittees to begin submitting discharge monitoring data and reports online.

Per 40 CFR 127.15 and 127.24, permitted facilities may request a temporary waiver for up to 5 years or a permanent waiver from electronic reporting from the Department. To obtain an electronic reporting waiver, a permittee must first submit an eDMR Waiver Request Form: <http://dnr.mo.gov/forms/780-2692-f.pdf>. A request must be made for each facility. If more than one facility is owned or operated by a single entity, then the entity must submit a separate request for each facility based on its specific circumstances. An approved waiver is not transferable.

The Department must review and notify the facility within 120 calendar days of receipt if the waiver request has been approved or rejected [40 CFR 124.27(a)]. During the Department review period as well as after a waiver is granted, the facility must continue submitting a hard-copy of any reports required by their permit. The Department will enter data submitted in hard-copy from those facilities allowed to do so and electronically submit the data to the EPA on behalf of the facility.

To assist the facility in entering data into the eDMR system, the permit describes limit sets in each table in Part A of the permit. The data entry personnel should use these identifiers to assure data entry is being completed appropriately.

- ✓ The permittee/facility is currently using the eDMR data reporting system.

GENERAL CRITERIA CONSIDERATIONS:

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants determined to cause, have reasonable potential to cause, or to contribute to, an excursion above any water quality standard, including narrative water quality criteria. In order to comply with this regulation, the permit writer has completed a reasonable potential determination on whether discharges have reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). In instances where reasonable potential exists, the permit includes limitations within the permit to address the reasonable potential. In discharges where reasonable potential does not exist, the permit may include monitoring to later determine the discharge's potential to impact the narrative criteria. Additionally, §644.076.1, RSMo as well as Section D – Administrative Requirements of Standard Conditions Part I of this permit state it shall be unlawful for any person to cause or allow any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule, or regulation promulgated by the commission.

- ✓ Applicable; this permit contains effluent limitations for oil and grease for outfall #004; the permit writer has determined this facility has reasonable potential to discharge a sheen or oil per 10 CSR 20-7.031(4)(B) from outfall #004 therefore limits were applied. See Part IV.
- ✓ Applicable; this permit contains effluent limitations to protect for toxicity in accordance with 10 CSR 20-7.031(4)(D) and (G); see Part IV for specific pollutant discussion.

GROUNDWATER MONITORING:

Groundwater is a water of the state according to 10 CSR 20-2.010(82), and is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

- ✓ This facility is not required to monitor groundwater for the water protection program.

MAJOR WATER USER:

Any surface or groundwater user with a water source and the equipment necessary to withdraw or divert 100,000 gallons (or 70 gallons per minute) or more per day combined from all sources from any stream, river, lake, well, spring, or other water source is considered a major water user in Missouri. All major water users are required by law to register water use annually (Missouri Revised Statutes Chapter 256.400 Geology, Water Resources and Geodetic Survey Section). <https://dnr.mo.gov/pubs/pub2337.htm>

- ✓ Applicable; this facility is a major water user and is registered with the state.

NO-DISCHARGE LAND APPLICATION:

Land application of wastewater or sludge shall comply with the all applicable no-discharge requirements listed in 10 CSR 20-6.015 and all facility operations and maintenance requirements listed in 10 CSR 20-8.020(15). These requirements ensure appropriate operation of the no-discharge land application systems and prevent unauthorized and illicit discharges to waters of the state. Land applications by a contract hauler on fields the permittee has a spreading agreement on are not required to be in this permit. A spreading agreement does not constitute the field being rented or leased by the permittee as they do not have any control over management of the field.

- ✓ Not applicable; this permit does not authorize operation of a no-discharge land application system to treat wastewater or sludge.

OIL/WATER SEPARATORS:

Oil water separator (OWS) tank systems are frequently found at industrial sites where process water and stormwater may contain oils and greases, oily wastewaters, or other immiscible liquids requiring separation. Food industry discharges typically require pretreatment prior to discharge to municipally owned treatment works. Per 10 CSR 26-2.010(2)(B), all oil water separator tanks must be operated according to manufacturer's specifications and authorized in NPDES permits or may be regulated as a petroleum tank.

- ✓ Not applicable; the permittee has not disclosed the use of any oil water separators they wish to include under the NPDES permit at this facility and therefore oil water separator tanks are not authorized by this permit.

REASONABLE POTENTIAL (RP):

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants which are (or may be) discharged at a level causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times; however, acute toxicity criteria may be exceeded by permit in zones of initial dilution, and chronic toxicity criteria may be exceeded by permit in mixing zones. If the permit writer determines any given pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for the pollutant per 40 CFR Part 122.44(d)(1)(iii) and the most stringent limits per 10 CSR 20-7.031(9)(A). Permit writers may use mathematical reasonable potential analysis (RPA) using the Technical Support Document for Water Quality Based Toxics Control (TSD) methods (EPA/505/2-90-001) as found in Section 3.3.2, or may also use reasonable potential determinations (RPD) as provided in Sections 3.1.2, 3.1.3, and 3.2 of the TSD.

- ✓ Applicable; an RPA was conducted on appropriate parameters and was conducted as per (TSD Section 3.3.2). A more detailed version including calculations of this RPA is available upon request. See Wasteload Allocations (WLA) for Limits in this section.

Parameter:	CMC Acute	CCC Chronic	Listing	Daily Max	Monthly Average	n#	CV	n Max	MF	RWC Acute	RWC Chronic	RP
Iron, Total Recoverable	n/a	1000	AQL	1830.91	720.92	26	1.019	2000	3.10	6203.10	6203.10	Yes

Units are (µg/L) unless otherwise noted.

- n/a Not Applicable
- n number of samples; if the number of samples is 10 or greater, then the CV value must be used in the WQBEL for the applicable constituent.
- CV Coefficient of Variation (CV) is calculated by dividing the Standard Deviation of the sample set by the mean of the same sample set.
- CCC continuous chronic concentration
- CMC continuous maximum concentration
- RWC Receiving Water Concentration: concentration of a toxicant or the parameter in the receiving water after mixing (if applicable)
- MF Multiplying Factor; 99% confidence level and 99% probability basis
- RP Reasonable Potential: an effluent is projected or calculated to cause an excursion above a water quality standard based on a number of factors including, as a minimum, the four factors listed in 40 CFR 122.44(d)(1)(ii).

- ✓ Applicable; the permit writer conducted an RPD on applicable parameters within the permit. See Part IV: Effluent Limits Determinations below.
- ✓ Not applicable; a mathematical RPA was not conducted for this facility. The permit writer completed an RPD, a reasonable potential determination, using best professional judgment for all of the appropriate parameters in this permit. An RPD consists of reviewing application data and/or discharge monitoring data for the last five years and comparing those data to narrative or numeric water quality criteria.
- ✓ Permit writers use the Department’s permit writer’s manual (<http://dnr.mo.gov/env/wpp/permits/manual/permit-manual.htm>), the EPA’s permit writer’s manual (<https://www.epa.gov/npdes/npdes-permit-writers-manual>), program policies, and best professional judgment. For each parameter in each permit, the permit writer carefully considers all applicable information regarding: technology based effluent limitations, effluent limitation guidelines, water quality standards, stream flows and uses, and all applicable site specific information and data gathered by the permittee through discharge monitoring reports and renewal (or new) application sampling. Best professional judgment is based on the experience of the permit writer, cohorts in the Department and resources at the EPA, research, and maintaining continuity of permits if necessary. For stormwater permits, the permit writer is required per 10 CSR 6.200(6)(B)2 to consider: A. application and other information supplied by the permittee; B. effluent guidelines; C. best professional judgment of the permit writer; D. water quality; and E. BMPs. Part IV provides specific decisions related to this permit.

SAMPLING FREQUENCY JUSTIFICATION:

Sampling and reporting frequency for outfall #004 was changed from quarterly to monthly. This change was to assure capture of most wastewater discharges through this outfall as all internal monitoring point sampling was removed from this permit. Outfall #006 monitoring frequency stayed the same.

40 CFR 122.45(d)(1) indicates all continuous discharges shall be permitted with daily maximum and monthly average limits. Minimum sampling frequency for all parameters is annually per 40 CFR 122.44(i)(2).

SAMPLING TYPE JUSTIFICATION:

Sampling type was continued from the previous permit. The sampling types are representative of the discharges, and are protective of water quality. Discharges with altering effluent should have composite sampling; discharges with uniform effluent can have grab samples. Grab samples are usually appropriate for stormwater. Parameters which must have grab sampling are: pH, ammonia, *E. coli*, total residual chlorine, free available chlorine, hexavalent chromium, dissolved oxygen, total phosphorus, volatile organic compounds, and others.

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, effluent limits, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit. SOCs are allowed under 40 CFR 122.47 providing certain conditions are met. A SOC is not allowed:

- For effluent limitations based on technology-based standards established in accordance with federal requirements, if the deadline for compliance established in federal regulations has passed. 40 CFR § 125.3.
- For a newly constructed facility in most cases. Newly constructed facilities must meet applicable effluent limitations when discharge begins, because the facility has installed the appropriate control technology as specified in a permit or antidegradation review. A SOC is allowed for a new water quality based effluent limit not included in a previously public noticed permit or antidegradation review, which may occur if a regulation changes during construction.
- To develop a TMDL, UAA, or other study associated with development of a site specific criterion. A facility is not prohibited from conducting these activities, but a SOC may not be granted for conducting these activities.

In order to provide guidance in developing SOCs, and to attain a greater level of consistency, the Department issued a policy on development of SOCs on October 25, 2012. The policy provides guidance to permit writers on standard time frames for schedules for common activities, and guidance on factors to modify the length of the schedule.

- ✓ Applicable; the time given for effluent limitations of this permit listed under Interim Effluent Limitation and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(12)]. The facility has been given a schedule of compliance to meet final effluent limits at outfall #006 for total recoverable iron, and outfalls #004 and #006 for pH. See permit Sections A and B for compliance dates.

SPILL REPORTING:

Per 260.505 RSMo, any emergency involving a hazardous substance must be reported to the Department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The Department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I. <http://dnr.mo.gov/env/esp/spillbill.htm>

SLUDGE – INDUSTRIAL:

Industrial sludge is solid, semi-solid, or liquid residue generated during the treatment of industrial process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and a material derived from industrial sludge.

- ✓ Applicable; this permit does not authorize land application of industrial sludge. Sludges are stored in the basin. The permitted management strategy must be followed, see permit. If the permitted management strategy cannot be followed, the permittee must obtain a permit modification.

STANDARD CONDITIONS:

The standard conditions Part I attached to this permit incorporate all sections of 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions should be reviewed by the permittee to ascertain compliance with this permit, state regulations, state statutes, federal regulations, and the Clean Water Act. Standard Conditions Part III, if attached to this permit, incorporate all requirements dealing with domestic sludge.

STORMWATER PERMITTING: LIMITATIONS AND BENCHMARKS:

Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater discharges. The *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater-only outfalls will generally only contain a maximum daily limit (MDL), benchmark, or monitoring requirement as dictated by site specific conditions, the BMPs in place, past performance of the facility, and the receiving water's current quality.

Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute Water Quality Standards (WQSs) are based on one hour of exposure, and must be protected at all times. Therefore, industrial stormwater facilities with toxic contaminants present in the stormwater may have the potential to cause a violation of acute WQSs if toxic contaminants occur in sufficient amounts. In this instance, the permit writer may apply daily maximum limitations.

Conversely, it is unlikely for rainfall to cause a discharge for four continuous days from a facility; if this does occur however, the receiving stream will also likely sustain a significant amount of flow providing dilution. Most chronic WQSs are based on a four-day exposure with some exceptions. Under this scenario, most industrial stormwater facilities have limited potential to cause a violation of chronic water quality standards in the receiving stream.

A standard mass-balance equation cannot be calculated for stormwater because stormwater flow and flow in the receiving stream cannot be determined for conditions on any given day or storm event. The amount of stormwater discharged from the facility will vary based on current and previous rainfall, soil saturation, humidity, detention time, BMPs, surface permeability, etc. Flow in the receiving stream will vary based on climatic conditions, size of watershed, area of surfaces with reduced permeability (houses, parking lots, and the like) in the watershed, hydrogeology, topography, etc. Decreased permeability may increase the stream flow dramatically over a short period of time (flash).

Numeric benchmark values are based on site specific requirements taking in to account a number of factors but cannot be applied to any process water discharges. First, the technology in place at the site to control pollutant discharges in stormwater is evaluated. The permit writer also evaluates other similar permits for similar activities. A review of the guidance forming the basis of Environmental Protection Agency's (EPA's) *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* (MSGP) may also occur. Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard may also be used. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States. If a facility has not disclosed BMPs applicable to the pollutants for the site, the permittee may not be eligible for benchmarks.

40 CFR 122.44(b)(1) requires the permit implement the most stringent limitations for each discharge, including industrially exposed stormwater; and 40 CFR 122.44(d)(1)(i) and (iii) requires the permit to include water-quality based effluent limitations where reasonable potential has been found. However, because of the non-continuous nature of stormwater discharges, staff are unable to perform statistical Reasonable Potential Analysis (RPA) under most stormwater discharge scenarios. Reasonable potential determinations (RPDs; see REASONABLE POTENTIAL above) using best professional judgment are performed.

Benchmarks require the facility to monitor, and if necessary, replace and update stormwater control measures. Benchmark concentrations are not effluent limitations. A benchmark exceedance, therefore, is not a permit violation; however, failure to take corrective action is a violation of the permit. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective actions may be necessary to comply with the conditions of the permit.

BMP inspections typically occur more frequently than sampling. Sampling frequencies are based on the facility's ability to comply with the benchmarks and the requirements of the permit. Inspections should occur after large rain events and any other time an issue is noted; sampling after a benchmark exceedance may need to occur to show the corrective active taken was meaningful.

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer, if there is no RP for water quality excursions.

✓ Not applicable; this facility does not have any stormwater-only outfalls.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k), Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when: 1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) Authorized under section 402(p) of the CWA for the control of stormwater discharges; 3) Numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf, BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to 1) identify sources of pollution or contamination, and 2) select and carry out actions which prevent or control the pollution of storm water discharges. Additional information can be found in *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006; September 1992).

A SWPPP must be prepared by the permittee if the SIC code is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2). A SWPPP may be required of other facilities where stormwater has been identified as necessitating better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate stream pollution from stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the benchmark values or limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure assisting in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once the potential sources of stormwater pollution have been identified, a plan should be formulated to best control the amount of pollutant being released and discharged by each activity or source. This should include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed the facility will employ the control measures determined to be adequate to achieve the benchmark values discussed above. The facility will conduct monitoring and inspections of the BMPs to ensure they are working properly and re-evaluate any BMP not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the benchmark value, the BMP being employed is deficient in controlling stormwater pollution. Corrective action should be taken to repair, improve, or replace the failing BMP. This internal evaluation is required at least once per month but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established.

For new, altered, or expanded stormwater discharges, the SWPPP shall identify reasonable and effective BMPs while accounting for environmental impacts of varying control methods. The antidegradation analysis must document why no discharge or no exposure options are not feasible. The selection and documentation of appropriate control measures shall serve as an alternative analysis of technology and fulfill the requirements of antidegradation [10 CSR 20-7.031(3)]. For further guidance, consult the antidegradation implementation procedure (<http://dnr.mo.gov/env/wpp/docs/AIP050212.pdf>).

Alternative Analysis (AA) evaluation of the BMPs is a structured evaluation of BMPs which are reasonable and cost effective. The AA evaluation should include practices designed to be: 1) non-degrading; 2) less degrading; or 3) degrading water quality. The glossary of AIP defines these three terms. The chosen BMP will be the most reasonable and effective management strategy while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The AA evaluation must demonstrate why “no discharge” or “no exposure” is not a feasible alternative at the facility. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.031(3) Water Quality Standards and *Antidegradation Implementation Procedure* (AIP), Section II.B.

If parameter-specific numeric benchmark exceedances continue to occur and the permittee feels there are no practicable or cost-effective BMPs which will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the permittee can submit a request to re-evaluate the benchmark values. This request needs to include 1) a detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values; 2) financial data of the company and documentation of cost associated with BMPs for review and 3) the SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. This will allow the Department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification, which includes an appropriate fee; the application is found at: <https://dnr.mo.gov/forms/#WaterPollution>

✓ Applicable; a SWPPP shall be developed and implemented for this facility.

SUFFICIENTLY SENSITIVE ANALYTICAL METHODS:

Please review Standard Conditions Part 1, section A, number 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 and/or 40 CFR 136 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is “sufficiently sensitive” when; 1) the method quantifies the pollutant below the level of the applicable water quality criterion or; 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015 and or 40 CFR 136. These methods are also required for parameters listed as monitoring only, as the data collected may be used to determine if numeric limitations need to be established. A permittee is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive. 40 CFR 136 lists the approved methods accepted by the Department. Tables A1-B3 at 10 CSR 20-7.031 shows water quality standards.

UNDERGROUND INJECTION CONTROL (UIC):

The UIC program for all classes of wells in the State of Missouri is administered by the Missouri Department of Natural Resources and approved by EPA pursuant to section 1422 and 1425 of the Safe Drinking Water Act (SDWA) and 40 CFR 147 Subpart AA. Injection wells are classified based on the liquids which are being injected. Class I wells are hazardous waste wells which are banned by RSMo 577.155; Class II wells are established for oil and natural gas production; Class III wells are used to inject fluids to extract minerals; Class IV wells are also banned by Missouri in RSMo 577.155; Class V wells are shallow injection wells; some examples are heat pump wells and groundwater remediation wells. Domestic wastewater being disposed of sub-surface is also considered a Class V well. In accordance with 40 CFR 144.82, construction, operation, maintenance, conversion, plugging, or closure of injection wells shall not cause movement of fluids containing any contaminant into Underground Sources of Drinking Water (USDW) if the presence

of any contaminant may cause a violation of drinking water standards or groundwater standards under 10 CSR 20-7.031, or other health based standards, or may otherwise adversely affect human health. If the director finds the injection activity may endanger USDWs, the Department may require closure of the injection wells, or other actions listed in 40 CFR 144.12(c), (d), or (e). In accordance with 40 CFR 144.26, the permittee shall submit a Class V Well Inventory Form for each active or new underground injection well drilled, or when the status of a well changes, to the Missouri Department of Natural Resources, Geological Survey Program, P.O. Box 250, Rolla, Missouri 65402. The Class V Well Inventory Form can be requested from the Geological Survey Program or can be found at the following web address: <http://dnr.mo.gov/forms/780-1774-f.pdf>

✓ Not applicable; the permittee has not submitted materials indicating the facility will be performing UI at this site.

VARIANCE:

Per the Missouri Clean Water Law §644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

✓ Not applicable; this permit is not drafted under premise of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the WLA is the amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs) are reviewed. If one limit does not provide adequate protection for the receiving water, then the other must be used per 10 CSR 20-7.015(9)(A).

✓ Applicable; wasteload allocations for toxic parameters were calculated using water quality criteria or water quality model results and by applying the dilution equation below; WLAs are calculated using the *Technical Support Document For Water Quality-Based Toxics Control* or TSD EPA/505/2-90-001; 3/1991.

$$C = \frac{(C_s \times Q_s) + (C_e \times Q_e)}{(Q_e + Q_s)} \quad \text{(EPA/505/2-90-001, Section 4.5.5)}$$

Where C = downstream concentration
Cs = upstream concentration
Qs = upstream flow
Ce = effluent concentration
Qe = effluent flow

- ✓ Acute wasteload allocations designated as daily maximum limits (MDL) were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).
- ✓ Chronic wasteload allocations designated as monthly average limits (AML) were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ).
- ✓ Number of Samples “n”: effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying assumption which should be, at a minimum, targeted to comply with the values dictated by the WLA. Therefore, it is recommended the actual planned frequency of monitoring be used to determine the value of “n” for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for “n” must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is “n = 4”. For total ammonia as nitrogen, “n = 30” is used.

WASTELOAD ALLOCATION (WLA) MODELING:

Permittees may submit site specific studies to better determine the site specific wasteload allocations applied in permits.

✓ Not applicable; a WLA study was either not submitted or determined not applicable by Department staff.

PART IV. EFFLUENT LIMITS DETERMINATIONS

OUTFALL #004 – WASTEWATER AND STORMWATER

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG.	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	*	SAME	ONCE/MONTH	MONTHLY	24 HR. TOT
CONVENTIONAL							
BOD ₅	mg/L	*	36	NEW	ONCE/MONTH	MONTHLY	GRAB
COD	mg/L	90	*	NEW	ONCE/MONTH	MONTHLY	GRAB
OIL & GREASE	mg/L	15	10	NEW	ONCE/MONTH	MONTHLY	GRAB
pH †	SU	*	*	INTERIM	ONCE/MONTH	MONTHLY	GRAB
pH †	SU	6.5 to 9.0	6.5 to 9.0	FINAL	ONCE/MONTH	MONTHLY	GRAB
TOTAL SUSPENDED SOLIDS (TSS)	mg/L	100	50	NEW	ONCE/MONTH	MONTHLY	GRAB
METALS							
ALUMINUM, TR	µg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB
NUTRIENTS							
AMMONIA AS N	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB
NITROGEN, TOTAL N (TN)	mg/L	*	*	NEW	ONCE/QUARTER	QUARTERLY	GRAB
PHOSPHORUS, TOTAL P (TP)	mg/L	*	*	NEW	ONCE/QUARTER	QUARTERLY	GRAB
OTHER							
CHLORIDE	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB
SULFATE	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB
CHLORIDE PLUS SULFATE	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB
WET TEST - ACUTE	TUa	*	-	NEW	ONCE/YEAR	ANNUALLY	GRAB

- * monitoring and reporting requirement only
- † report the minimum and maximum pH values; pH is not to be averaged
- TR total recoverable
- interim parameter requirements prior to end of SOC
- final parameter requirements at end of SOC

DERIVATION AND DISCUSSION OF LIMITS:

Monitoring frequency increased from quarterly to monthly as this is a wastewater outfall monitoring discharges to waters of the state.

PHYSICAL:

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD), monthly monitoring increased from quarterly in the previous permit.

CONVENTIONAL:

Biochemical Oxygen Demand - 5 Day (BOD₅)

Monitoring continued from the previous permit. Daily maximum, monitoring only; monthly average limit of 36 mg/L. There is no numeric water quality standard for BOD₅; however, increased oxygen demand may impact instream water quality. By only limiting the monthly average, the permit writer has determined any daily peaks of this pollutant is not detrimental to aquatic life in the short term; the variability of the discharges from this facility are reasonably expected to protect water quality for chronic increases in biochemical oxygen demand.

BOD₅ is also a valuable indicator parameter for facilities where biological components (such as corn, distillates, or ethanol) have the potential to enter stormwater at the site. BOD₅ monitoring allows the permittee to identify increases in oxygen demand which may indicate materials coming into contact with stormwater causing an increase in oxygen demand. Increases in BOD₅ may indicate a need for maintenance or improvement of BMPs. The benchmark has been removed because this outfall is for wastewater. The 95th percentile of the data collected by the facility was used to derive the monthly average permit limits for this outfall. This value is similar for other ethanol plants in the state and has been determined to be achievable at the facility.

Chemical Oxygen Demand (COD)

Daily maximum 90 mg/L; monthly average monitoring only. This limit is required to assure water quality is being maintained. There is no numeric water quality standard for COD; however, increased oxygen demand may impact instream water quality. COD is also a valuable indicator parameter. COD monitoring allows the permittee to identify increases in COD may indicate materials or chemicals coming into contact with stormwater causing an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs. The benchmark from the previous permit was used to create the limit for this permit; the facility can meet the limit 100% of the time. The limit is protective of water quality and is similar to other industries.

Oil & Grease

15 mg/L daily maximum; 10 mg/L monthly average; new limit. Oil and grease is considered a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or toluene, but these constituents are often lost during testing due to their boiling points. The facility reported non-detects. The permit writer completed an RPD on this parameter and because this basin collects all the stormwater for the site, found RP. Oils and greases of different densities will possibly form sheen or unsightly bottom deposits at levels which vary from 10 mg/L. To protect the general criteria, it is the responsibility of the permittee to visually observe the discharge and receiving waters for sheen or bottom deposits. A discharge water with sheen will violate general water quality criteria at 10 CSR 20-7.031(4)(B).

Daily maximum limits are set per the TSD:

AQL Chronic: 10 mg/L per 10 CSR 20-7.031 Table A1

Set chronic standard equal to chronic WLA per TSD §5.4.2 (EPA/505/2-90-001); multiply by 1.5 to obtain acute limit.

10 mg/L * 1.5 = 15 mg/L

pH

6.5 to 9.0 SU – instantaneous grab sample. Water quality limits [10 CSR 20-7.031(5)(E)] are applicable to this outfall. Previous permit was monitoring only however, for one monitoring result the pH was greater than 9.0 SU. A schedule of compliance is afforded for this parameter. In a pre-public notice comment, the facility indicated pH was caused by exogenous ammonia run-in from nearby fields. On 7/3/2019 the facility indicated they were able to effectively treat the pond to achieve 8 SU; this will assure any discharge is within the water quality standards.

Total Suspended Solids (TSS)

100 mg/L daily maximum; 50 mg/L monthly average. These limitations were based on limitations imposed on outfalls #001, #002, and #003 for the solids components contained in reverse osmosis wastewater and filter flush wastewater. There is no numeric water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS indicating uncontrolled materials leaving the site. Increased suspended solids in runoff can lead to decreased available oxygen for aquatic life and an increase of surface water temperatures in a receiving stream. Suspended solids can also be carriers of toxins, which can adsorb to the suspended particles; therefore, total suspended solids are a valuable indicator parameter for other pollution. The facility uses a basin to treat for solids. The facility reported from 5 to 148 mg/L with one value above the daily maximum limit.

METALS:

Effluent limitations for total recoverable metals were developed using methods and procedures outlined in the *Technical Support Document For Water Quality-based Toxic Controls* (EPA/505/2-90-001) and *The Metals Translator: Guidance For Calculating a Total Recoverable Permit Limit From a Dissolved Criterion* (EPA 823-B-96-007). Propagation of fish, shellfish, and wildlife apply designated as “Aquatic Life Protection” in 10 CSR 20-7.031 Tables A1 and A2. Additional use criterion (HHP, DWS, GRW, IRR, or LWW) may also be used as applicable to determine the most protective effluent limit for the waterbody class and uses.

Aluminum, Total Recoverable

The facility reported 564 µg/L in the application. Monitoring required to determine compliance with water quality standards for protection of aquatic life. While the value reported was above a potential monthly average limit of 374 µg/L, the facility discharges infrequently therefore the permit writer is affording additional time to collect data.

NUTRIENTS:

Ammonia, Total as Nitrogen

The facility reported 0.306 mg/L in the application. Monitoring required to determine compliance with water quality standards.

Nitrogen, Total N (TN)

Per 10 CSR 20-7.015(9)(D)7, quarterly nutrient monitoring required for facilities with a design flow greater than 0.1 MGD; the facility has ammonia in the wastewater.

Phosphorous, Total P (TP)

Per 10 CSR 20-7.015(9)(D)7, quarterly nutrient monitoring required for facilities with a design flow greater than 0.1 MGD; the facility reported 0.303 mg/L in the discharge.

OTHER:

Chloride

Previous permit required monthly sampling; no limits; monitoring continued; see chloride plus sulfate below.

Sulfate

Monitoring required to determine chloride plus sulfate; see below. The facility shall sample and independently report the analytical value of sulfate.

Chloride Plus Sulfate

Previous permit required sampling and reporting sulfate plus chloride without limitations. The wastewater systems at the site have high chloride plus sulfate at outfall #007, however, they receive treatment in the basin for outfall #004. Monitoring is continued to assure chloride plus sulfate levels remain below the water quality standard of 1000 mg/L.

Whole Effluent Toxicity (WET) Test, Acute

Monitoring is required to determine if reasonable potential exists for the discharge to cause toxicity within the receiving stream. A WET test is a quantifiable method to determine discharges from the facility cause toxicity to aquatic life by itself, in combination with, or through synergistic responses, when mixed with receiving stream water. Discharges at this outfall are short term and driven typically by precipitation therefore the acute test was chosen.

Under the federal Clean Water Act (CWA) §101(a)(3), requiring WET testing is reasonably appropriate for site-specific Missouri State Operating Permits for discharges to waters of the state issued under the National Pollutant Discharge Elimination System (NPDES). WET testing is also required by 40 CFR 122.44(d)(1). WET testing ensures the provisions in 10 CSR 20-6 and the Water Quality Standards in 10 CSR 20-7 are being met. Under 10 CSR 20-6.010(8)(A)4, the Department may require other terms and conditions it deems necessary to assure compliance with the CWA and related regulations of the Missouri Clean Water Commission. The following Missouri Clean Water Laws (MCWL) apply: §644.051.3. requires the Department to set permit conditions complying with the MCWL and CWA; §644.051.4 specifically references toxicity as an item we must consider in writing permits (along with water quality-based effluent limits); and §644.051.5. is the basic authority to require testing conditions.

The standard Allowable Effluent Concentration (AEC) for facilities discharging to unclassified, Class C, Class P (with default mixing considerations), or lakes [10 CSR 20-7.031(4)(A)4.B.(IV)(b)] is 100%. The standard dilution series for facilities discharging to waterbodies with no mixing considerations is 100%, 50%, 25%, 12.5%, & 6.25%.

OUTFALL #006 – GREENSAND FILTER WASTEWATER

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG.	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	*	SAME	ONCE/MONTH	MONTHLY	24 Hr. TOT
CONVENTIONAL							
CHLORINE, TOTAL RESIDUAL	µg/L	17 (ML130)	8 (ML130)	SAME	ONCE/MONTH	MONTHLY	GRAB
pH †	SU	*	*	INTERIM	ONCE/MONTH	MONTHLY	GRAB
pH †	SU	6.5 to 9.0	6.5 to 9.0	FINAL	ONCE/MONTH	MONTHLY	GRAB
SETTLABLE SOLIDS (SS)	mL/L/hr	1.0	1.0	SAME	ONCE/MONTH	MONTHLY	GRAB
METALS							
IRON, TR	µg/L	*	*	INTERIM	ONCE/MONTH	MONTHLY	GRAB
IRON, TR	µg/L	1831	721	FINAL	ONCE/MONTH	MONTHLY	GRAB
OTHER							
CHLORIDE	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB
SULFATE	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	GRAB
CHLORIDE PLUS SULFATE	mg/L	*	*	NEW	ONCE/MONTH	MONTHLY	SUM
WET TEST - ACUTE	TUa	*	-	NEW	ONCE/YEAR	ANNUALLY	GRAB

- * monitoring and reporting requirement only
- † report the minimum and maximum pH values; pH is not to be averaged
- new parameter not established in previous state operating permit
- interim parameter requirements prior to end of SOC
- final parameter requirements at end of SOC
- TR total recoverable

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD), monthly monitoring continued from previous permit.

CONVENTIONAL:

Chlorine, Total Residual (TRC)

17 µg/L daily maximum and 8 µg/L monthly average; warm-water Protection of Aquatic Life, CMC = 19 µg/L, CCC = 11 µg/L [10 CSR 20-7.031, Table A]; continued from previous permit. Background = 0 µg/L. Standard compliance language for TRC, including the minimum level (ML), is described in the permit. Chlorine has been shown to be present in the wastewater at this outfall.

Acute AQL: 19 µg/L

Chronic AQL: 10 µg/L

LTAa: WLAa * LTAa multiplier = 19 * 0.321 = 6.101

[CV: 0.6, 99th %ile]

LTAc: WLAc * LTAc multiplier = 10 * 0.527 = 5.274

[CV: 0.6, 99th %ile]

use most protective LTA: 5.274

Daily Maximum: MDL = LTA * MDL multiplier = 5.274 * 3.114 = 17 µg/L

[CV: 0.6, 99th %ile]

Monthly Average: AML = LTA * AML multiplier = 5.274 * 1.552 = 8 µg/L

[CV: 0.6, 95th %ile, n=4]

pH

6.5 to 9.0 SU – instantaneous grab sample. Water quality limits [10 CSR 20-7.031(5)(E)] are applicable to this outfall. Previous permit was monitoring only however, for one monitoring event the pH was greater than 9.0 SU. A schedule of compliance is afforded for this parameter.

Settleable Solids (SS)

The previous permit required a daily maximum limit of 1.0 mL/L/hr and a monthly average of 1.0 mL/L/hr. There is no numeric water quality standard for SS; however, sediment discharges can negatively impact aquatic life. Increased settleable solids are known to interfere with multiple stages of the life cycle in many benthic organisms. For example, they can smother eggs and young or clog the crevasses benthic organisms use for habitat. Settleable solids are also a valuable indicator parameter. Solids monitoring allows the permittee to identify increases in sediment and solids indicating uncontrolled materials leaving the site. The effluent limitations in the previous permit have been reevaluated and found to be protective of the receiving stream.

METALS:

Effluent limitations for total recoverable metals were developed using methods and procedures outlined in the *Technical Support Document For Water Quality-based Toxic Controls* (EPA/505/2-90-001) and *The Metals Translator: Guidance For Calculating a Total Recoverable Permit Limit From a Dissolved Criterion* (EPA 823-B-96-007). Propagation of fish, shellfish, and wildlife apply designated as “Aquatic Life Protection” in 10 CSR 20-7.031 Tables A1 and A2. Additional use criterion (HHP, DWS, GRW, IRR, or LWV) may also be used as applicable to determine the most protective effluent limit for the waterbody class and uses.

Iron, Total Recoverable

Previous permit was monitoring only. The facility reported from 150 to 2000 µg/L for this parameter; the RPA found RP; limits required. The facility cannot currently meet the new limits; the facility is afforded two years to determine the best course of action to remove high iron in the discharges.

Chronic AQL: 1000 µg/L

LTAc: WLAc * LTAc multiplier = 1000 * 0.367 = 367.059

[CV: 1.019, 99th %ile]

Daily Maximum: MDL = LTA * MDL multiplier = 367.059 * 4.988 = 1831 µg/L

[CV: 1.019, 99th %ile]

Monthly Average: AML = LTA * AML multiplier = 367.059 * 1.964 = 721 µg/L

[CV: 1.019, 95th %ile, n=4]

OTHER:

Chloride

New parameter for monitoring; required to determine chloride plus sulfate; see below.

Sulfate

Monitoring required to determine chloride plus sulfate below. The facility shall sample and independently report the analytical value of sulfate.

Chloride Plus Sulfate

New reporting requirement; this parameter is expected to be present in the effluent as it was shown to be present in the discharge through sampling for the renewal application. Additional sampling is required to determine compliance with Missouri’s water quality standard.

Whole Effluent Toxicity (WET) Test, Acute

Annual monitoring is required to determine if reasonable potential exists for the discharge to cause toxicity within the receiving stream. A WET test is a quantifiable method to determine discharges from the facility cause toxicity to aquatic life by itself, in combination with, or through synergistic responses, when mixed with receiving stream water. Discharges at this outfall are low in flow and infrequent therefore the acute test was chosen for this outfall.

Under the federal Clean Water Act (CWA) §101(a)(3), requiring WET testing is reasonably appropriate for site-specific Missouri State Operating Permits for discharges to waters of the state issued under the National Pollutant Discharge Elimination System (NPDES). WET testing is also required by 40 CFR 122.44(d)(1). WET testing ensures the provisions in 10 CSR 20-6 and the Water Quality Standards in 10 CSR 20-7 are being met. Under 10 CSR 20-6.010(8)(A)4, the Department may require other terms and conditions it deems necessary to assure compliance with the CWA and related regulations of the Missouri Clean Water Commission. The following Missouri Clean Water Laws (MCWL) apply: §644.051.3. requires the Department to set permit conditions complying with the MCWL and CWA; §644.051.4 specifically references toxicity as an item we must consider in writing permits (along with water quality-based effluent limits); and §644.051.5. is the basic authority to require testing conditions.

The standard Allowable Effluent Concentration (AEC) for facilities discharging to unclassified, Class C, Class P (with default mixing considerations), or lakes [10 CSR 20-7.031(4)(A)4.B.(IV)(b)] is 100%. The standard dilution series for facilities discharging to waterbodies with no mixing considerations is 100%, 50%, 25%, 12.5%, & 6.25%.

PART V. ADMINISTRATIVE REQUIREMENTS

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

PERMIT SYNCHRONIZATION:

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. <http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf>. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the Department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than two years old, such data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit.

✓ If the Department issues the permit at this time, the effective period of the permit would be less than two years in length (1st quarter 2021). To ensure efficient use of Department staff time, reduce the Department's permitting back log, and to provide better service to the permittee by avoiding another renewal application to be submitted in such a short time period, this operating permit will be issued for the maximum timeframe of five years and synced with other permits in the watershed at a later date.

PUBLIC NOTICE:

The Department shall give public notice a draft permit has been prepared and its issuance is pending.

<http://dnr.mo.gov/env/wpp/permits/pn/index.html> Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in or with water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

✓ The Public Notice period for this operating permit was from July 19, 2019 through August 19, 2019. No comments were received.

DATE OF FACT SHEET: AUGUST 20, 2019

COMPLETED BY:

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MISSOURI DEPARTMENT OF NATURAL RESOURCES
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STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

Part I – General Conditions

Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
2. **Monitoring Requirements.**
 - a. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.
 - b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.
3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
4. **Test Procedures.** The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is “sufficiently sensitive” when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.
5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

6. **Illegal Activities.**
 - a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or both.
 - b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

Section B – Reporting Requirements

1. **Planned Changes.**
 - a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42;
 - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
 - iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.
2. **Non-compliance Reporting.**
 - a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



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- b. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - ii. Any upset which exceeds any effluent limitation in the permit.
 - iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.
 - c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.
3. **Anticipated Noncompliance.** The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.
 4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.
 5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
 6. **Other Information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
 7. **Discharge Monitoring Reports.**
 - a. Monitoring results shall be reported at the intervals specified in the permit.
 - b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
 - c. Monitoring results shall be reported to the Department no later than the 28th day of the month following the end of the reporting period.
- b. Notice.
 - i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
 - ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
 - c. Prohibition of bypass.
 - i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 3. The permittee submitted notices as required under paragraph 2. b. of this section.
 - ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.
3. **Upset Requirements.**
 - a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
 - b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated; and
 - iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
 - iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
 - c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

Section C – Bypass/Upset Requirements

1. **Definitions.**
 - a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
 - b. *Severe Property Damage*: 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.
 - c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
2. **Bypass Requirements.**
 - a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.

Section D – Administrative Requirements

1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
 - a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
 - b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement



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- imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
- d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.
2. **Duty to Reapply.**
- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
- c. A permittees with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
3. **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.
4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
5. **Proper Operation and Maintenance.** 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. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
6. **Permit Actions.**
- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
- i. Violations of any terms or conditions of this permit or the law;
- ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
- iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- iv. Any reason set forth in the Law or Regulations.
- b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. **Permit Transfer.**
- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
- b. The Department 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 under the Missouri Clean Water Law or the Federal Clean Water Act.
- c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



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10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.
12. **Closure of Treatment Facilities.**
 - a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
 - b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.
13. **Signatory Requirement.**
 - a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
 - b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
 - c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.
14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

RECEIVED

MAY 02 2016



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM
 FORM E – APPLICATION FOR GENERAL PERMIT
 UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED
5-2-16	0 880

NOTE ► APPLICANTS FOR MOGD AND MOG823 ARE EXCLUDED FROM THIS FORM
 Please Fill Out "FORM B – Application for Operating Permit for Facilities which Receive Primarily Domestic Waste and Have a Design Flow Less Than or Equal to 100,000 Gallons per Day".

PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1. THIS APPLICATION IS FOR:

1.1 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Missouri Ethanol, LLC dba POET Biorefining - Laddonia, is a permitted 68 million gallon per year denatured ethanol production facility. In addition to fuel ethanol production, carbon dioxide, corn oil, wet cake (livestock feed for regional markets), and dried distillers grains (DDGS, livestock feed for regional, national, and international markets) are produced.

1.2 PLEASE SELECT ONE:

- a. This facility is now in operation under Missouri State Operating Permit (permit) MO – 0132489 and is submitting an application for renewal. There is not a proposed increase in design stormwater or wastewater flow. Annual fees will be paid when invoiced and there is no additional permit fee required for renewal.
- b. This facility is now in operation under permit MO – _____ and there is a proposed increase in design stormwater or wastewater flow.
- c. This is a facility submitting an application for a new permit (for a new facility).

If you checked either b or c above then you may need to submit an antidegradation review. See instructions.

2. FACILITY

FACILITY NAME Missouri Ethanol, LLC dba POET Biorefining - Laddonia		TELEPHONE NUMBER WITH AREA CODE (573) 373-1298	
ADDRESS (PHYSICAL LOCATION) 809 North Pine	CITY Laddonia	STATE MO	ZIP CODE 63352

3. OWNER

NAME Missouri Ethanol, LLC dba POET Biorefining-Laddonia	EMAIL ADDRESS Steve.Murphy@POET.COM	TELEPHONE NUMBER WITH AREA CODE (573) 373-1267
ADDRESS (MAILING) 809 North Pine	CITY Laddonia	STATE MO
		ZIP CODE 63352

4. CONTINUING AUTHORITY

NAME Same as above	E-MAIL ADDRESS	TELEPHONE NUMBER WITH AREA CODE	FAX NUMBER WITH AREA CODE
ADDRESS (MAILING)	CITY	STATE	ZIP CODE

5. FACILITY CONTACT

NAME Stephen Murphy	TELEPHONE NUMBER WITH AREA CODE (573) 373-1267	FAX NUMBER WITH AREA CODE (573) 373-1261
TITLE General Manager	EMAIL ADDRESS Steve.Murphy@POET.COM	

6. OUTFALL INFORMATION (attach additional sheets as necessary)

6.1 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION

Outfall Number _____ Qtr 1 _____ ¼ Qtr 2 _____ ¼ Sec. _____ T _____ R _____ County (see attachment)
 Outfall Number _____ Qtr 1 _____ ¼ Qtr 2 _____ ¼ Sec. _____ T _____ R _____ County (page 2 of 14)

6.2 IF ANY OF THE ABOVE OUTFALLS IS AN EXISTING OUTFALL, SUBMIT A SUMMARY OF POLLUTANTS ANALYZED IN THE PAST TWO YEARS.

6.3 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER BODY

Outfall Number _____ Receiving Water Body _____
 Outfall Number _____ Receiving Water Body _____

FACILITY DESCRIPTION (continued)

Outfall #001 – Ethanol for Fuel Manufacturing – SIC #2869/2048 – Internal Monitoring Point

Non-contact cooling tower blowdown – non-continuous discharges to Outfall #007

Design flow is 265,000 gallons per day

Actual flow is 30,000 gallons per day

Legal Description: NE ¼, NW ¼, NW ¼, Sec. 36, T52N, R7W, Audrain County

UTM Coordinates: X=617297.765, Y=4345458.437

Outfall #002 – Ethanol for Fuel Manufacturing – SIC #2869/2048 – Internal Monitoring Point

Reverse osmosis reject water – non-continuous discharges to Outfall #007

Design flow is 143,000 gallons per day

Actual flow is 109,000 gallons per day

Legal Description: NE ¼, NW ¼, NW ¼, Sec. 36, T52N, R7W, Audrain County

UTM Coordinates: X=617306.532, Y=4345463.502

Outfall #003 – Ethanol for Fuel Manufacturing – SIC #2869/2048 – Internal Monitoring Point

Water softener system / cooling tower filter backwash – non-continuous discharges to Outfall #007

Design flow is 3,000 gallons per day

Actual flow is 2,000 gallons per day

Legal Description: NE ¼, NW ¼, NW ¼, Sec. 36, T52N, R7W, Audrain County

UTM Coordinates: X=617298.154, Y=4345453.566

Outfall #004 – Ethanol for Fuel Manufacturing/Dried Distillers Grains – SIC #2869/2048

Stormwater runoff / discharge from Outfall #007 - Stormwater collection basin

Design flow 8.0 million gallons per day

Actual flow is 8.0 million gallons per day – discharges are batch releases and are not continuous

Legal Description: NW ¼, NE ¼, NW ¼, Sec. 36, T52N, R7W, Audrain County

UTM Coordinates: X=617488.447, Y=4345550.743

Outfall #005 – Eliminated

Outfall #006 – Ethanol for Fuel Manufacturing/Dried Distillers Grains – SIC #2869/2048

Stormwater runoff / Stormwater collection basin

Design flow 57,000 gallons per day

Actual flow is 57,000 gallons per day – discharges are batch releases and are not continuous

Legal Description: NE ¼, SE ¼, NW ¼, Sec. 36, T52N, R7W, Audrain County

UTM Coordinates: X=617619.680, Y=4345068.142

Outfall #007 – Ethanol for Fuel Manufacturing/Dried Distillers Grains – SIC #2869/2048

Combined discharges from Outfalls #001, #002 & #003 - Non-continuous discharges to Outfall #004

Design flow 411,000 gallons per day

Actual flow is 189,000 gallons per day

Legal Description: NE ¼, NW ¼, NW ¼, Sec. 36, T52N, R7W, Audrain County

UTM Coordinates: X=617307.506, Y=4345465.645

Outfall #008 – Ethanol for Fuel Manufacturing – SIC #2869/2048 – Internal Monitoring Point

Combined samples from Outfalls #004 and #006 for purposes of Whole Effluent Toxicity testing

Legal Description: NW ¼, NE ¼, NW ¼, Sec. 36, T52N, R7W, Audrain County

UTM Coordinates: X=617488.447, Y=4345550.743

Outfalls #001, #002, #003, #004, #006, #007 & #008

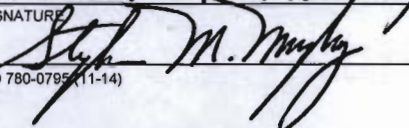
Receiving Stream: Unnamed tributary to Middle Lick Creek (U)
First Classified Stream and ID: Lick Creek (C) (00150)
USGS Basin & Sub-watershed No.: (07110007-0102)

7. ADDITIONAL INFORMATION

- 7.1 Does the discharge(s) for which you are seeking a permit discharge to a combined sewer system? Yes No
- 7.2 Primary SIC Code of facility 2869
- 7.3 If this application is for a stormwater discharge permit, please provide an attached list of **any** materials that are stored outside and exposed to stormwater.
- 7.4 Attach an aerial photograph or a USGS topographic map showing the location of the facility. Indicate on the map the facility, the receiving water body, and the outfall locations.

8. CERTIFICATION

I certify that I am familiar with the information contained in the application and to the best of my knowledge and belief, such information is true, complete, and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders, and decisions, subject to any legitimate appeal available to the applicant under the Missouri Clean Water Law.

NAME (TYPE OR PRINT) STEPHEN M. MURPHY	OFFICIAL TITLE GENERAL MANAGER	TELEPHONE NUMBER WITH AREA CODE 573-373-1267
SIGNATURE 	DATE SIGNED 4/25/16	



Missouri Department of Natural Resources

WASTEWATER TREATMENT FACILITY PERMIT FEES

Water Protection Program fact sheet

04/2015

Division of Environmental Quality Director: Leanne Tippett Mosby

PUB2564

All persons who build, erect, alter, replace, operate, use or maintain wastewater treatment facilities shall pay the appropriate fee as designated in RSMo 644.052 and 644.053. Fee types include operating, general permit, construction permit, permit modification, and variance fees. For additional information please refer to 10 CSR 20-6.011, *Fees* and RSMo 644.052 and 644.053. The fee amounts discussed herein became effective **Jan. 1, 2015**.

Operating Fees

Privately owned treatment facilities that treat human sewage (10 CSR 20-6.011(2)(B)), industrial process wastewater (10 CSR 20-6.011(2)(C) - subject to federal Clean Water Act categorical standards), industrial stormwater (subsection (D)) and other industrial process wastewater (10 CSR 20-6.011(2)(E) - not subject to federal Clean Water Act categorical standards) must pay an annual fee on the anniversary date of their permit based on the design flow of the facility (in gallons per day); see tables 1, 2, 3, and 4, respectively for fee amounts. The first annual fee shall be remitted with the permit operating application for the facility. No discharge facilities fees are based on the design flow of wastewater being handled. Sludge or solids disposal facilities fees are based on the combined total design flow of the wastewater treatment facilities from which the sludge or solids are removed. These fees apply to site-specific permits, general permits, and permits by rule.

Persons with a direct or indirect discharge to a public sewer system owned or operated by a city, public sewer district, public water district or other *publicly owned treatment works* (POTW) shall pay an annual fee per water service connection, see table 5. It should be noted this is a fee assessed to the discharger to the sewer system. The fee shall be collected by the agency billing customers (e.g., POTW) for sewer service and remitted to the department. The fee may be collected in monthly, quarterly, or annual increments for annual remittance to the department. No prepayment is required; therefore, a new POTW is not required to submit the first annual water service connection fee with an operating permit application. The department will bill the POTW annually.

General Permit Fees

General permits (as opposed to site-specific permits) are issued to multiple locations where activities are similar enough to be covered by a single set of requirements. A listing of the types of general permits available is provided on the department's website at dnr.mo.gov/env/wpp/permits/wpcpermits-general.htm. The fees associated with general permits are provided in *644.052, RSMo*. In general the fee for a new permit associated with a discharge of process wastewater or potentially contaminated storm water is \$200. Fees for permits associated with land disturbance stormwater or concentrated animal feeding operations (CAFOs) vary according to site complexity, see table 6. Table 6 also provides fee information for miscellaneous operations such as municipal separate storm sewer systems (MS4), chemical fertilizer and pesticide operations, and aquaculture facilities. Fees are to be submitted with the application for general permits. If a facility with a general permit treats human sewage

(10 CSR 20-6.011(2)(B)), industrial process wastewater (10 CSR 20-6.011(2)(C) - subject to federal Clean Water Act categorical standards), industrial stormwater

(10 CSR 20-6.011(2)(D)) and other industrial process wastewater (10 CSR 20-6.011(2)(E) - not subject to federal Clean Water Act categorical standards), it must pay an annual fee on the anniversary date of its permit based on the design flow of the facility (in gallons per day); see tables 1, 2, 3, and 4, respectively for fee amounts. For example, the fee for a MOG823 permit for a facility with a design flow of 11,000 gallons per day would be \$600.

Construction Permit and Antidegradation Review Fees

Construction permit fees are to be submitted with the permit application. Construction permit fees are as follows (Table 7):

- \$1,000 for wastewater treatment facilities with less than 500,000 gallons per day design flow,
- \$3,000 for wastewater treatment facilities with 500,000 or greater gallons per day design flow,
- \$300 for a sewer extension of more than 1,000 feet or the construction of two or more lift stations.

The fee for antidegradation review for an entirely new wastewater treatment plant is dependent on the design flow of the plant, see table 8. The fee for the review associated with a new facility having a design flow less than 100,000 gallons per day will \$500. A new plant having a design flow greater than or equal to 100,000 gallons per day will be assessed a fee of \$1,000. For existing facilities being upgraded or replaced, the fee will be \$250. A \$250 fee will also apply for projects that involve the development of water quality-based and technology-based effluent limits that will serve as the antidegradation baseline effluent limits; reviews are commonly referred to as water quality reviews.

Modifications

The fee associated with requests for modification to a state operating permit for a POTW (i.e., facilities collecting water service fees) is \$200. For all other operating permits the modification fee is 25 percent of the annual operating permit fee. The fee for minor modification (e.g., name change, address change, etc.) to non-POTW permits is \$100. Modification fees are summarized in table 9.

Variance

Any person seeking a variance in accordance with RSMo 644.061 shall file a petition for variance with the director. There is a \$250 filing fee with each petition for variance.

Rate Changes

The rates discussed above will remain as stated until such time as the commission promulgates rules defining the billing procedure.

Summary Tables

Table 1 - Privately Owned Treatment Works *Human Sewage Discharges - Annual Fees 10 CSR 20-6.011(2)(B)*

Design flow or adjusted design flow < 5,000 gallons per day (gpd)	\$ 150
Design flow between 5,000 and but less than 10,000 gpd	\$ 300
Design flow between 10,000 and but less than 15,000 gpd	\$ 600
Design flow between 15,000 and but less than 25,000 gpd	\$ 1,000
Design flow between 25,000 and but less than 30,000 gpd	\$ 1,500
Design flow between 30,000 and but less than 100,000 gpd	\$ 3,000
Design flow between 100,000 and but less than 250,000 gpd	\$ 4,000
Design flow greater than or equal to 250,000 gpd	\$ 5,000

Table 2 - Industrial Process Wastewater 10 CSR 20-6.011(2)(C)

Class IA concentrated animal feeding operation (CAFO)	\$ 5,000
Operating permits based on categorical standards, design flow < 1.0 million gallons per day (MGD)	\$ 4,200
Operating permits based on categorical std., design flow \geq 1.0 MGD	\$ 5,000

Table 3 - Industrial Stormwater 10 CSR 20-6.011(2)(D)

Design flow is < 1.0 MGD	\$ 1,800
Design flow is \geq 1.0 MGD	\$ 2,800

Table 4 - Other Industrial Process Wastewater 10 CSR 20-6.011(2)(E)

Facilities not included in (2)(C) or (2)(D) - noncategorical federal Clean Water Act

Design flow is < 1.0 MGD	\$ 1,800
Design flow is \geq 1.0 MGD	\$ 3,000

Table 5 - Sewer Service Connection Fees 10 CSR 20-6.011(2)(G)

Connection to a publically owned treatment works (POTW), > 35,000 customers, fee per connection	\$ 0.48
Connection to a POTW, > 20,000 but \leq 35,000 customers, fee per connection	\$ 0.60
Connection to a POTW, > 7,000 but \leq 20,000 customers, fee per connection	\$ 0.72
Connection to a POTW, \leq 7,000 customers, fee per connection	\$ 0.80
Industrial/commercial connection not served by a public water supply (PWS) district	\$ 3.42
Industrial/commercial connection with PWS line \leq 1-inch	\$ 3.00
Industrial/commercial connection with PWS line > 1-inch but \leq 4-inches	\$ 11.00
Industrial/commercial connection with PWS line > 4-inches	\$ 29.00

Table 6 - General Permit or Permit-By-Rule 10 CSR 20-6.011(2)(F)

General permits for discharge of process water and stormwater, potentially contaminated, annual fee	\$ 200
Stormwater, land disturbance; 1.0 acre but < 5.0 acres	\$ 500
Stormwater, land disturbance; 5.0 acres but < 10.0 acres	\$ 600
Stormwater, land disturbance; 10.0 acres but < 25.0 acres	\$ 750
Stormwater, land disturbance; 25.0 acres but < 100.0 acres	\$ 1,500
Stormwater, land disturbance; 100.0 acres but < 500.0 acres	\$ 3,000
Stormwater, land disturbance; 500.0 acres or greater	\$ 5,000
Stormwater, land disturbance, single fee for multiple sites; total < 100.0 acres	\$ 1,500
Stormwater, land disturbance, single fee for multiple sites; total 100.0 acres to <500.0 acres	\$ 3,000
Stormwater, land disturbance, single fee for multiple sites; total \geq 500.0 acres	\$ 5,000
Chemical fertilizer or pesticide facility annual fee	\$ 100
Class IA CAFO or animal feeding operation annual fee	\$ 5,000
Class IB CAFO or animal feeding operation, NPDES permit annual fee	\$ 450
Class IC or II CAFO or animal feeding operation, NPDES permit annual fee	\$ 350
Class IB CAFO or animal feeding operation, MO operating permit annual fee	\$ 300
Class IC or II CAFO or animal feeding operation, MO operating permit annual fee	\$ 150
Stormwater, municipal separate storm sewer system (MS4) annual fee	\$ 250
Aquaculture facility annual fee	\$ 300
Pesticide applicator annual fee	\$ 150

Permit-by-rule \$150

Table 7 - Construction Permits 10 CSR 20-6.011(2)(K)

WWTP with design flow < 500,000 gpd	\$ 1,000
WWTP with design flow ≥ 500,000 gpd	\$ 3,000
Sewer extension >1,000 feet or two or more lift stations	\$ 300

Table 8 - Anti-Degradation Review 10 CSR 20-6.011(2)(J)

New wastewater treatment plant (WWTP) with design flow of < 100,000 gpd	\$ 500
New WWTP with design flow of ≥ 100,000 gpd	\$ 1,000
Antidegradation review to upgrade or replace an existing facility or for a water quality review	\$ 250

Table 9 - Permit Modifications and Nonsubstantive Changes 10 CSR 20-6.011(2)(H)

Modification to operating permits for facilities that charge a service connection fee, (e.g., POTWs)	\$ 200
Substantive modification to non-POTW operating permits	25% of annual operating fee
Nonsubstantive modification to operating permits for facilities that do not charge a service connection fee, (e.g., non-POTWs)	\$ 100
Modification of a general permit	\$ 100

Nothing in this document may be used to implement any enforcement action or levy any penalty unless promulgated by rule under chapter 536 or authorized by statute.

For more information

Missouri Department of Natural Resources
 Water Protection Program
 P.O. Box 176
 Jefferson City, MO 65102-0176

800-361-4827 or 573-751-1300
<http://dnr.mo.gov/env/wpp>

OUTFALL #	Flow MGD	Temp °F	Chloride mg/L	BOD mg/L	COD mg/L	TSS mg/L	Oil & Grease mg/L	pH Std Units	Settleable Solids mg/L	Total Residual Chlorine mg/L	Ammonia as N mg/L	Chlorides + Sulfates mg/L	Ethanol mg/L	Precipitation inches	Dissolved Oxygen mg/L	Iron, Total Recoverable µg/L
1	X	X					X	X		X	X					
2	X		X			X	X	X		X	X	X				
3	X		X			X	X	X								
4	X			X	X	X	X	X	X				X	X	X	
6	X						X	X	X	X					X	X
7	X		X	X		X	X	X		X	X	X				
8																
WET Test																