



STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**  
GENERAL 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, 92<sup>nd</sup> Congress) as amended,

MO-R23E000

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

**FACILITY DESCRIPTION**

All Outfalls – Biodiesel Manufacturing, SIC code #2869

Stormwater runoff from biodiesel manufacturing and associated facilities

This permit authorizes only 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.

June 1, 2013

Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

May 31, 2018

Expiration Date

John Madras, Director, Water Protection Program

					PAGE NUMBER 2 of 7	
<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					PERMIT NUMBER MO-R23E000	
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 upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Stormwater</u> (Note 1 & 2)						
Flow	gallons	*		*	once/quarter****	24 hr. estimate
Chemical Oxygen Demand	mg/L	120		90	once/quarter****	grab
Total Suspended Solids (Note 5)	mg/L	100		50	once/quarter****	grab
pH	SU	**		**	once/quarter****	grab
Oil & Grease	mg/L	15		10	once/quarter****	grab
STORMWATER MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<u>Land application of wastewater</u> (Notes 1 & 3)						
Precipitation	inches	*			once per event***	grab
Total volume applied	gallons	*			once per event***	grab
Methanol	%	3			once per event***	grab
Oil & Grease	mg/L	*			once per event***	grab
pH	SU	*			once per event***	grab
LAND APPLICATION MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE _____.						
Soil pH at land application sites (Note 4)	SU	6-9			once per year, each site	composite
Annual Operational Report	See Requirements #10.				once/year	report
THE ANNUAL OPERATIONAL REPORT AND SOIL SAMPLING SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE _____.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS** (continued)

- \* Monitoring requirement only.
- \*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- \*\*\* One sample shall be collected and analyzed each time water is removed from containment and land applied.
- \*\*\*\* See table below for quarterly sampling:

Sample discharge at least once for the months of:	Report is due:
January, February, March (1st Quarter)	April 28
April, May, June (2nd Quarter)	July 28
July, August, September (3rd Quarter)	October 28
October, November, December (4th Quarter)	January 28

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS** (continued)

- Note 1 Report as no-discharge when a discharge does not occur during the report period.
- Note 2 These limits apply to stormwater runoff from the facility and accumulated stormwater in secondary containment structures. Accumulated stormwater may be discharged if it is not contaminated. No water with sheen may be discharged. A representative grab sample shall be taken 10 to 60 minutes after water discharge begins from a 0.1 inch or greater rainfall event.
- Note 3 Conduct this analysis only if employing land application for disposal of accumulated stormwater, non-contact cooling water, and water removed from feedstock, or raw materials. Land application of glycerin or characteristic hazardous wastes is prohibited. This analysis shall be used by the permit holder to comply with land application limitations found in Requirements #13. If land application does not occur, report as “no discharge”.
- Note 4 The soil at each land application site shall be sampled once per year. Soil sampling shall be in accordance with University of Missouri publication G09215 or G09217.
- Note 5 Emergency exceedances of effluent limitations for Total Suspended Solids are authorized due to precipitation exceeding the 25-year, 24-hour storm event. The burden of proof lies with the permit holder to document that the precipitation event occurred.

**C. SPECIAL CONDITIONS**

1. This permit authorizes the discharge of stormwater runoff from biodiesel manufacturing and associated facilities to waters of the state. Biodiesel is a diesel fuel substitute produced from agricultural products. This permit also authorizes additional activities, limited to incineration of byproducts from biodiesel manufacturing, and land application of certain wastewaters and materials. This permit applies to, but is not limited to, establishments with Standard Industrial Classification (SIC) code 0723, 2869, 2875, & 4953.

Under certain circumstances, crude glycerin can be a characteristic hazardous waste. Please contact the Hazardous Waste Program for assistance in determining if a hazardous waste permit is required.

Biodiesel production, incineration of glycerin, or its use as a fuel may be subject to regulation by the Air Pollution Control Program. If you intend to construct and incinerator or intend to use glycerin as fuel, such as for a boiler, contact the Air Pollution Control Program to determine permitting requirements.

2. Holders of current site-specific permits who desire to apply for inclusion under this general permit should contact the Department for application requirements. If a facility covered by this general permit should desire to apply for an individual permit, the owner may do so.
3. This permit does not authorize the discharge of waters other than stormwater. This permit also authorizes facilities which conduct blending of biodiesel with petroleum products, but only when the total amount of petroleum stored on site does not exceed 1,000 gallons.
4. Before a general permit may be issued for a new biodiesel manufacturing facility, the proposed permit must be public noticed for 30 days [10 CSR 20-6.020(1)(C)2.]. For a renewal of the permit for an existing facility, the proposed permit must be public noticed for 30 days only if the facility has been in significant noncompliance during the time of the previous permit [10 CSR 20-6.020(1)(C)4.].
5. If at any time the Missouri Department of Natural Resources (herein after “the Department”) determines that the quality of waters of the state may be better protected by requiring the owner of a facility to apply for a site specific permit, the Department may do so. Facilities found to be in noncompliance with this general permit may be required to obtain a site-specific permit.
6. Setbacks  
This permit does not authorize stormwater discharges from a biodiesel facility:
  - (a) Within 1,000 feet upstream of waters that have been identified as a losing stream, sinkhole, or other direct conduit to groundwater, a drinking water supply water body, or an outstanding state resource water\*;
  - (b) Within the watersheds of streams or lakes listed as an outstanding national resource water\* or their tributaries;

**C. SPECIAL CONDITIONS continued**

- (c) Within 100 feet upstream of a wetland, of a major reservoir (Class L2\*), permanently flowing stream (Class P\*) or intermittent stream (Class C\*);
- (d) Within two stream miles upstream of biocriteria reference locations\*;
- (e) Within two stream miles upstream of streams, lakes, or reservoirs identified as critical habitat for endangered species.

\* Identified or described in 10 CSR 20, Chapter 7. These regulations are available at many libraries and online at [www.sos.mo.gov](http://www.sos.mo.gov), or may be purchased from MDNR by calling the Water Protection Program.

7. The setback requirements in #6 above do not apply to land application. Please see Special Condition #8.

8. Setbacks for land application sites

Land application of accumulated stormwater from secondary containment, non-contact cooling water, water removed from feedstock, or raw materials shall not occur within:

- (a) 1,000 feet upstream of waters that have been identified as a losing stream, sinkhole, or other direct conduit to groundwater, or an outstanding state resource water\*;
- (b) 100 feet upstream of a wetland, of a reservoir (Class L1\*, L2\*, or L3\*), permanently flowing stream (Class P\*) or intermittent stream (Class C\*), or water supply well;
- (c) 100 feet of a ditch or other unclassified tributary to a stream;
- (d) 50 feet of a property boundary;

\* Identified or described in 10 CSR 20, Chapter 7. These regulations are available at many libraries and online at [www.sos.mo.gov](http://www.sos.mo.gov), or may be purchased from MDNR by calling the Water Protection Program.

9. Land application of accumulated stormwater from secondary containment, non-contact cooling water, water removed from feedstock, or raw materials must be consistent with all the following conditions:

- (a) Wastewater shall not exceed 0.2 inch/hour, 0.5 in/day, 1.0 in/week, and 24 in/year.
- (b) Application rates shall not exceed the following:

<u>Parameter</u>	<u>Maximum Annual Loading</u>
Total Kjeldahl Nitrogen (TKN)	150 lbs/acre/year
Oil & Grease	1000 lbs/acre/year

- (c) Land applied storm water shall be tested for the above parameters each time it is land applied.
- (d) Storm water containing more than 10% glycerin may not be land applied.
- (e) Land application sites shall have vegetation established as soon as practicable after waste incorporation within the normal crop planting and harvesting season.
- (f) Wastes shall be land applied at least 30 days before crop harvesting or grazing by cattle.
- (g) Wastes shall not be applied on field slopes exceeding 20 percent.
- (h) Land application shall not occur during frozen; snow covered, or saturated soil conditions.
- (i) Land application shall not occur during rainfall events.
- (j) Land application of characteristic hazardous waste is prohibited.

10. By January 28<sup>th</sup> of each year, the permittee shall submit an annual operational report. The report must include:

- (a) The amount of biodiesel produced, the amount of glycerin generated, and glycerin disposal methods, and
- (b) A summary of any land application. This includes total volume applied and a summary of the land application monitoring found in Table A.

(c) Additional requirements:

For facilities that reprocess materials from biodiesel manufacturers, the annual report must include:

- a. Quantity of glycerin, fatty acids, or other materials received, stored, or reprocessed at the site.
- b. Report the quantity of materials listed in a. above stored at the beginning of each quarter.

11. This general permit does not apply to land disturbance activities.

12. Facilities that are located within the watershed of the 303(d) listing of impaired waters will need to be evaluated, on a case-by-case basis, for inclusion under this general permit. Facilities that are found to be discharging the listed pollutant(s) of concern for impaired water may be required to obtain a site-specific permit.

**C. SPECIAL CONDITIONS continued**

13. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge 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; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- (c) Toxic pollutants shall consist of, but are not limited to, pollutants listed in 10 CSR-20, Chapter 7, Table A, or 40 CFR 122, Appendix D.

14. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (1) 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;
  - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
  - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (5) There shall be no significant human health hazard from incidental contact with the water;
  - (6) There shall be no acute toxicity to livestock or wildlife watering;
  - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (8) 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.

15. This permit may be reopened and modified, or alternatively revoked and reissued, to:

- (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
  - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
  - (2) controls any pollutant not limited in the permit.
- (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
- (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

16. All outfalls must be clearly marked in the field.

17. The permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The permittee shall prepare a SWPPP and submit it to the appropriate Department of Natural Resources Regional Office within 60 days of receiving coverage under this Master General Permit. The Department may require revisions to the SWPPP. A copy of the SWPPP must be kept on-site. 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 the following document:

**C. SPECIAL CONDITIONS continued**

Storm Water Management For Industrial Activities, Developing Pollution Prevention Plans and Best Management Activities, (Document number EPA 832-R-92-006) published by the United States Environmental Protection Agency (USEPA) in September 1992.

The SWPPP must include the following:

- (a) An assessment of all storm water discharges associated with raw materials, intermediate materials, finished products and waste products. This must include a list of potential contaminants exposed to storm water and an annual estimate of amounts that will be used in the described activities.
- (b) An assessment of all chemical handling and storage procedures is required to be addressed under the conditions of this section.
- (c) A listing of Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter storm water.
- (d) A schedule for implementing the BMPs, if necessary.
- (e) Provisions for preventing the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehousing activities and prevent the contamination of storm water from these substances.
- (f) All involved personnel shall be trained in materials handling and storage, and housekeeping of maintenance areas. Upon request, proof of training shall be submitted to the Department.
- (g) The SWPPP must include a schedule for monthly site inspections and a brief written report. The inspections must include observation and evaluation of BMP effectiveness, deficiencies, and corrective measures that will be taken. Deficiencies (such as leaking pipes, improper glycerin handling, etc.) must be corrected within seven days and the Department must be notified by letter. Any corrective measure that necessitates major construction may also need a construction permit. Inspection reports must be kept on site with the SWPPP. These must be made available to DNR personnel upon request.
- (h) A provision for designating an individual to be responsible for environmental matters.

18. The purpose of the SWPPP and the BMPs listed therein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR20-2.010(56)] of waters of the state, and corrective action means the facility took steps to eliminate the deficiency.

19. All spills must be **cleaned up** within 24 hours or as soon as possible, and a written report of the incident supplied with the facility's Discharge Monitoring Report (DMR). The following spills must be **reported** to the Department at the earliest practicable moment, but no greater than 24 hours after the spill occurs:

- (a) Any spill, of any material, that leaves the property of the facility;
- (b) Any spill, of any material outside of secondary containment and exposed to precipitation, greater than 25 gallons or equivalent volume of solid material.

The Department may require the submittal of a written report detailing measures taken to clean up the spill within 5 days of the spill. Whether the written report is submitted with the DMR or required to be submitted within 5 days, it must include the type of material spilled, volume, date of spill, date clean-up completed, clean-up method, and final disposal method. If the spill occurs outside of normal business hours, or if the permit holder cannot reach regional office staff for any reason, the permit holder is instructed to report the spill to the Department's 24 hour Environmental Emergency Response hotline at (573) 634-2436. Leaving a message on a Department staff member voice-mail does not satisfy this reporting requirement. 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.

Federal Regulations (CERCLA) requires 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.

20. All paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) shall be stored so that these materials are not exposed to storm water. Spill prevention, control, and/or management shall be provided sufficient to prevent any spills of these pollutants from entering a water 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.

21. Collection facilities shall be provided on-site, and arrangements made for proper disposal of, waste products which may be exposed to storm water.

22. Good housekeeping practices shall be maintained on the site to keep solid waste from entry into waters of the state.

**C. SPECIAL CONDITIONS continued**

23. An individual shall be designated by the permittee as responsible for environmental matters. Staff of the permitted facility shall inspect, on each workday, any structures that function to prevent pollution of storm water or to remove pollutants from storm water and of the facility in general to ensure that any Best Management Practices are continually implemented and effective.
24. All involved personnel shall be trained in material handling and storage, and housekeeping of areas having materials exposed to stormwater. Upon request, proof of training shall be submitted to the Department.
25. All fueling facilities present on-site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.
26. Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that are transported, stored, or used for maintenance, cleaning or repair shall be managed according to the provisions of RCRA and CERCLA.

**PERMIT TRANSFER**

This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.

**TERMINATION**

In order to terminate this permit, the permittee shall notify the Department by submitting Form H, included with the State Operating Permit. The permittee shall complete Form H and mail it to the Department at the address noted in the cover letter of this permit. Proper closure of any storage structure is required prior to permit termination. A closure plan shall be submitted to the Department and approved prior to initiating closure activities.

**PERMIT RENEWAL REQUIREMENTS**

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than 30 days prior to the permit's expiration date. Failure to apply for renewal may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

**DUTY OF COMPLIANCE**

The permittee shall comply with all conditions of this general permit. Any noncompliance with this general permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

This permit authorizes only the activities described in this permit. Compliance with this permit may not be considered a shield from compliance with any local ordinance, State Regulation or State Law.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FACT SHEET  
FOR THE PURPOSE OF RENEWAL  
OF  
MO-R23E000  
MASTER GENERAL PERMIT**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution 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 storm water 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.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)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 (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Fact Sheet is for a Master General Permit

**Part I – Facility Information**

The following Facility Information shall appear on the coverage document issued to a General Permit Covered Facility.

NPDES #:

Facility Name:

Facility Address:

Owner's Name:

Owner's Address:

Facility Region:

Facility County:

Facility Type:

Facility SIC Code(s):

Facility Description: Storm water runoff from biodiesel manufacturing facilities. This permit also authorizes activities associated with glycerin disposal. The product glycerin is sometimes generated in quantities greater than can be sold, and therefore it must be disposed of.

Comments: For the purposes of this permit, glycerin is the same as glycerol.

Other glycerin disposal options not authorized in this permit can still be utilized by the permit holder, so long as they do not result in exposure of materials or products to storm water. Examples include sale of refined glycerin to a manufacturer. The fate of all glycerin must be detailed in the annual report (Requirements #14) It is possible for the biodiesel manufacturing facility to obtain No Exposure Certification. A facility seeking certification should contact the Department for instructions. A construction permit is not required for biodiesel facilities unless they are constructing a wastewater treatment facility.

**Outfalls**

A full description of each outfall shall appear on the coverage document issued to a General Permit Covered Facility. The following information is required for each outfall.

**Outfall #001**

Legal Description: (detailed)

UTM Coordinates: X =, Y =

Receiving Stream: Name (U), (C), (P) etc...

First Classified Stream and ID: Name (C) (P) (####)

USGS Basin & Sub-watershed No.: (# - #)

**Setbacks for Land Application**

These set-backs are intended as a margin of safety for accidents, spills, etc. For a simple 20-acre square field, the set-backs established in this permit reduce the available land in said field to 15.9 acres. Available land in a 100-acre field with a 20' wide drainage ditch running through the middle is reduced to 80 acres.

**Part II – Operator Certification Requirements**

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation.

Not Applicable;

This facility is not required to have a certified operator.

**Part III – Receiving Stream Information**

**APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:**

As per Missouri's Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

Please mark the correct designated waters of the state categories of the receiving stream.

Missouri or Mississippi River [10 CSR 20-7.015(2)]:	Yes <input checked="" type="checkbox"/> ; No <input type="checkbox"/>
Lake or Reservoir [10 CSR 20-7.015(3)]:	Yes <input checked="" type="checkbox"/> ; No <input type="checkbox"/>
Losing [10 CSR 20-7.015(4)]:	Yes <input type="checkbox"/> ; No <input checked="" type="checkbox"/>
Metropolitan No-Discharge [10 CSR 20-7.015(5)]:	Yes <input checked="" type="checkbox"/> ; No <input type="checkbox"/>
Special Stream [10 CSR 20-7.015(6)]:	Yes <input type="checkbox"/> ; No <input checked="" type="checkbox"/>
Subsurface Water [10 CSR 20-7.015(7)]:	Yes <input type="checkbox"/> ; No <input checked="" type="checkbox"/>
All Other Waters [10 CSR 20-7.015(8)]:	Yes <input checked="" type="checkbox"/> ; No <input type="checkbox"/>

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1<sup>st</sup> classified receiving stream's beneficial water uses to be maintained are located in the Receiving Stream Table, located below in accordance with [10 CSR 20-7.031(3)]. This permit does not allow discharges within two miles upstream of a waterbody with the designated use of drinking water supply.

## **Part IV – Rationale and Derivation of Effluent Limitations & 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)], or is an existing facility.

### **ANTI-BACKSLIDING:**

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); CFR §122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- New permit, not applicable.

### **ANTIDegradation:**

-Policies which ensure protection of water quality for a particular water body where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation plans are adopted by each State to minimize adverse effects on water.

Not Applicable;

As per [10 CSR 20-7.031(2)(D)], the three (3) levels of protection provided by the anti-degradation policy in subsections (A), (B), and (C) of this section shall be implemented according to procedures developed by the Department. *Missouri Antidegradation Rule and Implementation Procedure*, when approved, shall apply at renewal of this Master General Permit.

### **AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:**

As per [10 CSR 20-6.010(3)(B)], ...An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the Department.

### **BIOSOLIDS & SEWAGE SLUDGE:**

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address: <http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

Not applicable;

This condition is not applicable to the permittee for this facility.

### **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.

**PRETREATMENT PROGRAM:**

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

Several special conditions pertaining to the permittee's pretreatment program may be included in the permit, and are as follows:

- Implementation and enforcement of the program,
- Annual pretreatment report submittal,
- Submittal of list of industrial users,
- Technical evaluation of need to establish local limitations, and
- Submittal of the results of the evaluation

Not Applicable;

The permittee, at this time, is not required to have a Pretreatment Program or does not have an approved pretreatment program.

**REASONABLE POTENTIAL ANALYSIS (RPA):**

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard.

In accordance with [40 CFR Part 122.44(d)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Applicable;

An RPA was conducted for this Iron for Outfall #002.

**REMOVAL EFFICIENCY:**

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals.

Not Applicable;

Influent monitoring is not being required to determine percent removal.

**SCHEDULE OF COMPLIANCE (SOC):**

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, 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.

Not Applicable;

This permit does not contain a SOC.

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP):**

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* 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 storm water 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*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water 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.

Applicable;

A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the Department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan.

**WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:**

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined to total amount of pollutant that may be discharged into that stream without endangering its water quality.

Not Applicable;

Wasteload allocations were not calculated.

**WATER QUALITY STANDARDS:**

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

**WHOLE EFFLUENT TOXICITY (WET) TEST:**

As per [10 CSR 20-7.031(1)(CC)], a toxicity test conducted under specified laboratory conditions on specific indicator organism; and as per [40 CFR §122.2], the aggregate toxic effect of an effluent measured directly by a toxicity test.

Not Applicable;

At this time, the permittee is not required to conduct WET test for this facility.

**40 CFR 122.41(M) - BYPASSES:**

The federal Clean Water Act (CWA), Section 402 prohibits wastewater dischargers from "bypassing" untreated or partially treated sewage (wastewater) beyond the headworks. A bypass, which includes blending, is defined as an intentional diversion of waste streams from any portion of a treatment facility, [40 CFR 122.41(m)(1)(i)]. Additionally, Missouri regulation 10 CSR 20-2.010(11) defines a bypass as the diversion of wastewater from any portion of wastewater treatment facility or sewer system to waters of the state. Only under exceptional and specified limitations do the federal regulations allow for a facility to bypass some or all of the flow from its treatment process. Bypasses are prohibited by the CWA unless a permittee can meet all of the criteria listed in 40 CFR 122.41(m)(4)(i)(A), (B), & (C). Any bypasses from this facility are subject to the reporting required in 40 CFR 122.41(l)(6) and per Missouri's Standard Conditions I, Section B, part 2.b. Additionally, Anticipated Bypasses include bypasses from peak flow basins or similar devices designed for peak wet weather flows.

Not Applicable;

This facility does not bypass.

**303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):**

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are 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 waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Not Applicable;  
 This facility does not discharge to a 303(d) listed stream.

***Each Outfall***

**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GALLONS	*		*		
CHEMICAL OXYGEN DEMAND	MG/L	120		90		
TOTAL SUSPENDED SOLIDS	MG/L	100		50		
PH	SU	6.5-9.0		6.5-9.0		
OIL & GREASE	MG/L	15		10		

\* Monitoring requirement only

**DERIVATION AND DISCUSSION OF LIMITS:**

- **Chemical Oxygen Demand.** Biodiesel facilities handle chemicals (such as glycerin) with a high chemical oxygen demand, therefore potential may exist for discharge of stormwater that could affect the water quality standards of the nearest downstream classified waterbody.
- **Total Suspended Solids.** 100 mg/L daily maximum and 50 mg/L monthly average. Inspections of biodiesel facilities have demonstrated the necessity of an effluent limit for TSS. These effluent limits have been demonstrated to be attainable by existing technology at other industrial stormwater facilities, and are protective of water quality standards in most receiving streams.
- **pH.** 6.5-9.0 Standard Units. Biodiesel facilities handle caustic and acidic chemicals; therefore potential exists for discharge of storm water outside of water quality standards. Effluent limits established consistent with Water Quality Standards, 10 CSR 20-7.031(4)(E).
- **Oil & Grease.** This conventional pollutant has limits of 15mg/L daily maximum and 10 mg/L monthly average for the protection of aquatic life. Effluent limits based on water quality standards and established consistent with other industrial stormwater facilities and with Department policy. 10 CSR 20-7.031 Table A.

**LAND APPLICATION ANALYSIS**

Monitoring to determine loading from land application.

## **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.

### **PUBLIC NOTICE:**

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and 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 March 1, 2013 through April 1, 2013. No responses received or responses to the Public Notice of this operating permit do not warrant the modification of effluent limits and/or the terms and conditions of this permit.

**DATE OF FACT SHEET: FEBRUARY 7, 2013**

### **COMPLETED BY:**

**JOY JOHNSON, ENVIRONMENTAL SPECIALIST III**  
**NPDES PERMITS UNIT**  
**WATER PROTECTION PROGRAM**  
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