

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, 92nd Congress) as amended,

Permit No. MO-G35xxxx

Owner: < name >
Address: < address >

Continuing Authority: < name, or same as above >
Address: < address, or same as above >

Facility Name: < name >
Facility Address: < physical address >

Legal Description: ¼, ¼, ¼, Sec. xx, TxxN, RxxW, < county > County
Latitude/Longitude: +xxxxxxx/-0xxxxxxx

Receiving Stream: < receiving stream > < (C, P, L1, L2, L3) >
First Classified Stream and ID: < 1st classified stream > < (C, P, etc.) > < (ID number) > 303(d) List
USGS Basin & Sub-watershed No.: < (USGS HUC12 #) >

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

FACILITY DESCRIPTION

Containment Outfalls. All SIC Codes

Discharge of water from secondary containment, collection basins, or sumps associated with facilities of all SIC codes that have above ground storage capacity of pre-consumer or post-consumer petroleum products, ethanol or biodiesel totaling more than 20,000 gallons, but less than 250,000 gallons.

Stormwater Outfalls. SIC 4226, 5171

This permit also includes stormwater discharges that are not associated with secondary containment for the above listed SIC codes.

This permit authorizes only the wastewater, including stormwater, discharges described herein 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 Section 644.051.6 of the Law.

September 18, 2017
Effective Date


Edward B. Galbraith, Director, Division of Environmental Quality

September 17, 2022
Expiration Date


Chris Wieberg, Director, Water Protection Program

APPLICABILITY

1. This Missouri State Operating Permit (permit) authorizes the discharge of uncontaminated water from secondary containment, any uncontaminated water associated collection basins, or water that has accumulated in sumps associated with dispensers of pre- and post-consumer petroleum products for all SIC codes. This permit is limited to those facilities with storage capacity totaling more than 20,000 gallons, but less than 250,000 gallons of petroleum products on-site in above ground tanks. Facilities with less than 20,000 gallons capacity are exempt from this permit unless it is determined by the department that the operating practices are not adequate and that an operating permit is required to protect the environment.
2. This permit is applicable to industrial stormwater discharges for these listed SIC codes.

<u>SIC Code</u>	<u>Activity</u>
4226	Special Warehousing and Storage
5171	Petroleum Bulk Stations and Terminals
3. Facilities covered under a current site-specific permit who desire to apply for inclusion under this general permit should contact the Missouri Department of Natural Resources (department) for application requirements and procedures. Likewise, if at any time the department determines that the quality of waters of the state may be better protected by requiring the owner/operator of the permitted site to apply for a site-specific State Operating Permit, the department may do so. If a permittee covered under a current general permit desires to apply for site-specific permit, the permittee may do so.
4. Facilities that discharge water from secondary containment or a sump directly to a combined sewer system are not required to obtain this permit unless they are required to be permitted for stormwater. Facilities that only need stormwater coverage may also inquire with the department's regional offices to determine their eligibility for the MOR80C000 general permit.
5. This permit does not authorize the discharge of anything other than uncontaminated secondary containment water and stormwater. It does not authorize discharges of domestic wastewater or any process wastewaters. The following are allowable non-stormwater discharges authorized under this permit:
 - (a) Discharges from fire-fighting activities;
 - (b) Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
 - (c) Landscape watering, provided all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer's instructions;
 - (d) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
 - (e) Routine external building wash down that does not use detergents;
 - (f) Foundation or footing drains where flows are not contaminated with process materials; and
 - (g) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).
6. This permit does not authorize the discharge of spilled materials or petroleum products drained from any equipment (transformers, trucks, cars, bulldozers, motorcycles, etc.). Spilled materials must be cleaned up within 24 hours. If the spilled material is a hazardous waste, it shall be managed as a hazardous waste. All such spills in an amount equal to or greater than 25 gallons shall be reported within 24 hours to the department.
7. This permit **does not authorize** discharges:
 - (a) Within 1,000 feet upstream or up-gradient of a wetland¹;
 - (b) Within two (2) miles upstream of biocriteria reference locations¹;
 - (c) Within 1,000 feet of an Outstanding State Resource Water¹ (OSRW) per 10 CSR 20-7.015(6)(A)3; or
 - (d) Within two (2) miles upstream of streams, lakes, or reservoirs identified as critical habitat for endangered species.¹
8. Facilities that are located within the watershed of an impaired water as designated on the 305(b) Report need to be evaluated on a case-by-case basis for inclusion under this permit. Missouri's impaired waters can be found at: www.dnr.mo.gov/env/wpp/waterquality/index.html. Facilities that are found to be discharging the listed pollutant(s) of concern for any impaired water may be required to obtain a site-specific permit.

¹ Identified or described in 10 CSR 20, Chapter 7. These regulations are available at many libraries and online at <http://www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp>, or may be purchased from the department by calling the Water Protection Program.

9. Within the watershed of an Outstanding National Resource Waters (ONRW), which includes the Ozark National Scenic Riverways and the National Wild and Scenic Rivers System, this permit:
- (a) Authorizes **no-discharge facilities** [as defined in 10 CSR 20-6.015(1)(B)7.] to operate. Any discharge from a no-discharge facility will be considered a violation of this permit unless a catastrophic or chronic storm event [as defined in 10 CSR 20-6.015(1)(B)] occurs. In the event of a catastrophic or chronic storm event, the no-discharge facility is authorized to release only the amount of water required to prevent damage to the facility or established Best Management Practices (BMPs).
 - (b) Authorizes **stormwater discharge facilities** to operate and continue to discharge stormwater that has not come in contact with secondary containment so long as the stormwater requirements set forth in this permit are strictly followed. ONRWs are protected against any degradation in quality as defined in 10 CSR 20-7.015(6)(B) and 7.031(3)(C). More detailed requirements concerning discharges are found in the Requirement section of this permit. If the discharge of stormwater is determined to cause water quality degradation, the department may require the facility to operate as a no-discharge facility under this permit or to apply for a site-specific permit.
10. A facility covered under this permit may use a mechanical oil/water separator without obtaining a separate permit for the oil/water separator.

SECONDARY CONTAINMENT DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

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.						
- The interim effluent limitations apply solely to facilities previously covered under this permit and shall become effective upon issuance and remain in effect until September 30, 2020 .						
- All new permitted facilities are required to meet final effluent limits in table A-2.						
Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETER(S) All Permitted Discharges	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS (Note 1)	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	mgd	*		*	once/year	24 hr. estimate
pH**	SU	6.5 – 9.0		6.5 – 9.0	once/year	grab
Oil & Grease	mg/L	15.0		10.0	once/year	grab
Ethylbenzene	mg/L	0.32		0.32	once/year	grab
Benzene	mg/L	*		*	once/year	grab
Toluene	mg/L	*		*	once/year	grab
Xylene	mg/L	*		*	once/year	grab
Ethanol	mg/L	*		*	once/year	grab
TPH	mg/L	10.0		10.0	once/year	grab
Stored Hazardous Wastes (Note 2)	mg/L	*		*	once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY VIA THE DEPARTMENT'S eDMR SYSTEM. THE FIRST REPORT IS DUE JANUARY 28, 20XX . IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE.						

* Monitoring requirement only

** pH is measured in standard pH units and is not to be averaged. pH is limited to the range of 6.5 – 9.0.

Note 1 – Annual reporting is required. If a discharge occurs during the reporting period, samples shall be collected and tested for the parameters listed in Table A-1. Report as “no discharge” when a discharge does not occur during the reporting period. If multiple samples are collected and analyzed during the sampling period, the multiple samples are not to be averaged at intervals exceeding one calendar month.

Note 2 – Hazardous waste regulated facilities shall also sample for any hazardous wastes stored at the facility inside the secondary containment structure within the past year and report any findings. Contact the Hazardous Waste Program to determine analysis method for characterization. Facilities that store hazardous wastes shall attach laboratory analysis to their normal annual report. Facilities that do not store hazardous waste during the reporting period shall attach a certification stating that no hazardous wastes were on premises.

TABLE A-2 FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The facility is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit.

- For previously permitted facilities, the final effluent limits shall become effective **October 1, 2020**, and remain in effect until the expiration of the permit.
- New facilities applying for this permit shall be required to meet final effluent limits immediately.

All discharges shall be controlled, limited, and monitored by the facility as specified below:

EFFLUENT PARAMETER(S) All Permitted Discharges ^Ω	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS (Note 1)	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	mgd	*		*	once/year	24 hr. estimate
pH**	SU	6.5 - 9.0		6.5 – 9.0	once/year	grab
Oil & Grease	mg/L	15.0		10.0	once/year	grab
Ethylbenzene	mg/L	0.32		0.32	once/year	grab
Benzene	mg/L	0.005		0.005	once/year	grab
Toluene	mg/L	1.0		1.0	once/year	grab
Xylene	mg/L	10		10	once/year	grab
Ethanol	mg/L	*		*	once/year	grab
Stored Hazardous Wastes (Note 2)	mg/L	*		*	once/year	grab

MONITORING REPORTS SHALL BE SUBMITTED **ANNUALLY** VIA THE DEPARTMENT'S eDMR SYSTEM. THE FIRST REPORT IS DUE **JANUARY 28, 20XX**. IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE.

* Monitoring requirement only.

** pH is measured in standard pH units and is not to be averaged. pH is limited to the range of 6.5 – 9.0.

Ω Regulated discharges are those from secondary containment, sumps or other devices listed in the applicability section of this permit. Stormwater discharges not a result of secondary containment, sumps, etc. are not required to be sampled unless specifically directed to do so by the department.

Note 1 – Annual reporting is required. If a discharge occurs during the reporting period, samples shall be collected and tested for the parameters listed in Table A-2. Report as “no discharge” when a discharge does not occur during the reporting period. If multiple samples are collected and analyzed during the sampling period, the multiple samples are not to be averaged at intervals exceeding one calendar month.

Note 2 – Hazardous waste regulated facilities shall also sample for any hazardous wastes stored at the facility inside the secondary containment structure within the past year and report any findings. Contact the Hazardous Waste Program to determine analysis method for characterization. Facilities that store hazardous wastes shall attach laboratory analysis to their normal annual report. Facilities that do not store hazardous waste during the reporting period shall attach a certification stating that no hazardous wastes were on premises.

REQUIREMENTS

1. Electronic Discharge Monitoring Report (eDMR) Submission System.

Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally-consistent set of data about the NPDES program. All general permit covered facilities under this master general permit shall comply with the department's requirements for electronic reporting.

(a) Discharge Monitoring Reporting Requirements:

- 1) Registration to participate in the department's eDMR system is required as part of the application for general permit coverage in order to constitute a complete permit application. General information may be accessed at dnr.mo.gov/env/wpp/edmr.htm and the eDMR Permit Holder and Certifier Registration form (Form MO 780-2204) at <http://dnr.mo.gov/forms/780-2204-f.pdf>.
- 2) The permittee must electronically submit compliance monitoring data via the eDMR system. In regards to Standard Conditions Part I, Section B, #7, the eDMR system is currently the only department approved reporting method for this permit.

- (b) Other actions: 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); and
 - 4) Low Erosivity Waivers (LEWs) and Other Waivers from Stormwater Controls.
- (c) Electronic Submissions. To access the eDMR system, use the following link in your web browser:
<https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx>.
- (d) Waivers from Electronic Reporting:
- 1) 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.
 - 2) The permittee may obtain a temporary or permanent electronic reporting waiver by first submitting an eDMR Waiver Request Form (Form 780-2692): <http://dnr.mo.gov/forms/780-2692-f.pdf>, by contacting the appropriate permitting office or emailing edmr@dnr.mo.gov. The department will either approve or deny this electronic reporting waiver request within 120 calendar days of receipt.
 - 3) Only permittees with an approved waiver request may submit monitoring data and reports on paper to the department for the period that the approved electronic reporting waiver is effective.
2. Once a month, on a workday, the tank system shall be visually inspected to identify problem areas that could lead to a leak. Identified problems shall be repaired as soon as practicable. Areas such as tank foundations, connections, coatings, tank walls, and the piping system shall be inspected for corrosion, leaks, or other physical damage that may weaken the tank system. A log of such inspections and findings shall be kept on-site for a period of five years and made available to the department for viewing upon request.
3. There shall be no discharge of waters with a visible sheen per general criteria in 10 CSR 20-7.031(4)(B), even if this water complies with the final numeric effluent limits in the applicable Table A-2. If a visible sheen is present, the water must be treated before it is discharged. Contact the department's appropriate regional office for information or questions regarding oil and water separators.
4. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (§644.055, RSMo).
5. The requirements in this permit do not supersede nor remove liability for compliance with county and other local ordinances.

STORMWATER REQUIREMENTS

1. For facilities with SIC codes 4226 and 5171 in addition to the limitations and monitoring requirements listed above, this permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). When applying for coverage under this permit, a SWPPP that includes an Alternative Analysis of the Best Management Practices (BMPs) must be developed, implemented, and maintained at the facility. Alternative Analysis is a structured evaluation of BMPs that are reasonable and cost effective. The analysis should include practices that are 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 that 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. This structured analysis of BMPs serves as the Antidegradation review, fulfilling the requirements of 10 CSR 20-7.031(3). The permittee shall select, install, use, operate, and maintain the BMPs prescribed in the SWPPP in accordance with the concepts and methods described in the following document: *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 (EPA) in June 2015. https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf. (General information may also be found at <https://www.epa.gov/npdes/industrial-stormwater-guidance>.)

New Facilities: The new SWPPP for the facility must be prepared within 60 days and implemented within 180 days of permit issuance. 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 as site conditions change.

Existing Facilities: The existing SWPPP for your facility must be reviewed and revised as necessary within 30 days of reissuance of coverage. The general permit requires all facilities to develop and maintain a SWPPP. The SWPPP should be kept on-site and should not be sent to the department unless specifically requested.

Expanding Facilities: The existing SWPPP for the facility, including the Alternative Analysis, must be reviewed and revised as necessary. Once expansion occurs the revised SWPPP must be implemented within 30 days of permit modification. Thereafter, 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 as site conditions change.

For all facilities, the SWPPP must include the following:

- (a) An assessment of all stormwater discharges associated with the facility, facility activities, and facility materials. This assessment must include a list of potential contaminants and an annual estimate of amounts that will be used in the described activities.
 - (b) A listing of BMPs and a narrative explaining how the BMPs will be implemented to control and minimize the amount of potential contaminants that enter stormwater.
 - (c) A schedule for implementing the BMPs.
 - (d) A schedule for a monthly site inspection and a brief written report, which includes the name of the inspector, the signature of the inspector, and the date. The inspections must include observation and analysis of BMP effectiveness, deficiencies, and corrective measures that will be taken as well as the integrity of the containment structure(s). Deficiencies must be corrected within seven days. Inspection reports must be kept on-site with the SWPPP and must be made available to the department upon request.
 - (e) A provision for designating an individual to be responsible for environmental matters.
 - (f) A provision for providing training to all personnel involved in material handling, material storage, and housekeeping of areas having materials exposed to stormwater. Proof of training must be made available to the department upon request.
2. The purpose of the SWPPP and the BMPs listed therein is to prevent pollutants from entering waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, or failed to achieve compliance with requirements of the permit. Corrective action means the facility took steps to eliminate the deficiency.
 3. Permittees shall adhere to the following minimum BMPs that must be implemented at all facilities:
 - (a) Collection facilities shall be provided on-site, and arrangements made for proper disposal of waste products, including but not limited to petroleum waste products and solvents, which may be exposed to stormwater.
 - (b) Provide sediment and erosion control sufficient to prevent pollution to waters of the state and comply with the effluent limitations and other permit conditions. This may require the construction of properly designed sediment basins or other treatment structures.
 - (c) All fueling facilities present on-site shall adhere to applicable federal and state regulations concerning underground storage, aboveground storage, and dispensers, including spill prevention, control and countermeasures.
 - (d) Store all paints, solvents, petroleum products, petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that 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 countermeasures to prevent any spill 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 prevent the contamination of groundwater.
 - (e) Good housekeeping practices shall be maintained on the site to keep solid waste from entry into waters of the state.
 4. This permit stipulates pollutant benchmarks applicable to your stormwater discharge. The benchmarks do not constitute direct numeric effluent limitations and are included to assist in the evaluation of BMPs. The department may require benchmark sampling as a result of illegal discharges, compliance issues, complaint investigations or evidence of impacts from activities at the facility. If such an action is needed, the department will specify in writing the sampling requirements, including such information as location and extent. It is a violation of this permit to fail to comply with said written notice to sample.
 5. Any benchmark sampling results shall be maintained on-site for 5 years and made available to the department upon request.
 6. Failure to meet a benchmark is not a permit violation. Benchmark monitoring data are primarily for your use in determining the overall effectiveness of your SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a benchmark concentration is not met, you must review your SWPPP and your BMPs to determine whether any improvement or additional controls are needed to reduce that pollutant in your stormwater discharge(s). Failure to address a benchmark violation with improved BMPs is a permit violation.
 7. When sampling flow-through BMPs, stormwater samples should be collected within the first 60 minutes of discharge occurring as a result of precipitation events exceeding 0.1 inches during a 24-hour period. Precipitation events include rainfall as well as run-off from the melting of frozen precipitation. Local weather stations and on-site gauges are two methods for obtaining local precipitation amounts. When sampling flow-through BMPs, stormwater samples should be collected when a discharge occurs.
 8. Stormwater samples should be collected prior to leaving or at the property boundary before the discharge enters waters of the state.

9. The following Benchmarks are considered necessary to protect existing water quality and should not be exceeded during discharges resulting from a precipitation event exceeding 0.1 inches during a 24 hour period. The BMPs at the facility should be designed to meet these benchmarks during rainfall events up to the 10 year, 24-hour rain event according to National Weather Service data http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas14_Volume8.pdf.

TABLE B		STORMWATER BENCHMARKS	
The facility is authorized to discharge from stormwater outfall(s) with serial number(s) as specified in the application for this permit. The benchmarks shall become effective upon issuance of the permit and remain in effect until the expiration of the permit. Such stormwater discharges shall be controlled, and limited, by the facility as specified below:			
PARAMETER	UNITS	BENCHMARK	
Oil & Grease	mg/L	10	
Total Suspended Solids	mg/L	50	

SPECIAL CONDITIONS

1. Drains on secondary containment must remain closed and sealed at all times, except when draining uncontaminated water from containment. Any oil must be removed before stormwater can be released or it must be disposed of in accordance with legally approved methods.
2. To prevent inadvertent release of spilled or leaked contaminants, any pump mounted in the containment structure for the purpose of discharging uncontaminated water shall not be equipped with an automatic float control or other mechanism to automate its operation. Accumulated water must be inspected and treated, if applicable, before being released.
3. Secondary containment structures shall be checked after each measurable precipitation event and the subsequent removal of any accumulated water shall occur as soon as practicable in order to retain maximum containment capacity.

STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Standard Conditions Parts I, dated August 01, 2014, and hereby incorporated as though fully set forth herein.

1. 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 general operating 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 general operating permit application;
 - (b) That the permittee has begun or expects to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the general operating permit application.
2. 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 shall be reopened and modified, or alternatively revoked and reissued to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Section 301(b)(2)(C) and (D), 304(b)(2)(A) and (B), and 307(a)(2) of the CWA, if the effluent standard or limitation issued or approved:
 - (1) Contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
 - (2) Controls any pollutant not limited in this permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a wasteload allocation study, toxicity test, or other information indicates changes are necessary to ensure compliance with Missouri Water Quality Standards (10 CSR 20-7.031).
 - (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.
 - (d) If the Department determines that the permittee's discharges cause, have reasonable potential to cause, or are contributing to exceedances of Missouri's Water Quality Standards.

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

PERMIT RENEWAL

Unless terminated, the permittee shall submit an application for the renewal of this permit by submitting *Form E-Application for General Permit* (Form MO 780-0795) at <http://dnr.mo.gov/forms/780-0795-f.pdf> no later than thirty (30) days prior to the permit's expiration date. If a facility submits a timely and complete application in accordance with 10 CSR 20-6.010(5)(B), (5)(C), and (10)(E)1, as well as § 644.051.10, RSMo 2015, and if the department is unable, through no fault of the permittee, to issue a renewal prior to expiration of the previous permit, the terms and conditions of the expired permit are administratively continued and will remain fully effective and enforceable until such time when a permit action is taken. Failure to submit a renewal application for a facility that is still in operation is a violation of the Missouri Clean Water Law.

As part of the complete application and as required by the federal NPDES eReporting rule, participation in the department's Electronic Discharge Monitoring Report Submission System (eDMR) will be required. Facilities already participating in eDMR need not re-apply upon renewal. Facilities required to participate that are not yet active shall submit the eDMR Permit Holder and Certifier Registration form (Form MO 780-2204) at <http://dnr.mo.gov/forms/780-2204-f.pdf>, unless an alternative is available such as CROMERR services. If qualified, facilities may obtain a temporary or permanent electronic reporting waiver by submitting an eDMR Waiver Request Form (Form MO 780-2692) at <http://dnr.mo.gov/forms/780-2692-f.pdf>. More information can be found at: <http://dnr.mo.gov/env/wpp/edmr.htm>.

Failure to apply for renewal of a permit may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

PERMIT TRANSFER

This permit may not be transferred to a new owner in any fashion except by submitting an *Application for Transfer of Operating Permit* (Form MO 780-1517) at <http://dnr.mo.gov/forms/780-1517-f.pdf> signed by the seller and buyer of the facility along with the appropriate modification fee. In some cases, revocation and reissuance may be necessary. Facilities with transfers carried out without proper notice to the department will be considered to be operating without a permit and may be assessed an administrative penalty.

PERMIT TERMINATION

This permit may be terminated when activities covered by this permit have ceased and no significant materials [as defined in 10 CSR 20-6.200(1)(C)27.] remain on the property or if on the property, are stored in such a way as to have no potential for pollution. Proper closure of any storage structure is required prior to permit termination according to provisions set forth in Standard Conditions, Part 1. In order to terminate this permit, the facility shall notify the department by completing and submitting *Form H – Request for Termination of a General Permit* (Form MO 780-1409) at <http://dnr.mo.gov/forms/780-1409-f.pdf> and shall follow a closure plan approved by the department.

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-G350000

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 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 (permits) 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). Permits are issued for a period of five (5) years unless otherwise specified.

Per 40 CFR 124.56, 40 CFR 124.8, and 10 CSR 20-6.020(1)(A)2., a Fact Sheet 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 permit. A Fact Sheet is not an enforceable part of a permit.

This Fact Sheet is for a:

- Major
- Minor
- Industrial Facility
- Variance
- Master General Permit
- Permit with widespread public interest

Part I – Facility Information

Facility Type: Industrial
Facility SIC Code(s): 4226 Special Warehousing and Storage, Not Elsewhere Classified
5171 Petroleum Bulk Stations and Terminals

Other facilities with above ground tanks for bulk petroleum storage that meets the applicability requirements of this permit, may be also be covered regardless of SIC code.

Facility Description:

This permit authorizes the discharge of accumulated water from the secondary containment structures of the above ground storage of petroleum products, ethanol, or biodiesel with a capacity totaling 20,000 or more gallons, but less than 250,000 gallons. Water from secondary containment structures or sumps is covered by the requirements of this permit.

The sampling and reporting of specific pollutants of concern is required under this permit in accordance with the type of activities carried out by this type of facility. When there is a discharge, the water must be tested annually for the parameters identified by this permit. If there is a visible sheen or odor, the water must not be discharged and must be treated or disposed of through another approved method such as hauling to a wastewater treatment facility.

Industrial stormwater is also covered by the stormwater requirements of this permit for those facilities with SIC codes specifically included due to state or federal regulations.

The development of a Stormwater Pollution Prevention Plan (SWPPP) for inspection and identification of pollutants of concern for the type of facility covered under this permit has been continued. Regulation in 10 CSR 20-6.200(6)7. specifies that general permits shall contain Best Management Practices (BMPs) and or monitoring and reporting requirements to keep contaminated stormwater from being discharged. The BMP and SWPPP requirements are established in accordance with 10 CSR 20-7.031 in a manner that is deemed protective of all possible receiving stream conditions. Local conditions are not considered when developing conditions for a general permit. A facility may apply for a site-specific permit if they desire a review of site-specific conditions.

Benchmarks for Oil and Grease and Total Suspended Solids have been added to the permit for facilities with SIC Codes 4226 and 5171.

The major change in this permit is centered on the establishment of limitations for BTEX components (which were removed during the 2007 permit renewal due to the permit excluding coverage for discharges in proximity to losing streams, sinkholes, and direct conduits to groundwater). Expanded discussion on BTEX components can be found in Part IV-Effluent Limits Determination. A TPH limitation is required as an interim limitation according to the Schedule of Compliance. With the addition of BTEX parameters, TPH is dropped from monitoring in final effluent limitations. Since WQBELs for BTEX component limits are protective of groundwater, setbacks for losing streams, sinkholes and direct conduits to groundwater have been removed from the permit.

Since groundwater and drinking water standards were used in setting effluent limits, setbacks from classified streams and streams, lakes, reservoirs and wells designated as drinking water supply have been removed from the permit. In addition, the setback for losing streams, sinkholes and other direct conduits to groundwater have been removed.

This permit has been reorganized and restructured incorporating the most current language used by the department. Although annual monitoring is required, if visual inspection of accumulated water reveals a visible sheen or other evidence of contamination, the facility is required not to discharge and must correct BMPs to limit the possibility of discharge of contaminated water. A mechanical oil and water separator may be used to remove sheen from the water so that it may be discharged. If more information is needed regarding oil and water separators, the facility is directed to contact the department's appropriate regional office. A list of regional offices and contact information may be found at: <http://dnr.mo.gov/regions/index.html>. Also available is a department publication, *Oil and Water Separators (G14) General Information Technical Bulletin* (PUB0234) available at <http://dnr.mo.gov/pubs/pub234.htm>.

Clarification: Water discharged from secondary containment units is not considered "stormwater," even though it is generated by the accumulation of rainfall within the secondary containment. Once the stormwater enters the secondary containment impoundment, it has a reasonable potential to be impacted by contaminants from the bulk storage within the secondary containment and becomes wastewater.

Part II – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

Per Missouri Effluent Regulations (10 CSR 20-7.015), the waters of the state are divided into 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 Effluent Limitations section. This permit applies to facilities discharging to the following water body categories:

- Missouri or Mississippi River [10 CSR 20-7.015(2)]
- Lakes or Reservoirs [10 CSR 20-7.015(3)]
- Losing Streams [10 CSR 20-7.015(4)]
- Metropolitan No-Discharge Streams [10 CSR 20-7.015(5)]
- Special Streams [10 CSR 20-7.015(6)]
- Subsurface Waters [10 CSR 20-7.015(7)]
- All Other Waters [10 CSR 20-7.015(8)]

Missouri Water Quality Standards (10 CSR 20-7.031) 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 1st classified receiving stream's beneficial water uses shall be maintained in accordance with 10 CSR 20-7.031(4). The requirements established by this permit are intended to be protective of all streams that fall within the categories of receiving water bodies indicated above. A general permit does not take into consideration site-specific conditions.

MIXING CONSIDERATIONS:

This permit applies to receiving streams of varying low flow conditions. Therefore, the effluent limitations must be based on the smallest low flow streams considered, which includes waters without designated uses. As such, no mixing is allowed.

- Not Applicable: Mixing Zone [10 CSR 20-7.031(5)(A)4.B.(I)(a)]
- Not Applicable: Zone of Initial Dilution [10 CSR 20-7.031(5)(A)4.B.(I)(b)]

RECEIVING STREAM MONITORING REQUIREMENTS:

- Not Applicable: There are no receiving water monitoring requirements recommended at this time.

Part III- Rationale and Derivation of Effluent Limitations and Permit Conditions

ANTI-BACKSLIDING:

A provision in the Federal Regulations CWA Section 303(d)(4); CWA Section 402(c); 40 CFR Part 122.44(I) that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- The Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
- **General Criteria.** The previous permit contained a special condition which described a specific set of prohibitions related to general criteria found in 10 CSR 20-7.031(4). In order to comply with 40 CFR 122.44(d)(1), the permit writer has conducted reasonable potential determinations for each general criterion and established numeric effluent limitations where reasonable potential exists. While the removal of the previous permit special condition creates the appearance of backsliding, since this permit establishes numeric limitations where reasonable potential to cause or contribute to an excursion of the general criteria exists the permit maintains sufficient effluent limitations and monitoring requirements in order to protect water quality, this permit is equally protective as compared to the previous permit. Therefore, given this new information, and the fact that the previous permit special condition was not consistent with 40 CFR 122.44(d)(1), an error occurred in the establishment of the general criteria as a special condition of the previous permit. Please see Reasonable Potential Analysis section below for more information regarding the reasonable potential determinations for each general criterion related to this facility.
 - All requirements and effluent limitations in this permit are at least as protective as those previously established. While the 100 foot setback from classified streams and the 2 mile setback from streams, lakes and reservoirs designated as drinking water have been removed from the permit, water quality based effluent limitations have been put in place to protect groundwater and drinking water resources. All setbacks for special waterways remain in the permit.

ANTIDegradation:

Antidegradation policies ensure protection of water quality for a particular water body on a pollutant by pollutant basis to ensure Water Quality Standards are maintained to support beneficial uses such as fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as an Outstanding National Resource Water or Outstanding State Resource Water [10 CSR 20-7.031(3)(C)]. Antidegradation policies are adopted to minimize adverse effects on water. The department has determined that the best avenue forward for implementing the Antidegradation requirements into general permits is by requiring the appropriate development and maintenance of a SWPPP. The SWPPP must identify all Best Management Practices (BMPs) that are reasonable and effective, taking into account environmental impacts and costs. This analysis must document why no discharge or no exposure options are not feasible at the facility. This selection and documentation of appropriate control measures will then serve as the analysis of alternatives and fulfill the requirements of the Antidegradation Rule and Implementation Procedure 10 CSR 20-7.031(3) and 10 CSR 20-7.015(9)(A)5.

Any facility seeking coverage under this permit, which undergoes expansion or discharges a new pollutant of concern, must update their SWPPP and select new BMPs that are reasonable and cost effective. New facilities seeking coverage under this permit are required to develop a SWPPP that includes this analysis and documentation of appropriate BMPs. Renewal of coverage for a facility requires a review of the SWPPP to assure that the selected BMPs continue to be appropriate.

- Applicable: The pollutants of concern in this permit are Ethanol, Stored Hazardous Substances, Oil and Grease, Benzene, Toluene, Ethylbenzene and Xylene. Compliance with the effluent limitations established in this permit, along with the evaluation and implementation of BMPs as documented in the SWPPP, meets the requirements of Missouri's Antidegradation Review [10 CSR 20-7.031(3), 10 CSR 20-7.031 Table A, and 10 CSR 20-7.015(9)(A)5].

BENCHMARKS:

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented. 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 address a benchmark violation with improved BMPs is a permit violation. The 10-year, 24-hour rain event information may be found at:

http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas14_Volume8.pdf.

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 limitations of the permit. Under this permit facilities are required to monitor annually. This assures that water quality is protected without placing undue restriction on small businesses.

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 Toxicity 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 contain only a maximum daily limit (MDL), benchmark, or monitoring requirement determined by the site-specific conditions including the receiving water's current quality. Inspections of the stormwater BMPs occur monthly, and facilities with no compliance issues are usually expected to sample stormwater annually.

If data becomes available that indicates existing water quality will be protected by alternative benchmarks or sampling requirements specific to this industry, the department will propose to incorporate those benchmarks into this general operating permit as part of a general operating permit modification. Such data must be approved by the department as appropriate and representative before it can be considered.

Numeric benchmark values are based on water quality standards or other stormwater permits including the Environmental Protection Agency's (EPA's) Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP). 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. 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.

- Applicable: This facility may have stormwater-only outfalls with benchmarks. The benchmarks listed are consistently achieved in stormwater discharges by a variety of other industries with SWPPPs and is deemed protective of instream water quality and aquatic life.

PUBLIC NOTICE OF COVERAGE FOR AN INDIVIDUAL FACILITY:

The need for an individual public notification process shall be determined and identified in the permit [10 CSR 20-6.020(1)(C)5.].

- Not Applicable: A public notice is not required for these general permit covered facilities.

PUBLIC NOTICE OF COVERAGE FOR AN INDIVIDUAL FACILITY:

Public Notice of reissuance of coverage is not required unless the facility has been found to be in significant noncompliance [10 CSR 20-6.020(1)(C)4.]. The need for an individual public notification process shall be determined and identified in the permit [10 CSR 20-6.020(1)(C)5.].

- Not Applicable: Public Notice is not required for issuance of coverage under this permit to individual facilities for the first time.

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 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 that pollutant.

- Conservative assumption: A Reasonable Potential Analysis was conducted. A reasonable potential to violate water quality standards is assumed for the pollutants of concern due to the nature of the activities carried out under this permit, resulting in the effluent limits contained in the permit.

- (a) Water Quality Standards. To the extent required by law, 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. Each general criterion below was assessed in relation to activities carried out by facilities covered under this permit and numeric limits assigned for criteria where there was a reasonable potential to cause or contribute to an excursion above narrative or numeric water quality standards.
- (b) General Criteria. The following general water quality criteria are 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.**

Based on the activities carried out by the facilities under this general permit, the department has determined there is no reasonable potential for contaminants to cause putrescent, unsightly or harmful bottom deposits.

- (2) **Waters shall be free from oil, scum, and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.**
The department has determined that there is reasonable potential for activities covered under this general permit to cause oil, scum or floating debris in waters of the state. This has been addressed by assigning effluent limits for Oil and Grease, Ethylbenzene, Benzene, Toluene and Xylene. In addition, narrative conditions of the permit prohibit the discharge of water with a visible sheen even if the effluent limits are not exceeded. Such water must be treated to remove the sheen before it can be discharged. The department has determined that the effluent limits and narrative conditions for these pollutants are sufficient to protect water quality standards general criteria.
- (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.**
The department has determined that there is a reasonable potential for activities covered under this general permit to contribute contaminants that could cause unsightly color, offensive odor or prevent full maintenance of beneficial uses. This has been addressed by assigning effluent limits for pH, Ethylbenzene, Benzene, Toluene, Xylene, and Ethanol. The department has determined that the effluent limits for these pollutants are sufficient to protect water quality standards general criteria.
- (4) **Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal, or aquatic life.**
The department has determined that there is a reasonable potential for activities covered under this general permit to contribute contaminants that could be harmful to human, animal or aquatic life. This has been addressed by assigning effluent limits for pH, Ethylbenzene, Benzene, Toluene, Xylene, and Ethanol. The department has determined that the effluent limits for these pollutants are sufficient to protect water quality standards general criteria.
- (5) **There shall be no significant human health hazard from incidental contact with the water.**
The department has determined that there is a reasonable potential for activities covered under this general permit to contribute contaminants that could cause significant health hazard from incidental contact with the water at some facilities covered by this permit. For this reason, monitoring is retained for Stored Hazardous Wastes that may have been present at the facility within the past year.
- (6) **There shall be no acute toxicity to livestock or wildlife watering.**
The department has determined that there is a reasonable potential for activities covered under this general permit to contribute contaminants that could cause toxicity to livestock or wildlife watering. This has been addressed by assigning effluent limits for Ethylbenzene, Benzene, Toluene, Xylene, Ethanol and Stored Hazardous Wastes. The department has determined that the effluent limits for these pollutants are sufficient to protect water quality standards general criteria.
- (7) **Waters shall be free from physical, chemical, or hydrologic changes that would impair the natural biological community.**
Based on the activities carried out by the facilities under this general permit, the department has determined there is no reasonable potential for contaminants to cause physical, chemical or hydrologic changes that would impair the natural biologic community other than what has already been addressed by the effluent limits in this permit.
- (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, RSMo.**
Based on the activities carried out by the facilities under this general permit, the department has determined there is no reasonable potential for the deposition of used tires, car bodies, appliances, demolition debris, used vehicles or equipment or solid waste into waters of the state other than what is addressed by the implementation of a SWPPP for the facility.

SCHEDULE OF COMPLIANCE (SOC):

Per § 644.051, RSMo, a permit may be issued with a Schedule of Compliance (SOC) to provide time for a facility to come into compliance with new state or federal effluent regulations, water quality standards, or other requirements. Such a schedule is not allowed if the facility is already in compliance with the new requirement, or if prohibited by other statute or regulation. An SOC includes 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. *See also* Section 502 (17) of the Clean Water Act, and 40 CFR§ 122.2. For new effluent limitations, the permit includes interim monitoring for the specific parameter to demonstrate the facility is not already in compliance with the new requirement. Per 40 CFR § 122.47(a)(1) and 10 CSR 20-7.031(11), compliance must occur as soon as possible. If the permit provides a schedule for meeting new water quality based effluent limits, an SOC must include an enforceable, final effluent limitation in the permit even if the SOC extends beyond the life of the permit.

- Applicable: This permit contains a Schedule of Compliance. The time given for effluent limitations of this permit listed under Interim Effluent Limitations and Final Effluent Limitations were established in accordance with 10 CSR 20-7.031(11). Existing permitted facilities have been given a schedule of compliance to meet the final effluent limits.

SETBACKS:

Setbacks are common elements of permits and are established to provide a margin of safety in order to protect the receiving water from accidents, spills, unusual events, etc. The setback for losing streams, sinkholes and direct conduits to groundwater has been removed from this permit. New effluent limitations for benzene, toluene, ethylbenzene and xylene have been added to the permit using WQBEL for aquatic life, drinking water and groundwater.

VARIANCE:

As 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.

- This operating permit is not drafted under premises of a petition for variance.

WATER QUALITY STANDARDS:

Per 10 CSR 20-7.031(4), 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 conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality [10 CSR 20-7.031(5)].

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 total amount of pollutant that may be discharged into that stream without endangering its water quality.

- Not Applicable: Wasteload allocations were not calculated. Daily maximum and monthly average limits are equal to the water quality standards for each pollutant. Because this is a Master General Permit, the calculation of WLAs for each facility discharging under this permit is beyond the scope of the permit.

WLA MODELING:

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

- Not Applicable: A WLA study was either not submitted or determined not applicable by department staff.

WHOLE EFFLUENT TOXICITY (WET) TEST:

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

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

305(B) REPORT & TOTAL MAXIMUM DAILY LOAD (TMDL):

Section 305(b) of the Federal CWA 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, maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 305(b) report 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 305(b) report, then a watershed management plan will be developed that shall include the TMDL calculation

- Not Applicable: This facility does not discharge to 305(b) impaired water(s).

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(3)(k) Best Management Practices (BMPs), BMPs are implemented to control or abate the discharge of pollutants when: (1) Authorized under Section 304(e) of the 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 *Developing Your Stormwater Pollution Prevention Plan, a Guide for Industrial Operators* (EPA 833-B-09-002; https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf. [General information may also be found at <https://www.epa.gov/npdes/industrial-stormwater-guidance>.] published by the United States Environmental Protection

Agency (EPA) in June 2015, BMPs are measures or practices used to reduce the amount of pollution entering waters of the state. BMPs may take the form of a process, activity, or physical structure. EPA developed factsheets on the pollutants of concern for specific industries along with the BMPs to control and minimize stormwater (<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>). Along with EPA's factsheets, the International Stormwater BMP database (www.bmpdatabase.org/index.htm) may provide guidance on BMPs appropriate for specific industries. BMPs should be designed to handle discharges resulting from a precipitation event up to and including the 10-year, 24-hour rain event. Estimates of 10 year, 24 hour precipitation events for Missouri may be found at the following NOAA National Weather Service website: http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mo.

Additionally in accordance with 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 stormwater 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.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

In this general permit, TBELs are established through the SWPPP and BMP requirements. Effective BMPs may have to be designed on a site-specific basis. The concurrent implementation of SWPPP and effluent monitoring provides a tool for each facility to evaluate the effectiveness of BMPs to ensure protection of water quality.

WATER QUALITY BASED EFFLUENT LIMITATIONS

In this permit WQBELs are established in accordance with 10 CSR 20-7.031.

Part IV- Effluent Limitations Determination

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this permit.

EFFLUENT LIMITATIONS FOR TABLE A-1 AND A-2:

PARAMETER ALL DISCHARGES	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Flow	gpd	1	*		*	NO	
pH	SU	2, 3	6.5-9.0		6.5-9.0	NO	
Oil & Grease (mg/L)	mg/L	2, 3	15		10	NO	
Ethylbenzene	mg/L	2, 3	0.32		0.32	NO	320 µg/L
Benzene	mg/L	2, 3	0.005		0.005	YES	**
Toluene	mg/L	2, 3	1.0		1.0	YES	**
Xylene	mg/L	2, 3	10		10	YES	**
Ethanol	mg/L	9	*		*	NO	
TPH	mg/L	2, 3	10		10	NO	
Stored Hazardous Waste	mg/L	9	*		8	NO	

* Monitoring requirement only

** Parameter not established in previous state operating permit.

Basis for Limitations Codes:

- | | |
|---|------------------------------------|
| 1. State or Federal Regulation/Law | 7. Antidegradation Policy |
| 2. Water Quality Standard | 8. Water Quality Model |
| 3. Water Quality Based Effluent Limitations | 9. Best Professional Judgment |
| 4. Lagoon Policy | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy | 11. WET Test Policy |
| 6. Antidegradation Review | 12. Dissolved Oxygen Policy |

DERIVATION AND DISCUSSION OF LIMITATIONS:

- **Flow:** In accordance with 40 CFR Part 122.44(i)(1)(ii), the volume of effluent discharged from each outfall is needed to ensure compliance with permitted effluent limitations. If the facility is unable to obtain effluent flow, then it is the responsibility of the facility to inform the department, which may require the submittal of a permit modification.
- **pH:** In accordance with 10 CSR 20-7.031(5)(E), effluent limits are established to meet water quality standards. The state water quality standard for pH is 6.5-9.0 SU. In accordance with the Clean Water Act section 301(b)(1)(C), the more stringent standard must be applied to the permit. Therefore, the state water quality standard 6.5-9.0 SU will be carried over from the previous permit and implemented in this permit
- **Oil & Grease:** This permit has water quality based effluent limitations of 15 mg/L daily maximum and 10 mg/L monthly average for the protection of aquatic life per 10 CSR 20-7.031 Table A. The existing effluent limitations are carried over from the previous permit.
- **Total Petroleum Hydrocarbons:** Effluent limitation for this parameter in the previous permit has been removed from final effluent limitations and replaced with sampling for individual hydrocarbons in BTEX. Values for TPH are strongly influenced by the extraction technique and laboratory method used to quantify the sample, which make test results hard to interpret if the laboratory does not report their method. For this reason TPH alone is no longer used in State of Missouri permits and is now replaced by tests with more standardized methods and results. For this permit, TPH is retained in the schedule of compliance and is removed from final effluent monitoring in favor of effluent limits for individual hydrocarbons (BTEX) found in fuel.
- **Ethylbenzene:** The previous permit limit, based on water quality standards for protection of aquatic life, was retained in this permit.

- **Benzene:** Of the compounds in gasoline, benzene has one of the highest solubilities in water and one of the lowest Henry’s Law constants. Since benzene is an indicator compound, benzene breakthrough would also indicate that other hydrocarbons are no longer being sorbed, as well. Benzene is one of the most toxic constituents of petroleum products (listed as a carcinogen by EPA). Therefore, an effluent limitation of benzene is needed to ensure adequate control of the majority of the many other volatile fuel constituents. Drinking Water Supply (DWS) and Groundwater (GRW) standards based on the water quality standards in 10 CSR 20-7.031 Table A were used to develop effluent limitations. Health-based standards are typically developed to achieve certain risk- based levels based on long-term (lifetime) exposure to the toxic material. Discharges covered by this permit will not typically be discharged directly to a drinking water supply, but since limitations in this permit are not being developed on an individual or site-specific basis, the permit must be protective of all potential uses or exposure scenarios. Due to its toxic nature, any discharges of benzene to drinking water supplies would require a site-specific permit. Since the technologies used to treat benzene and many of the other pollutants covered by this permit can typically achieve minimum laboratory detection or reporting level concentrations, the lowest established DWS/GRW limits are acceptable for establishing effluent limitations.
- **Toluene:** Virtually all of EPA and state issued permits for petroleum secondary containment discharges reviewed in research for this permit contain limits for BTEX (benzene, toluene, ethylbenzene and xylene) components. Since the composition of petroleum products can be highly variable and for some petroleum products any one of the four BTEX components could be the dominant constituent, we have placed limits on toluene based on the water quality standards in 10 CSR 20-7.031 Table A for the protection of Drinking Water Supply (DWS) and Groundwater (GRW).
- **Xylene:** Virtually all of EPA and state issued permits for petroleum secondary containment discharges reviewed in research for this permit contain limits for BTEX components. Since the composition of petroleum products can be highly variable and for some petroleum products any one of the four BTEX components could be the dominant constituent, we have placed limits on xylene based on the water quality standards in 10 CSR 20-7.031 Table A for the protection of Drinking Water Supply (DWS) and Groundwater (GRW).
- **Ethanol:** The previous permit monitoring requirement for ethanol, based on best professional judgement, has been evaluated and retained in this permit. Ethanol production has increased in Missouri over recent years. Ethanol is known to cause lowered dissolved oxygen and fish kills in aquatic systems. It is the department’s determination that ethanol monitoring shall occur until such time that there is sufficient data to analyze and evaluate the risk of harmful effects.
- **Stored Hazardous Wastes:** The previous permit monitoring requirement for stored hazardous wastes, based on best professional judgement, has been evaluated and retained in this permit. Since this permit is for bulk storage facilities and hazardous waste may be stored in bulk on-site, monitoring is required for those facilities that retain bulk storage of hazardous waste materials. Facilities are directed to report annual laboratory results for any hazardous waste materials present. Facilities that store no such materials shall report annually that no such materials are stored on-site.

SAMPLING FREQUENCY:

Sampling frequency is established in accordance with department policy. Effluent limitations are expressed in a daily maximum and a monthly average. Annual monitoring and reporting has been retained from the previous permit. Annual monitoring is required if a stormwater discharge from secondary containment or sump occurs. Annual monitoring and reporting is considered to be reasonable and cost effective while providing sufficient data to evaluate the likelihood of contaminated waters being discharged for these facilities. Results from samples may be submitted as both the daily maximum and the monthly average. If the facility collects multiple samples during any year, the permit requires the facility to submit a monthly average. If no discharges occur during a sampling period, report as “no discharge.”

PART V- BENCHMARKS

BENCHMARKS FOR TABLE B

PARAMETER	UNIT	BASIS FOR BENCHMARK	BENCHMARK	MODIFIED	PREVIOUS PERMIT BENCHMARKS
OIL AND GREASE	mg/L	9	10	YES	NO BENCHMARK
TOTAL SUSPENDED SOLIDS	mg/L	1	50	YES	NO BENCHMARK

Basis for Limitation Codes:

- | | | |
|---|---------------------------|------------------------------------|
| 1. State or Federal Regulation/Law | 5. Ammonia Policy | 9. Best Professional Judgement |
| 2. Water Quality Standard | 6. Antidegradation Review | 10. TMDL or Permit in Lieu of TMDL |
| 3. Water Quality Based Effluent Limitations | 7. Antidegradation Policy | 11. WET Test Policy |
| 4. Lagoon Policy | 8. Water Quality Model | 12. Dissolved Oxygen Policy |

DERIVATION AND DISCUSSION OF BENCHMARKS

The CWA requires that all NPDES discharges to Waters of the U.S. contain technology-based or water-quality based effluent limitations, whichever is more stringent. When the EPA has not established industry specific technology based Effluent Limitation Guidelines, Missouri uses EPA's *Technical Support Document for Water Quality Based Toxics Control* (TSD) method for calculating site-specific water-quality based effluent limitations. The TSD method is based on assumptions and statistics that apply to continuous discharges, not intermittent stormwater discharges and thus do not apply to this permit.

- **Oil and Grease:** This permit has a benchmark of 10 mg/L, which has been determined to be a feasible and affordable Technology Based Effluent Limit. This value is consistently achieved in stormwater discharges by a variety of other industries with SWPPPs.
- **Total Suspended Solids:** this permit has a benchmark of 50 mg/L, which has been determined to be a feasible and affordable Technology Based Effluent Limit. This value is consistently achieved in stormwater discharges by a variety of other industries with SWPPPs.

If data becomes available that indicates existing water quality will be protected by alternative benchmarks specific to this industry, the department will propose to incorporate those benchmarks into this permit as part of a permit modification. Such data must be approved by the department as appropriate and representative before it can be considered.

PART VI- ADMINISTRATIVE REQUIREMENTS

On the basis of preliminary staff review and applicable standards and regulations, the department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit subject to certain effluent limitations, schedules, and special conditions contained herein and within the 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 or because of 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 facility must be notified of the denial in writing.

The department must give public notice of a pending permit or of a new or reissued Missouri State Operating Permit. The public comment period is a length of time not less than thirty (30) days following the date of the public notice, during which interested persons may submit written comments about the proposed permit.

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

- The Public Notice period for this permit was from June 9, 2017 to July 10, 2017. USEPA approved permit draft on X, 2017.

DATE OF FACT SHEET: MAY 30, 2017

COMPLETED BY:
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