

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

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

Permit No. MO-G940000

Owner: <Owner's Name>
Address: <Owner's Address>

Continuing Authority: <Name, or Same as above >
Address: <Address, or Same as above >

Facility Name: <Facility Name>
Facility Address: <Physical address >

Legal Description: ¼, ¼, ¼, Sec. xx, TxxN, RxxW, < county > County
UTM Coordinates: X= , Y=

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 HUC14 #) >

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 -

Process wastewater and/or stormwater discharges associated with fuel spill remediation at any industrial or commercial facility.

This permit authorizes only process wastewater and/or stormwater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with RSMo Section 621.250, 640.013, and 644.051.6; 10 CSR 20-1.020 and 20-6.020 of the Law.

February 1, 2017
Effective Date


Steven Feeler, Acting Director, Division of Environmental Quality

January 31, 2022
Expiration Date


David J. Lamb, Acting Director Water Protection Program

APPLICABILITY

1. This permit authorizes discharge and on-site disposal of wastewater during fuel spill remediation, including wastewaters and stormwaters associated with underground storage tank removals, wastewater generated during the installation of wells for the purpose of monitoring contaminated groundwater, pumping of contaminated groundwater, rain water contacting contaminated soil, pit dewatering, and equipment cleaning. This permit also authorizes earth moving activities associated with fuel spill remediation; therefore a separate land disturbance permit is not required. This Missouri State Operating Permit (permit) authorizes the discharge of process wastewater and stormwater to waters of the state of Missouri from any industrial or commercial facility that has a fuel spill and any facility that the Missouri Department of Natural Resources (department) determines to be in need of this permit.
2. If a facility covered under a current general permit desires to apply for a site-specific permit, the facility may do so by contacting the department for application requirements and procedures.
3. Facilities covered under a current site-specific permit who desire to apply for inclusion under this general permit may contact the department for application requirements and procedures.
4. This permit does not authorize discharges:
 - (a) Within 1,000 feet of areas which would drain to a losing stream, sinkhole or other direct conduit to groundwater;
 - (b) Within two stream miles upstream of reservoirs or lakes used for public drinking water supplies (class L1)¹ or drinking water supply streams with less than 10 cubic feet per second (cfs) (7-day Q₁₀) low flow as defined in 10 CSR 20-7.031 Water Quality Standards;
 - (c) Within two stream miles upstream of biocriteria reference locations¹;
 - (d) Within two stream miles upstream of streams, lakes, or reservoirs identified as critical habitat for endangered species¹;
 - (e) Within 100 feet of a Class W¹ or mitigated wetland, Class L2¹ reservoir, Class P¹ stream or Class C¹ stream.
5. For discharges to Outstanding State Resource Waters (OSRW) or within the watershed of Outstanding National Resource Waters (ONRW), which includes the Ozark National Riverways and the 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. If a no-discharge facility desires to become a facility that is authorized to discharge stormwater, the facility is directed to contact the department to discuss applicability. 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 stormwater 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 so long as the stormwater requirements set forth in this permit are not exceeded. Should a stormwater monitoring value be exceeded, the discharge is considered to cause degradation in water quality of the OSRW or ONRW and the facility must take corrective action to meet the benchmarks. OSRWs and ONRWs are protected against any degradation in quality as defined in 10 CSR 20-7.015(6)(B) and 7.031(3)(C). Failure to take corrective action to address a discharge exceedance and failure to make tangible progress towards achieving compliance with the effluent limitations is a permit violation. More detailed requirements concerning stormwater discharges are found in the Stormwater Requirement section of this permit. If exceedances of stormwater discharge monitoring continue to occur, the department may require the facility to operate as a no-discharge facility under this permit or to apply for a site-specific permit.
 - (c) Does not authorize discharge of process wastewater or pit dewatering directly to an OSRW or within the watershed of an ONRW per 10 CSR 20-7.015(6)(A)3.
6. This permit does not apply to the discharge of any water other than wastewater and stormwater specific to fuel spill remediation activities. For the purpose of this permit, “fuel” means gasoline, crude oil, refined oils, kerosene, aviation fuels, and diesel fuels. It does not include asphalt emulsions, solvents, solvents blended with other materials or oils containing Poly-Chlorinated-Biphenyls (PCBs).
7. This permit does not authorize the construction and operation of Underground Injection Control (UIC) wells used to inject fluids underground.
8. This permit does not authorize the operation of a soil treatment cell (landfarm) or in-situ soil treatment for remediation of contaminated soils.
9. Any test hole or boring deeper than 10 feet may require approval from the Missouri Geological Survey.
10. The department may require any facility authorized by a general permit to apply for a site-specific permit [10 CSR 20-6.010(13)(C)]. Cases where a site-specific permit may be required include, but are not limited to, the following:
 - (a) The discharge(s) is a significant contributor of a pollutant(s) which impairs the beneficial uses of the receiving stream;
 - (b) The discharger is not in compliance with the conditions of the general permit;
 - (c) A Total Maximum Daily Load (TMDL) containing requirements applicable to the discharge(s) approved.

EXEMPTIONS

1. Facilities that discharge wastewater and stormwater directly to a publicly owned treatment facility that has consented to receive such discharges are exempt from this permit. It should be noted, however, that the receiving treatment facility must comply with the notification requirements in their permit before accepting a new waste.
2. A permit is not required for the one time on-site land application of a *de minimis* amount (less than 500 gallons) of contaminated stormwater from Underground Storage Tank (UST) pit closure operations in accordance with 10 CSR 20-6.015(3)(B)14. However, the water must be applied so that it infiltrates into the soil and does not leave the property. Land application is not permitted when soil conditions are frozen, snow-covered, or saturated.
3. A permit is not required for any stormwater runoff that does not come in contact with contaminated soils during UST/AST closures/other remedial activities. To qualify for this exemption, however, stockpiles of contaminated soils will be securely and completely covered over-top and underneath by tarp or other impervious material.
4. Applicants that qualify for and obtain coverage under this general permit are exempted from the requirement for a construction permit for the sole purpose of constructing wastewater treatment devices related to spill remediation activities. Per 644.015.3, RSMo 2015, construction permitting of treatment devices necessary to comply with the requirements of a permit is only required when the facility treats domestic wastewater or is constructing an earthen basin as a storage structure to hold, convey, contain, store or treat domestic, agricultural or industrial process wastewater.

PERMIT REQUIREMENTS

1. All outfalls must be clearly marked in the field and visible from both land and water perspectives.
2. The results of all samples from a discharge that are collected and analyzed must be submitted to the department.
3. If no discharge occurs during a reporting period, reporting is still required. In this case, report as no-discharge.
4. In no case shall any discharge contain floating solids or visible foam in other than trace amounts.
5. No wastewater with visible sheen may be discharged. If the water has a sheen it must either be treated so as to remove the pollutants causing the sheen, or hauled to a permitted treatment facility.
6. Facilities shall manage materials (products, stockpiles of contaminated soils, etc.) to ensure that these materials are not transported off site or into a water of the state during a high water event.
7. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010 and must be reported to the department at the earliest practicable moment, but no greater than 24 hours after the spill occurs. A record of each reportable spill shall be retained with the Stormwater Pollution Prevention Plan (SWPPP) and made available to the department upon request. 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 at the earliest practicable moment after discovery. Leaving a message on a department staff member voice-mail does not satisfy this reporting requirement. This requirement is in addition to the Noncompliance Reporting requirement found in Standard Conditions Part I.
8. Release of a hazardous substance must be cleaned up within 24 hours or as soon as possible and must be reported to the department at the earliest practicable moment, but no greater than 24 hours after the spill occurs. The following spills are required to meet these requirements:
 - (a) Any spill of any material that leaves the property of the facility;
 - (b) Any release of petroleum including crude oil or any fraction thereof, natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas) in excess of 50 gallons for liquids or three hundred cubic feet for gases; and
 - (c) Any spill of any material, outside of secondary containment exposed to precipitation, greater than 25 gallons or an equivalent volume of solid material.
9. 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.

PERMIT REQUIREMENTS (continued)

- (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.
10. For the purpose of this permit, process wastewater includes pit dewatering, well purge water, pumped and treated groundwater, water from equipment cleaning, and any other non-stormwater discharge. In order to comply with Missouri's Antidegradation Implementation Procedure, any discharger may assume significant degradation and complete an Alternatives Analysis to show the highest level of attainable effluent treatment. The conclusion of the Analysis will show the highest level of attainable effluent treatment that is practicable, effective, reliable, and economically efficient. Alternatives for handling or preventing contamination of process wastewater (Best Management Practices) shall also be included in the Analysis. The highest level of Best Management Practices (BMP) or treatment attainable for process wastewater must be implemented.
11. The following minimum Best Management Practices shall be incorporated into each remediation plan:
- (a) Every effort should be made to minimize the amount of water recovered with the spilled fuel/oil;
 - (b) Decanting of water recovered from portable tanks, internal tanks, collection wells, or other storage containers shall be carried out by estimating the optimum retention time (generally 2 to 6 hours) to allow oil or fuel to float to the top of the storage container and underlying water to be decanted per EPA Region 7 *Decanting Guidance for Oil Spill Response*;
 - (c) Water to be decanted shall be withdrawn a minimum of 12 inches below the oil-water interface in any temporary storage container;
 - (d) If water is decanted to a water body it should be discharged to the impacted water body at a location upstream/upflow of a boomed area where oil recovery is being conducted; and
 - (e) Visual monitoring of the decanting operation shall occur to ensure prompt identification of any oil in the decanted water and subsequent corrective action.
12. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (Section 644.055, RSMo). The fees can be found at 10 CSR 20-6.011.
13. Mandatory compliance with all conditions in this permit and those in Standard Conditions Part I, dated August 1, 2014, is required. At no time shall any discharge result in a violation of Water Quality Standards [10 CSR 20-7.031]. A facility will be required to obtain a site-specific permit if the department determines that a site-specific permit is necessary to protect water quality.
14. 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 permitted facilities under this master general permit shall comply with the department's requirements for electronic permitting unless a waiver has been granted by the department. Application to participate in the eDMR system is required as part of the application for general permit coverage in order to constitute a complete permit application and may be accessed at dnr.mo.gov/env/wpp/edmr.htm. Facilities already participating in the eDMR program need not re-apply. The facility may, under certain circumstances, apply for a temporary or permanent waiver from electronic reporting by submitting eDMR Waiver Request form (Form 780-2692, <http://dnr.mo.gov/forms/780-2692-f.pdf>) to the appropriate permitting office

SCHEDULE OF COMPLIANCE

The schedule of compliance for interim effluent limits only applies to facilities that obtained and operated under the previous Master General Permit. Interim effluent limitations shall remain in effect no longer than two years minus one day from the effective date of this master general permit. (See date in Table A-1.) All new facilities seeking coverage under this permit must meet the final effluent limitations in Table A-2 on page 6.

EFFLUENT 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 [no longer than two years minus one day from the effective date of the permit] until January 31, 2019 . All discharges shall be controlled, limited and monitored by the permittee as specified below: All newly permitted facilities are required to meet final effluent limits in table A-2.						
EFFLUENT PARAMETER(S) All Discharges	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS (Note 2)	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	SAMPLING FREQUENCY	SAMPLE TYPE
Flow	mgd	*		*	once/weekday**	24 hr. estimate
Chemical Oxygen Demand (Note 1)	mg/L	120		90	once/month	grab
Total Suspended Solids	mg/L	50		30	once/month	grab
pH Units***	SU	6.5 – 9.0		6.5 – 9.0	once/month	grab
Ammonia as N	mg/L	1.0		1.0	once/month	grab
Oil & Grease	mg/L	15		10	once/month	grab
Total Petroleum Hydrocarbons	mg/L	10		10	once/month	grab
Ethylbenzene	mg/L	0.32		0.32	once/month	grab
Benzene	mg/L	*		*	once/month	grab
Toluene	mg/L	*		*	once/month	grab
Xylene	mg/L	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> VIA THE DEPARTMENT'S eDMR SYSTEM. THE FIRST REPORT IS DUE <u>MONTH 28, 2017</u> . IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE. AS REQUIRED BY THE FEDERAL NPDES eREPORTING RULE, PARTICIPATION IN THE DEPARTMENT'S ELECTRONIC DISCHARGE MONITORING REPORT SUBMISSION SYSTEM (eDMR) IS REQUIRED, UNLESS A WAIVER IS GRANTED. SHOULD A WAIVER TO eDMR BE GRANTED BY THE DEPARTMENT, PAPER REPORTS SHALL BE SUBMITTED IN A TIMELY MANNER TO THE APPROPRIATE REGIONAL OFFICE.						

* Monitoring requirement only.

** Once each weekday refers to Monday, Tuesday, Wednesday, Thursday and Friday. Weekday estimates will be reported individually in monthly discharge monitoring reports.

*** pH is measured in standard pH units and is not to be averaged.

Note 1 – COD analysis shall be conducted via method SM5220D, *Standard Methods for Examination of Water and Wastewater*.

Note 2 – 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.

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 limitations shall take effect [two (2) years after the effective date of the Master General Permit] on February 1, 2019 , and remain in effect until expiration of the Master General Permit. For new facilities, these final effluent limitations shall be effective at issuance of the Master General Permit. All discharges shall be controlled, limited, and monitored by the facility as specified below:						
EFFLUENT PARAMETER(S) All Discharges	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS (Note 1)	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	SAMPLING FREQUENCY	SAMPLE TYPE
Flow	mgd	*		*	once/weekday**	24 hr. estimate
Chemical Oxygen Demand ^Ω	mg/L	120		90	once/month	grab
Total Suspended Solids	mg/L	50		30	once/month	grab
pH Units***	SU	6.5 - 9.0		6.5 – 9.0	once/month	grab
Ammonia as N	mg/L	1.0		1.0	once/month	grab
Oil & Grease	mg/L	15		10	once/month	grab
Ethylbenzene	mg/L	0.32		0.32	once/month	grab
Benzene	mg/L	0.005		0.005	once/month	grab
Toluene	mg/L	1		1	once/month	grab
Xylene	mg/L	10		10	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> VIA THE DEPARTMENT'S eDMR SYSTEM. THE FIRST REPORT IS DUE <u>MONTH 28, 2017</u> . IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE. AS REQUIRED BY THE FEDERAL NPDES eREPORTING RULE, PARTICIPATION IN THE DEPARTMENT'S ELECTRONIC DISCHARGE MONITORING REPORT SUBMISSION SYSTEM (eDMR) IS REQUIRED, UNLESS A WAIVER IS GRANTED. SHOULD A WAIVER TO eDMR BE GRANTED BY THE DEPARTMENT, PAPER REPORTS SHALL BE SUBMITTED IN A TIMELY MANNER TO THE APPROPRIATE REGIONAL OFFICE.						

* Monitoring requirement only.

** Once each weekday refers to Monday, Tuesday, Wednesday, Thursday and Friday. Weekday estimates will be reported individually in monthly discharge monitoring reports.

*** pH shall be measured in standard pH units and is not to be averaged.

^Ω COD analysis shall be conducted via any method listed in 40 CFR 136 as an appropriately sensitive method.

Note 1 – 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.

STORMWATER REQUIREMENTS

- Stormwater shall be monitored in accordance with the effluent limitations listed in Table A-1 and A-2 above. All stormwater samples shall be collected within the first 60 minutes of discharge occurring as a result of precipitation events of 0.1 inches or greater. Stormwater samples shall be collected prior to or at the property boundary. In situations where stormwater has the possibility of entering a water of the state before leaving facility property, samples shall be collected before the discharge enters a water of the state on or off facility property. Samples must be collected from an active discharge. Stormwater samples shall not be taken from standing pools. 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. It is a violation of this permit to fail to comply monitoring requirements.

STORMWATER REQUIREMENTS (continued)

2. Visual inspection and monitoring of stormwater BMPs shall be conducted to determine the overall effectiveness of the SWPPP with regard to pollutants of concern for this permit and to assist the facility in knowing when additional corrective action may be necessary to protect water quality. Visual inspection shall occur on a weekly basis, at a minimum, when materials are exposed to stormwater. If visual inspection reveals a sheen on stormwater, the facility must monitor the discharge and review the SWPPP and Best Management Practices (BMPs) to determine what improvements or additional controls are needed to reduce pollutants in the stormwater discharge(s). Failure to improve BMPs or take corrective action to address a deficiency and failure to make tangible progress towards alleviating stormwater contamination is a permit violation. Exceedances believed to be the result of legacy chemical use at the facility are not exempted from this requirement. Facilities are encouraged to contact the department to formulate a plan for investigation and cleanup if legacy chemical use is suspected to be the cause of exceedances.
3. When applying for coverage under this permit, the facility shall develop a SWPPP. The facility 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*, (number EPA 833-B-09-002) published by the United States Environmental Protection Agency (EPA) in February, 2009 (www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf).
4. The selection of control measures that prevent or reduce the discharge of pollutants in stormwater shall be specified in the SWPPP. The SWPPP shall identify the 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 shall serve as an alternative analysis of technology and fulfill the requirements of Antidegradation [10 CSR 20-7.031(3) and 10 CSR 20-7.015(9)(A)5.]. Failure to implement and maintain the chosen alternatives is a permit violation. Existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address exceedances.
5. New Facilities:
 - (a) For new facilities that are being issued coverage under this general permit for the first time, the SWPPP must be prepared within sixty (60) days and implemented within one hundred eighty (180) days of the permit issuance.
 - (b) Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
 - (c) The SWPPP must be kept on-site or be made readily available to the department upon request. The SWPPP should not be sent to the department unless specifically requested.
6. Existing and Expanding Facilities:
 - (a) The facility was required to prepare a SWPPP for coverage under a previous version of this permit. The facility must review and update the SWPPP to assure that the selected BMPs continue to be appropriate and ensure implementation of all provisions of this permit by permit issuance.
 - (b) Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
 - (c) The SWPPP must be kept on-site or be made readily available to the department upon request. The SWPPP should not be sent to the department unless specifically requested.
7. 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. Pollutants of concern for this permit include Chemical Oxygen Demand, Ammonia, Benzene, Toluene, Ethylbenzene, Xylene and Total Suspended Solids.
 - (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. Selected BMPs shall be designed to meet the requirements of any rainfall event up to and including the 10-year, 24-hour event as defined by the National Weather Service. More information may be found at: http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas14_Volume8.pdf.
 - (c) A schedule for weekly site inspections during stormwater exposure and a brief written report, which includes the name of the inspector, the signature of the inspector, and the date. Site inspections may be conducted monthly during dry periods when no materials are exposed to stormwater. The inspections must include observation and analysis of BMP effectiveness, deficiencies, and corrective action that will be taken. Deficiencies must be corrected within seven (7) days and must be documented in the inspection report. The facility may submit a written request to the department justifying additional time, if necessary, to complete corrective action. The purpose of the SWPPP and the BMPs listed therein is to prevent pollution [10 CSR 20-2.010(56)] of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution of waters of the state or meeting the requirements of this permit. Corrective action means the facility took steps to eliminate the deficiency. Inspection reports must be kept with the SWPPP and must be made available to the department upon request.

STORMWATER REQUIREMENTS (continued)

- (d) A provision for designating an individual to be responsible for environmental matters.
 - (e) 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.
 - (f) A provision for evaluating established requirements in this permit.
8. The following minimum BMPs must be implemented at all facilities:
- (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of stormwater from these substances.
 - (b) Provide collection facilities on-site and arrange for proper disposal of waste products including, but not limited to, petroleum waste products solid waste, de-icing/anti-icing products, and solvents.
 - (c) 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.
 - (d) Provide sediment and erosion control sufficient to prevent sediment loss off of the property, pollution of waters of the state, and to comply with the conditions of this permit, Missouri Clean Water Law, and the CWA. This may require the use of treatment structures such as straw bales, silt fences, sediment basins, or other technology.
 - (e) Provide good housekeeping practices on-site to keep solid waste from entering waters of the state.

STANDARD CONDITIONS

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

1. Water Quality Standards

- (a) To the extent required by law, discharges to waters of the state shall not cause a violation of Missouri Water Quality Standards (10 CSR 20-7.031), including both specific and general criteria.
- (b) General Criteria. The following 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, RSMo.

2. Changes in Discharges of Toxic Substances

In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

- (a) That an activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
 - (3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
 - (4) One milligram per liter (1 mg/L) for antimony;
 - (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - (6) The notification level established by the department in accordance with 40 CFR 122.44(f).

STANDARD CONDITIONS (CONTINUED)

- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
- (1) Five hundred micrograms per liter (500 µg/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7); or
 - (4) The level established by the Director in accordance with §122.44(f).
3. 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 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 assure 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, an effluent limitation derived from a TMDL is developed for the receiving waters, which would then be included in a list of waters of the state not fully achieving Missouri 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* <http://dnr.mo.gov/forms/780-0795-f.pdf> no later than thirty (30) days prior to the permit's expiration date if they wish to continue an activity regulated by this permit after permit expiration. If a renewal application is not received 30 days prior to the expiration date of the permit, the permittee may be required to apply for and obtain a new permit. 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. More information can be found at: <http://dnr.mo.gov/env/wpp/edmr.htm>. The facility may, under certain circumstances, apply for a temporary or permanent waiver from electronic reporting by submitting eDMR Waiver Request form (Form 780-2692, <http://dnr.mo.gov/forms/780-2692-f.pdf>), contacting the appropriate permitting office and/or emailing edmr@dnr.mo.gov. 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* <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 prior notice to the department will be considered to be operating without a permit and may be assessed an administrative penalty.

PERMIT TERMINATION

The permittee shall apply for permit termination when activities covered by this permit have ceased and no significant materials [as defined by 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. Short-term remediations shall request termination upon completion of project. In order to terminate this permit, the permittee shall notify the department's appropriate regional office by completing and submitting *Form H-Request for Termination of a General Permit* <http://dnr.mo.gov/forms/780-1409-f.pdf>.

DUTY OF COMPLIANCE

The facility shall comply with all conditions of this permit. Any noncompliance with this permit constitutes a violation of Chapter 644, Missouri Clean Water Law, 10 CSR 20-6, and 10 CSR 20-7. Noncompliance may result in enforcement action, termination of this permit, or denial of the facility's request for renewal.

DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

Missouri Department of Natural Resources Fact Sheet MO-G940000

The Federal Water Pollution Control Act [Clean Water Act (CWA)] Section 402 of 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 CWA). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (permit) are issued by the Missouri Department of Natural Resources (department) under an approved program, operated in accordance with federal and state laws (Federal CWA 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 CFR124.8, 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 an MSOP.

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 Codes: All SIC codes may be covered under this permit when remediating a fuel spill

Facility Description: This permit authorizes the discharge of process wastewater and stormwater runoff to waters of the State of Missouri from short-term or long-term fuel spill remediation activities. It is anticipated that most remediation projects will be short-term and the permit will be terminated as soon as remediation is complete, however, facilities with ongoing problems may need to maintain permit coverage for an extended period of time. In order to recover free product and any residual contamination remediation activities may include excavation of contaminated soils, digging of interceptor trenches, installation of monitoring wells, etc. It is an unavoidable consequence that some contaminated soils are exposed to precipitation during these activities, therefore the permit includes visual monitoring of stormwater discharges as well as the development and implementation of a SWPPP to ensure that Best Management Practices are adequate to protect water quality. The permit also authorizes discharge of process wastewater such as dewatering of interceptor trenches or sumps, monitoring well purge water, groundwater pumping and treatment, etc. Stormwater shall be treated through the employment of sufficient BMPs and all discharges, both stormwater and process wastewater, must comply with effluent limits. Process wastewater too heavily contaminated to comply with effluent limits shall be hauled to a permitted treatment facility.

This permit establishes a SWPPP requirement for inspection and identification of pollutants of concern from this type of facility or for all facilities covered under this permit. 10 CSR 20-6.200(7) specifies that “general permits shall contain BMP requirements and/or monitoring and reporting requirements to keep the stormwater from becoming contaminated.” 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.

The major changes in this permit are centered on the re-establishment of limitations for BTEX components (which were removed in error from the previous permit) to bring it back in line with department guidelines and other states’ permits. Expanded discussion on BTEX components can be found in Part IV - Effluent Limits Determination. SIC codes have been removed from the permit because the department has determined that this permit may be used for any industrial or commercial facility that must remediate a fuel spill, both short-term and long term. It is anticipated that many facilities will need only short-term coverage and will terminate the permit upon completion of the remediation project; however, a few facilities will require long-term coverage and will continue to receive coverage under this permit. The permit has been clarified that effluent limitations and monitoring applies to all discharges— both stormwater and non-stormwater. Although monthly monitoring is required, if visual inspection of stormwater reveals a sheen or other evidence of contamination, the facility is required to monitor that discharge and correct BMPs to limit the possibility of contamination reoccurrence.

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.

- Not Applicable: All effluent limitations in this permit are at least as protective as those previously established.

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 Chemical Oxygen Demand, Total Suspended Solids, Ammonia, Oil and Grease, Total Petroleum Hydrocarbons, Benzene, Toluene, Ethyl Benzene and Xylene. Compliance with the effluent limitations established in this permit for the protection of General Criteria, 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].

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.

- Not Applicable: A Reasonable Potential Analysis was not conducted for this facility.
 Conservative assumption: 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.

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 two (2) year SOC for Benzene, Toluene and Xylene.

In order to provide guidance to Permit Writers in developing SOC's and attain a greater level of consistency, as of April 9, 2015, the Department issued an updated policy on development of SOC's. This policy provides guidance to Permit Writers on the standard time frames for schedules of common activities and guidance on factors that may modify the length of the schedule such as a Cost Analysis for Compliance. New facilities seeking coverage under this permit are not eligible for interim effluent requirements and must meet final effluent limitations immediately.

- This SOC provides ample time for renewal facilities to sample discharges, evaluate compliance with the effluent limitations, and take corrective action as necessary.

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.

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.

- Wasteload allocations were not calculated.

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; www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf) published by the United States Environmental Protection Agency (EPA) in February 2009, 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 (cfpub1.epa.gov/npdes/stormwater/swsectors.cfm). 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.

INTERIM EFFLUENT LIMITATIONS FOR TABLE A-1:

PARAMETER ALL DISCHARGES	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Flow	gpd	1	*		*	No	
Chemical Oxygen Demand	mg/L	9	120		90	No	
TSS	mg/L	9	50		30	No	
pH	SU	3	6.5-9.0		6.5-9.0	No	
Ammonia as N	mg/L	1, 9	1.0		1.0	No	
Oil & Grease (mg/L)	mg/L	3	15		10	No	
Total Petroleum Hydrocarbons	mg/L	9	10		10	No	
Ethylbenzene	mg/L	3,9	0.32		0.32	No	320 µg/L
Benzene	mg/L	3,9	*		*	YES	**
Toluene	mg/L	3,9	*		*	YES	**
Xylene	mg/L	3,9	*		*	YES	**

FINAL EFFLUENT LIMITATIONS FOR TABLE A-2:

PARAMETER ALL DISCHARGES	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Flow	gpd	1	*		*	No	
Chemical Oxygen Demand	mg/L	9	120		90	No	
Total Suspended Solids	mg/L	9	50		30	No	
pH	SU	3	6.5-9.0		6.5-9.0	No	
Ammonia as N	mg/L	1, 9	1.0		1.0	No	
Oil & Grease (mg/L)	mg/L	3	15		10	No	
Ethylbenzene	mg/L	3,9	0.32		0.32	No	320 µg/L
Benzene	mg/L	3,9	0.005		0.005	YES	**
Toluene	mg/L	3,9	1		1	YES	**
Xylene	mg/L	3,9	10		10	YES	**

* Monitoring requirement only

** Parameter not previously 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 assure 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.
- Chemical Oxygen Demand (COD):** Effluent limitations of 120 mg/L daily max, 90 mg/L monthly avg. have been demonstrated to be protective in most settings, and have been demonstrated to be attainable utilizing existing technology.

- **Total Suspended Solids:** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of water quality. Solids may be present in the wastewater from excavation or other necessary remediation activities. Effluent limitations for each type of receiving water body were set according to 10 CSR 20-70.015(2)-(8) and are considered necessary for protection of Water Quality Standards 10 CSR 20-7.031(4). It is the department's best professional judgment to implement the previous permit limits of 50 mg/L as a daily maximum and 30 mg/L as a monthly average in this permit. The department has determined that these values are protective of state general criteria cited above and technologically achievable.
- **pH:** In accordance with 10 CSR 20-7.031(4)(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.
- **Total Ammonia Nitrogen:** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of water quality. The effluent limitation of 1.0 mg/L for total ammonia nitrogen is protective of water quality in all but the most extreme circumstances per 10 CSR 20-7.031 Table B1, which are not expected to occur from either pumped groundwater or stormwater.
- **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 has been carried over from the previous permit for interim effluent limits. However, 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 interim effluent limitations, TPH is retained as an indicator. For final effluent limitations, TPH is dropped from required 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 (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. Human Health Protection-Fish Consumption (HHF) standards 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, and 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, BTEX, and many of the other pollutants covered by this permit, can typically achieve minimum laboratory detection or reporting level concentrations, the lowest established HHF limits are acceptable for establishing effluent limitations.
- **Toluene:** Virtually all of EPA and state issued permits for petroleum remediation discharges reviewed in research for this permit contained limits for BTEX (benzene, toluene, ethylbenzene and xylene) components. Since the composition of gasoline is highly variable and for some gasoline 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.
- **Xylene:** Virtually all of EPA and state issued permits for petroleum remediation discharges reviewed in research for this permit contained limits for BTEX components. Since the composition of gasoline is highly variable and for some gasoline 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.

SAMPLING FREQUENCY:

Sampling frequency is established in accordance with department policy. Effluent limitations are expressed in a daily maximum and a monthly average. Monthly or daily monitoring is required depending on the parameter, with monthly reporting required. Results from samples may be submitted as both the daily maximum and the monthly average. If the facility collects multiple samples during any month, the permit requires the facility to submit a monthly average. If no discharges occur during a sampling period, report as "no discharge."

DATE OF FACT SHEET: OCTOBER 11, 2016

COMPLETED BY:
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