

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 RSMo as amended, hereinafter, the Law) and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.: MO-G14xxxx

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
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 and Sub-watershed No.: < (USGS HUC12 #) >

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

FACILITY DESCRIPTION

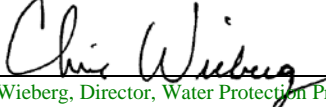
All Outfalls – See page 2 for applicability
Discharges from oil water separators.

This permit authorizes only wastewater 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 §§ 621.250, 640.013, and 644.051.6 RSMo.; 10 CSR 20-1.020 and 20-6.020.

July 1, 2019
Effective Date


Edward B. Galbraith, Director, Division of Environmental Quality

June 30, 2024
Expiration Date


Chris Wieberg, Director, Water Protection Program

A. APPLICABILITY

1. This Missouri State Operating Permit (permit) authorizes discharges from oil water separators (OWS) to waters of the State of Missouri whose function is the treatment of water (without detergents or additives) used to rinse or wash down pavements, dispensers, and other equipment. This permit specifically applies to establishments such as gas stations, pipeline compressor stations, transformer stations, truck stops, and vehicle repair shops. Facilities typically covered by this permit are associated with the primary Standard Industrial Classification (SIC) Codes of 5541 – Gasoline Service Stations and 4959 – Sanitary Services (Oil spill cleanup). Facilities which use an oil water separator to treat waste streams containing different pollutant sources than those described above may need to apply for a site-specific permit. If there are questions about the applicability of this permit to a facility, please contact the applicable Missouri Department of Natural Resources (Department) Regional Office for further permitting direction.
2. This permit does not authorize discharges from OWS and other wastewater treatment devices treating vehicle or equipment wash waters, such as those at carwash facilities. Washing wastewater treatment systems must be constructed and operated according to applicable permits and regulations.
3. This permit does not authorize the discharge of any water other than OWS effluent. This permit does not meet the requirement to obtain a stormwater permit under 10 CSR 20-6.200 or a wastewater permit if required under 10 CSR 20-6.010 for other wastewater discharges. The MOG14xxx permit may be obtained in addition to another permit.
4. This permit does not cover land disturbance activities. Land disturbance activities disturbing one or more acres of total area for the entire project or less than one acre for sites that are part of a common promotional plan of development may require a land disturbance permit. Instructions on how to apply for and receive the online land disturbance permit are located at www.dnr.mo.gov/env/wpp/epermit/help.htm. Questions regarding permit requirements may be directed to the Department's Land Disturbance phone line at [573-526-2082](tel:573-526-2082) or toll free at [855-789-3889](tel:855-789-3889).
5. This permit does not authorize discharges which are located in a way to allow water to be released into sinkholes, caves, fissures, or other openings in the ground which could drain into aquifers directly or indirectly (except losing streams) per 10 CSR 20-7.015(7).
6. This permit does not authorize discharge into the watersheds of lakes and reservoirs designated as L1 in 10 CSR 20-7.031, per 10 CSR 20-7.015(3)(C).
7. This permit does not authorize discharge to watersheds of a Metropolitan No-Discharge Stream (10 CSR 20-7.031 Table F) per 10 CSR 20-7.015(5).
8. For facilities which would discharge directly to Outstanding State Resource Waters:
 - (a) Outstanding State Resource Waters are protected against any degradation in quality as defined in 10 CSR 20-7.015(6)(B) and 7.031(3)(C).
 - (b) This permit authorizes only no-discharge facilities [as defined in 10 CSR 20-6.015(1)(B)7.] to operate.
 - (c) 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)2.-3.] 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 BMPs.
9. For facilities operating within the watershed of Outstanding National Resource Water, which includes the Ozark National Riverways and the National Wild and Scenic Rivers System:
 - (a) This permit authorizes only no-discharge facilities [as defined in 10 CSR 20-6.015(1)(B)7.] to operate.
 - (b) 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)2.-3.] 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 BMPs.
 - (c) When applying for or renewing this permit, the facility must attach an engineering report sealed by a professional engineer licensed in the state of Missouri to the application. The engineering report must demonstrate the facility is capable of operating as a no-discharge facility. The report will provide the details of water usage and the methods of land application.
10. Facilities located within the watershed of an impaired water as designated in the 305(b) Report must be evaluated on a case-by-case basis for inclusion under this permit. Missouri's impaired waters can be found at <https://dnr.mo.gov/env/wpp/waterquality/index.html>. Facilities found to be discharging the listed pollutant(s) of concern for any impaired water may be required to obtain a site-specific permit.

11. 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) is approved.
12. 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.
13. 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.

B. EXEMPTIONS AND EXCLUSIONS

1. Facilities discharging effluent directly to a combined sewer system (as defined in 40 CFR 122.26 and 40 CFR 35.2005) connecting to a publicly owned treatment works which has consented to receive such a discharge are exempt from stormwater permit requirements.
2. OWS which are covered under another Missouri State Operating permit, either site-specific or general, are excluded from this permit. Certain general permits explicitly authorize the use of OWS as stormwater treatment devices; please review permits closely to determine applicability. Site-specific permits may be modified to include discharges from OWS. Please contact the appropriate Regional Office if you have questions about whether a permit covers OWS discharges.
3. OWS which are used to treat only stormwater (which does not include OWS used to capture pavement washwater, drips, leaks, or other wastewaters), are sized and operated per manufacturer specifications, and are one hundred ten (110) gallons or less are exempt from permit requirements.
4. Facilities that have an MOG67xxxx permit, or are operating under permit-by-rule, and are discharging water used for the hydrostatic testing of new petroleum-related oil and gas pipelines and storage tanks in the state of Missouri are not required to obtain a MOG14xxxx permit to construct and operate an oil-water separator to aid in meeting limits for hydrostatic wastewater.

C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

TABLE A		FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES FROM OIL WATER SEPARATORS				
The facility is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall take effect upon issuance and remain in effect until expiration of the Master General Permit. All discharges shall be controlled, limited, and monitored by the facility as specified below:						
EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM		MONTHLY AVERAGE	SAMPLING FREQUENCY	SAMPLE TYPE
OUTFALL: LIMIT SET: FW						
Flow	gpd	*		*	once/year***	24 hr estimate
Benzene	µg/L	*		*	once/year***	grab
Ethylbenzene	µg/L	320		320	once/year***	grab
Oil and Grease	mg/L	15		10	once/year***	grab
pH**	SU	6.5-9.0		--	once/year***	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> VIA THE DEPARTMENT'S eDMR SYSTEM. THE FIRST REPORT IS DUE <u>JANUARY 28, 20XX</u> . THE DISCHARGE SHALL NOT CONTAIN FLOATING SOLIDS, SHEEN, OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

* Monitoring requirement only.

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

*** Yearly monitoring is required. If a discharge occurs during the reporting period (any time during the year), samples shall be collected and tested for the parameters listed in Table A. Report as no-discharge when a discharge does not occur during the reporting period. It is a violation of this permit to fail to sample. 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.

D. PERMIT 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 and may be accessed at dnr.mo.gov/env/wpp/edmr.htm.
 - 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 and Other Waivers from Stormwater Controls (LEWs).
 - (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>. If you experience difficulties with using the eDMR system you may contact edmr@dnr.mo.gov or call 573-526-2082 or toll free 855-789-3889 for assistance.
 - (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 the approved electronic reporting waiver is effective.
2. OWS shall be operated and maintained per manufacturer's specifications and remain in compliance with the requirements and effluent limitations of this permit. A schedule of maintenance must be implemented and records kept for a period of at least three (3) years, per Standard Conditions Part I (2014). Records shall be retained onsite in physical or digital form and be made available to the Department upon request.
3. Oil collected by the OWS shall be treated as used oil consistent with the requirements of 10 CSR 25-11.279.
4. The laboratory results of all samples from a discharge collected and analyzed must be submitted to the Department via the eDMR system.
5. 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.
6. Compliance with all requirements in this permit does not supersede nor remove liability for compliance with county and other local ordinances.
7. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, termination, notice of planned changes, or anticipated non-compliance does not stay any permit condition.
8. Wastewater outfalls must be clearly marked in the field. Land application areas must be marked on a map retained onsite and made accessible to Department personnel on request.
9. The permittee shall furnish to the Department, within a reasonable time, any information required to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit; or to determine if the permittee is in compliance with this permit. The permittee shall also furnish to the Department upon request copies (electronic or otherwise) of records required to be kept by this permit.

10. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
 - (a) The alteration or addition could significantly change the nature or increase the quantity of pollutants in the discharge. This notification applies to pollutants subject to the effluent limitations of this permit as well as new pollutants different from pollutants listed in this permit; or
 - (b) The alteration or addition results in a significant change in disposal practices and may justify the application of permit conditions different from or absent in the current permit.
11. Before releasing stormwater accumulated in petroleum secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen to protect the general criteria found at 10 CSR 20-7.031(4). If the presence of odor or sheen is indicated, the water shall be treated using an appropriate method or disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility. Following treatment and before release, the water shall be tested for oil and grease, benzene, toluene, ethylbenzene, and xylene using 40 CFR part 136 methods. All pollutant levels must be below the most protective, applicable standards for the receiving stream, found in 10 CSR 20-7.031 Table A before discharge is authorized. Records of all testing and treatment of water accumulated in secondary containment shall be stored in the SWPPP and be available on demand to the Department. Stormwater in secondary containment which has contacted industrial products other than petroleum is not authorized for discharge.
12. The following minimum BMPs must be implemented at all facilities:
 - (a) Collection facilities shall be provided onsite, and arrangements made for proper disposal of waste products, including but not limited to crude glycerin, petroleum waste products and solvents, which may be exposed to stormwater.
 - (b) 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.
 - (c) Provide collection facilities onsite 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.
 - (d) Store all paints, solvents, petroleum products, petroleum waste products, and storage containers (such as drums, cans, or cartons) so they 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) Provide good housekeeping practices onsite to keep solid waste from entering waters of the state.
 - (f) Facilities shall manage materials (products, stockpiles, waste piles, etc.) to ensure these materials are not discharged off-site or into a water of the state during a high water event.

E. WASTEWATER STORAGE BASIN REQUIREMENTS

1. Lagoons shall be designed in accordance with 10 CSR 20-8. Construction of an earthen basin or holding structure may require a construction permit. Instructions on how to apply for and receive a construction permit are located at <https://dnr.mo.gov/env/wpp/permits/ww-construction-permitting.htm>. Questions regarding permit requirements may be directed to Department's Water Protection Program phone line at [573-751-1300](tel:573-751-1300), or toll free at [800-361-4827](tel:800-361-4827).
2. The storage basin berms shall be mowed and kept free of any deep-rooted vegetation, burrowing animal dens, or other potential sources of damage to the berms.
3. Ensure adequate provisions are provided to prevent surface water intrusion into storage basins and to protect earthen embankments of storage basins from erosion.
4. The minimum and maximum operating water levels for the storage basin shall be clearly marked. Each basin shall be operated so the maximum water elevation does not exceed two feet below the Emergency Spillway except due to exceedances of the 10-year or 25-year, 24-hour storm events according to National Weather Service data.
5. Per 10 CSR 20-8.200(4)4., an emergency spillway shall be provided that:
 - (a) Prevents the overtopping and cutting of berms;
 - (b) Is compacted and vegetated or otherwise constructed to prevent erosion; and
 - (c) Has the ability for a representative sample to be collected, if discharging.
6. If samples are to be obtained from a discharging wastewater storage basin, they shall be taken at a discrete discharge location such as the spillway or outfall as the basin discharges. Do not dip sample from the storage basin. If the structure does not discharge during a reporting period, report as "C" (no discharge) in the eDMR system.

7. The facility shall maintain this permit until all waste storage structure(s) have been closed in accordance with 10 CSR 20-6.015(5)(B).
8. Additional requirements for No-Discharge Systems:
- Storage volume of the no-discharge basin shall meet the minimum number of days of storage in accordance with 10 CSR 20-8.200(6)(C)1.
 - Process wastewater shall be land applied whenever feasible based on soil conditions, weather conditions, and permit requirements. Storage basin(s) shall be lowered to the minimum operating level prior to each winter by November 30.
 - Storage basins shall have an emergency spillway to protect the structural integrity during operation at near full water levels and in the event of overflow conditions. It is a violation of this permit to place material in the emergency spillway or otherwise cause it to function improperly, as this may result in a catastrophic failure of the storage basin.
 - Any unauthorized discharge from the wastewater storage basins shall be reported to the Department as soon as possible but always within 24 hours of the facility becoming aware of the discharge. Unauthorized discharges should be reported to the appropriate regional office during regular business hours, or to the Department's 24-hour Environmental Emergency Response Hotline at 573-634-2436 outside of regular business hours.

F. LAND APPLICATION AND SOIL MONITORING

TABLE B		LAND APPLICATION MONITORING REQUIREMENTS				
The facility is authorized to conduct land application of wastewater as specified in this permit. The land application of process wastewater and stormwater shall be controlled, limited, and monitored by the facility as specified below:						
PARAMETER(S)	UNITS	FINAL LIMITATIONS			MONITORING REQUIREMENTS †	
		DAILY MAXIMUM		MONTHLY AVERAGE	SAMPLING FREQUENCY	SAMPLE TYPE
OPERATIONAL MONITORING LIMIT SET: OM						
Irrigation Period	hours	*		--	once/day	total measured
Volume Irrigated	gallons	*		--	once/day	total measured
Application Area	acres	*		--	once/day	total measured
Application Rate	inches	*		--	once/day	total measured
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> VIA THE DEPARTMENT'S eDMR SYSTEM. THE FIRST REPORT IS DUE <u>MONTH 28, 20XX</u> . IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE.						
WASTEWATER MONITORING REQUIREMENTS LIMIT SET: LW						
Benzene	mg/L	*		Ω	once/year	grab ††
Ethylbenzene	mg/L	*		Ω	once/year	grab ††
Toluene	mg/L	*		Ω	once/year	grab ††
Xylene	mg/L	*		Ω	once/year	grab ††
Oil and Grease	mg/L	*		Ω	once/year	grab ††
Annual Operating Report ‡	--	--		--	once/year	report
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> VIA THE DEPARTMENT'S eDMR SYSTEM. THE FIRST REPORT IS DUE <u>JANUARY 28, 20XX</u> . IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE.						
SOIL MONITORING REQUIREMENTS LIMIT SET: SM						
Benzene	mg/kg	*		Ω	once/permit	grab
Ethylbenzene	mg/kg	*		Ω	once/permit	grab
Toluene	mg/kg	*		Ω	once/permit	grab
Xylene	mg/kg	*		Ω	once/permit	grab
MONITORING REPORTS SHALL BE SUBMITTED ONCE PER PERMIT CYCLE VIA THE DEPARTMENT'S eDMR SYSTEM. THE REPORT IS DUE BY <u>JANUARY 28, 2024</u> . IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE.						

* Monitoring requirement only.

† If land application does not occur during the report period, report as "C" (No Discharge) in the eDMR system. If a facility does not land apply, this limit set will not be assigned.

‡ See Land Application Requirements #10 for report information.

Ω Monitor at least once per monitoring period. If more than one sample is analyzed in a month, report the average of samples collected during a particular month. In the event no land application occurs during the monitoring period, report "AG" (conditional monitoring not required this monitoring period).

†† Process wastewater which is land applied shall be sampled at the irrigation pump, wet well, or application vehicle.

G. LAND APPLICATION REQUIREMENTS

1. Land application of OWS wastewater is authorized by this permit. Land application of OWS sludge is not authorized by this permit under any circumstances. Oil collected by the OWS shall be treated as used oil consistent with the requirements of 10 CSR 25-11.279.
2. This permit does not authorize application of wastewater to public use areas [10 CSR 20-8.200(6)(F)]. A public contact site is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.
3. Land application shall not adversely affect a threatened or endangered species or its designated critical habitat.
4. Land application of OWS wastewater:
 - (a) Shall not result in a discharge of process wastewater from land application fields;
 - (b) Shall not occur during frozen, snow covered, or saturated soil conditions, or when a forecasted precipitation event is likely to produce runoff within 24 hours of land application [10 CSR 20-6.015(1)(B)7];
 - (c) Shall occur only during daylight hours;
 - (d) Shall not be land applied within thirty (30) days prior to crop harvesting or grazing by cattle;
 - (e) Shall not exceed 0.25 inches/hour; 0.5 inch/day; 1.0 inch/week; and 24 inches/year;
 - (f) Shall not occur on slopes exceeding 12 percent (%); and
 - (g) Shall not cause surface ponding or runoff of process wastewater from the application site during land application.
 - (h) Shall not occur, per 10 CSR 20-8.200(6), within:
 - 1) 50 feet of the property line or public road;
 - 2) 300 feet up-gradient of a public or privately owned drinking water impoundment or intake, or water supply well not located on property;
 - 3) 150 feet of an occupied residence, public building, or public use area; and
 - 4) 300 feet of a sinkhole, losing stream, or other direct conduit to groundwater.
5. The process wastewater land application system shall be operated so as to provide uniform distribution of process wastewater over the entire irrigation site.
6. For row crop irrigation, a complete ground cover of vegetation shall be maintained on the land application site unless the crop field has erosion control measures or a slope of 3 percent (%) or less.
7. The land application site and system shall be visually inspected at least hourly during process wastewater land application to check for runoff and equipment malfunctions. A log of inspections shall be kept and made available to the Department upon request. Inspection log shall at a minimum contain all of the following for each day of application: date of application, weather conditions, soil moisture conditions, application method, total volume applied, and total area used.
8. There shall be no land application of any pollutant in sufficient amounts to cause harm to the soil structure or productivity, or cause stress or toxicity to plant life.
9. These requirements do not supersede nor remove liability for compliance with county and other local ordinances.
10. Records shall be maintained and summarized into an annual operating report by January 28th of each year for the previous calendar year and submitted via eDMR. The reports shall be stored, physically or electronically, with the records for this permit and shall be made available to Department staff upon request. The annual report shall include the following:
 - (a) Record of maintenance and repairs performed during the year, average number of times per month the facility is checked to see if it is operating properly, and description of any unusual operating conditions encountered during the year;
 - (b) The number of days of storage the basin(s) are designed to have; the number of days the storage basin(s) has discharged during the year, the discharge flow, the reasons discharge occurred, and effluent analysis performed;
 - (c) A summary of the land application operations including freeboard at the start and end of the year, the number of days of land application for each month, the total gallons land applied, the total acres used, crops grown, crop yields per acre, the application rate in inches/acre/day and total for the year, the monthly and annual precipitation received at the facility, a summary of testing results for process wastewater; and
 - (d) A summary of any problems or deficiencies encountered, corrective action taken, and improvements planned.

H. STANDARD CONDITIONS

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

I. SPECIAL CONDITIONS

1. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under 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 contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit.
2. Changes in Discharges of Toxic Substances. In addition to the reporting requirements under §122.41(1), all facilities with this permit must notify the Director as soon as they know or have reason to believe:
 - (a) 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 the discharge will exceed the highest of the following notification levels:
 - 1) One hundred micrograms per liter (100 µg/L);
 - 2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
 - 3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
 - 4) One milligram per liter (1 mg/L) for antimony;
 - 5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - 6) The notification level established by the Department in accordance with 40 CFR 122.44(f).
 - (b) An 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 the 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 the pollutant in the permit application in accordance with §122.21(g)(7).
 - 4) The level established by the Director in accordance with §122.44(f).
3. Reporting of Non-Detects:
 - (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated.
 - (b) The permittee shall not report a sample result as “Non-Detect” without also reporting the detection limit of the test. Reporting as “Non-Detect” without also including the detection limit will be considered failure to report, which is a violation of this permit.
 - (c) The permittee shall report the “Non-Detect” result using the less than sign and the minimum detection limit (e.g., <10).
 - (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for the parameter.
 - (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
 - (f) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the “<MDL” shall be reported as indicated in item (c).

J. PERMIT RENEWAL

1. 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.
2. When a facility submits a timely and complete application in accordance with 10 CSR 20-6.010(10)(C)1, 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 is a violation of the Missouri Clean Water Law. 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.

3. 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>.

K. PERMIT TRANSFER

1. This permit may not be transferred to a new owner or continuing authority 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. Standard Condition Part 1, Subsection D.7 applies.
2. Facilities that have undergone transfers of ownership without prior notice to the Department will be considered to be operating without a permit.

L. PERMIT TERMINATION

1. 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. Whenever a release or a potential for release from a permitted facility is permanently eliminated, the existing permit may be terminated.
2. Proper closure of any effluent storage structure is required prior to permit termination. See <https://dnr.mo.gov/pubs/pub2568.htm> for more information on closure.
3. Permits do not terminate automatically upon expiration. In order to terminate this permit, the permittee shall notify the Department's appropriate regional office by completing and submitting *Request for Termination of Operating Permit* <http://dnr.mo.gov/forms/780-1409-f.pdf>. The Department may require inspection of the premises prior to granting termination of a permit.

Missouri Department of Natural Resources Fact Sheet MO-G14xxxx

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 Code(s): 5541, 4959, other
Facility Description: This permit authorizes the discharge of wastewater from OWS tanks to waters of the State of Missouri whose function is the treatment of water (without detergents or additives) used to rinse or wash down pavements.

This permit specifically applies to establishments such as gas stations, pipeline compressor stations, transformer stations, truck stops, and vehicle repair shops. Facilities typically covered by this permit are associated with the primary Standard Industrial Classification (SIC) Codes of 5541 – Gasoline Service Stations and 4959 – Sanitary Services (oil spill cleanup). Facilities which use an OWS to treat waste streams containing different pollutant sources than those described above may need to apply for a site-specific permit. If there are questions about the applicability of this permit to a facility, please contact the applicable Missouri Department of Natural Resources (Department) Regional Office for further permitting direction.

CHANGES TO THIS PERMIT INCLUDE:

- Updated language throughout the permit to current permit language used by the Department.
- Changed the exemptions to be in line with Underground Tank Technical Regulations (see below).
- Clarified and updated setbacks.
- Added eDMR language.
- Adds benzene as a monitoring requirement in effluent.
- Requires minimum site BMP implementation.
- Adds a once per permit cycle land application soil monitoring requirement.
- Adds benzene, toluene, and xylene to land application wastewater monitoring requirements.
- Adds land application and storage basin requirements.
- The requirement to submit monitoring reports for wastewater storage basins was removed.

CLARIFICATION:

Per 10 CSR 26-2.010(1)-(2), OWS must be covered (permitted) under section 402 or 307(b) of the Clean Water Act, which are the National Pollutant Discharge Elimination System (NPDES) program and the Pretreatment program, respectively, or be subject to Underground Storage Tanks Technical Regulations. This permit removes the exemption previously granted to facilities voluntarily using the OWS to treat only stormwater whose oil and grease originated from vehicle parking and/or fueling, such as parking lots, gas stations, convenience stores, and truck stops. This exemption was replaced with exemptions in line with Underground Storage Tank Technical Regulations:

- OWS covered under another Missouri State Operating permit, either site-specific or general, are excluded from this permit. Certain general permits explicitly authorize the use of OWS as stormwater treatment devices, please review the permit closely to determine applicability. Site-specific permits may be modified to include discharges from OWS. Please contact the appropriate Regional Office if you have questions about whether a permit covers OWS discharges.
- OWS which are used to treat only stormwater (not including OWS used to capture pavement washwater or other wastewaters), are sized and operated per manufacturers specifications, and have a capacity of one hundred ten (110) gallons or less are excluded from permitting requirements.
- All other OWS must be covered by this NPDES permit.

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. 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)]; except L1.
- Losing Streams [10 CSR 20-7.015(4)]
- Metropolitan No-Discharge Streams [10 CSR 20-7.015(5)]; no discharge facilities only.
- Special Streams [10 CSR 20-7.015(6)]; no discharge facilities only.
- 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 limitations established by this permit are intended to be protective of all streams falling 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 [10 CSR 20-7.031(5)(A)4.B.(I)(a)]. No Zone of Initial Dilution is allowed. [10 CSR 20-7.031(5)(A)4.B.(I)(b)].

RECEIVING STREAM MONITORING REQUIREMENTS:

There are no receiving water monitoring requirements recommended at this time.

Part III – Rationale and Derivation of Effluent Limitations & Permit Conditions

305(B) REPORT, 303(d) LIST, & TOTAL MAXIMUM DAILY LOAD (TMDL):

Section 305(b) of the Federal CWA requires each state identify waters not meeting Water Quality Standards and for which adequate water pollution controls have not been required. Water Quality Standards protect such beneficial uses of water as whole body contact, maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of waters which are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed which shall include the TMDL calculation. For facilities with an existing general permit before a TMDL is written on their receiving stream, the Department will evaluate the permit and may require any facility authorized by this general permit to apply for and obtain a site-specific operating permit. Requests for coverage of a new facility under this general permit will be evaluated on a case-by-case basis for facilities located within the watershed of an impaired water as designated on the 305(b) Report.

- ✓ Conditional: The Department will review all discharges to impaired waters on a case-by-case basis.

ANTI-BACKSLIDING:

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

- ✓ Applicable: Limitations in this operating permit for the reissuance conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.

- ✓ The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
 - The previous permit special conditions contained a specific set of prohibitions related to general criteria found in 10 CSR 20-7.031(4); however, there was no determination as to whether the discharges have reasonable potential to cause or contribute to excursion of those general water quality criteria in the previous permit. Federal regulations 40 CFR 122.44(d)(1)(iii) requires instances where reasonable potential (RP) to cause or contribute to an exceedance of a water quality standard exists, a numeric limitation must be included in the permit. Rather than conducting the appropriate RP determination, the previous permit simply placed the prohibitions in the permit. These conditions were removed from the permit. Appropriate reasonable potential determinations were conducted for each general criterion listed in 10 CSR 20-7.031(4)(A) through (I) and effluent limitations were placed in the permit for those general criteria where it was determined the discharge had reasonable potential to cause or contribute to excursions of the general criteria. Specific effluent limitations were not included for those general criteria where it was determined the discharges will not cause or contribute to excursions of general criteria. Removal of the prohibitions does not reduce the protections of the permit or allow for impairment of the receiving stream. The permit maintains sufficient effluent limitations, monitoring requirements and best management practices to protect water quality. See General Criteria Considerations below.
 - The previous permit required monitoring and reporting on no-discharge storage basins. The permit writer determined this is an unnecessary parameter, and does not provide relevant information to the Department. The permittee is required to maintain the basins in a no-discharge manner, reporting of freeboard levels is not necessary.
 - Language in the previous permit prohibited discharges within 1,000 feet of outstanding state resource waters. This setback language in the previous permit is believed to have been established to provide a buffer between the discharge and the receiving stream, thus reducing the potential for general water quality criteria to be violated by a facility's discharge. This permit prohibits facilities directly discharging into these waterbodies. It is believed this requirement is equally protective of water quality.

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.

- ✓ Applicable: the pollutants of concern for this permit are ethylbenzene, oil and grease, and pH. Antidegradation applies to all new or expanded discharges. For new or expanded facilities that are eligible for coverage under this permit, the technology/treatment required by the conditions in this permit are expected to protect the General Criteria and not cause water quality standards violations. In addition, less-degrading options (beyond those required in this permit) are not expected to be economically efficient. Based on this analysis, new permittees and permittees proposing an increase in design flow do not need to obtain a site-specific Antidegradation review. [10 CSR 20-7.031(3) and Table A and 10 CSR 20-7.015(9)(A)5.]

GENERAL CRITERIA CONSIDERATIONS:

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants which have been determined to cause, have the reasonable potential to cause, or to contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The rule further states pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above a narrative criterion within an applicable State water quality standard, the permit shall contain a numeric effluent limitation protecting the narrative criterion. The previous permit included the narrative criteria as specific prohibitions placed upon the discharge. These prohibitions were included in the permit absent any discussion of the discharge's reasonable potential to cause or contribute to an excursion of the criterion.

In order to comply with this regulation, the permit writer has completed a reasonable potential determination on whether the discharge has reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). These specific requirements are listed below followed by derivation and discussion (the lettering matches the rule itself, under 10 CSR 20-7.031(4)). In instances where reasonable potential exists, the permit includes numeric limitations to address the reasonable potential. In instances where reasonable potential does not exist, the permit includes monitoring of the discharges potential to impact the receiving stream's narrative criteria. Finally, all of the previous permit narrative criteria prohibitions have been removed from the permit given they are addressed by numeric limits where reasonable potential exists. It should also be noted Section 644.076.1, RSMo as well as Section D – Administrative Requirements of Standard Conditions Part I of this permit state it shall be unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri which are in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule, or regulation promulgated by the commission.

- (A) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.

- For all facilities, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because nothing in DMR records or permit writer research indicates putrescent wastewater would be discharged from the facilities covered under this permit.
 - For all facilities, there is no RP for unsightly or harmful bottom deposits preventing full maintenance of beneficial uses because nothing in DMR records or permit writer research indicates unsightly or harmful bottom deposits would be discharged from the facilities covered under this permit.
- (B) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.
- For all facilities, there is RP for oil in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because DMR data reviewed by the permit writer indicates oil may be present in sufficient amounts to impair beneficial uses. The permit writer has retained oil and grease limitations from the previous permit to protect this general criterion.
 - For all facilities, there is no RP for scum and floating debris in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because DMR data and research reviewed by the permit writer do not indicate scum and floating debris will be present in sufficient amounts to impair beneficial uses.
- (C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.
- For all facilities, there is no RP for unsightly color or turbidity in sufficient amounts preventing full maintenance of beneficial uses because no DMR data or research done by the permit writer indicates unsightly color or turbidity will be present in sufficient amounts to impair beneficial uses.
 - For all facilities, there is no RP for offensive odor in sufficient amounts preventing full maintenance of beneficial uses because nothing found by permit writer research indicates offensive odor will be present in sufficient amounts to impair beneficial uses.
- (D) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life.
- The permit writer considered specific toxic pollutants when writing this permit. Numeric effluent limitations are included for those pollutants which could be discharged in toxic amounts. These effluent limitations are protective of human health, animals, and aquatic life.
- (E) There shall be no significant human health hazard from incidental contact with the water.
- Much like the condition above, the permit writer considered specific toxic pollutants when writing this permit, including those pollutants which could cause human health hazards. The discharge is limited by numeric effluent limitations for those conditions which could result in human health hazards.
- (F) There shall be no acute toxicity to livestock or wildlife watering.
- The permit writer considered specific toxic pollutants when writing this permit. Numeric effluent limitations are included for those pollutants which could be discharged in toxic amounts. These effluent limitations are protective of livestock and wildlife watering.
- (G) Waters shall be free from physical, chemical or hydrologic changes which would impair the natural biological community.
- For all facilities, there is no RP for physical or hydrologic changes which would impair the natural biological community because nothing in research done by the permit writer indicates this industry would discharge effluent which causes physical or hydrologic changes which would impair the natural biological community.
 - It has been established any chemical changes are covered by the specific numeric effluent limitations established in the permit.
- (H) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- There are no solid waste disposal activities or any operation which has reasonable potential to cause or contribute to the materials listed above being discharged through any outfall.

MAJOR WATER USER:

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

OPERATOR CERTIFICATION REQUIREMENTS:

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

- ✓ Not Applicable: This facility is not required to have a certified operator.

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 which are or may be discharged at a level which 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 any given pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the water quality standard, the permit must contain effluent limits for the pollutant.

- ✓ Conservative assumption: A traditional statistical Reasonable Potential Analysis has not been conducted for this master general permit; but instead the Department has made a reasonable potential determination based on sources of pollutants related to water quality standards. Activities performed by facilities covered under this master general permit were evaluated as to whether discharges have reasonable potential to cause or contribute to excursions of general criteria listed in 10 CSR 20-7.031(4). 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.
- ✓ Permit writers use the Department's permit writer's manual (<http://dnr.mo.gov/env/wpp/permits/manual/permit-manual.htm>), the EPA's permit writer's manual (<https://www.epa.gov/npdes/npdes-permit-writers-manual>), program policies, and best professional judgment. For each parameter in each permit, the permit writer carefully considers all applicable information regarding technology based effluent limitations, effluent limitation guidelines, and water quality standards. Best professional judgment is based on the experience of the permit writer, cohorts in the Department and resources at the EPA, research, and maintaining continuity of permits if necessary. For stormwater permits, the permit writer is required per 10 CSR 6.200(6)(B)2 to consider: A. application and other information supplied by the permittee; B. effluent guidelines; C. best professional judgment of the permit writer; D. water quality; and E. BMPs. Part V provides specific decisions related to this permit.
- ✓ The permit writer reviewed industry materials, available DMR data, past inspections, and other available documents and research to evaluate general and narrative water quality reasonable potential for this permit. Per the permit writer's best professional judgment, based on available data and full and accurate disclosure on application materials, this industry demonstrates reasonable potential for excursions from the general or narrative water quality criteria. See Part IV: Effluent Limit Determinations for specific parameter RP.

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 may include 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.

- ✓ Not Applicable: This permit does not contain a SOC.

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.

- ✓ Per 10 CSR 20-7.015(5) and 10 CSR 20-7.031(7), this permit does not authorize discharges to No-Discharge watersheds. These are special streams designated in regulation, which do not allow any discharges except clean uncontaminated stormwater. As this permit authorizes wastewater discharges, there is no discharge to these watersheds authorized.
- ✓ Per 10 CSR 20-7.015(7), this permit does not authorize discharges which are located in a way to allow water to be released into sinkholes, caves, fissures, or other openings in the ground which could drain into aquifers directly or indirectly. This is to protect groundwater, which is a water of the state and a drinking water source.
- ✓ Per 10 CSR 20-7.015(3)(C), this permit does not authorize discharge into the watersheds of lakes and reservoirs designated as L1. These are lakes and reservoirs constructed primarily for drinking water use.
- ✓ Per 10 CSR 20-7.015(6)(B) and 7.031(3)(C) Outstanding National and State Resource Waters are protected against any degradation in water quality, so stricter conditions apply in these watersheds. No discharge and land application facilities are authorized in these areas.

SLUDGE – DOMESTIC BIOSOLIDS:

Biosolids are solid materials resulting from domestic wastewater treatment meeting federal and state criteria for beneficial use (i.e. fertilizer). Sewage sludge is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information: <http://extension.missouri.edu/main/DisplayCategory.aspx?C=74> (WQ422 through WQ449).

- ✓ Not applicable: this condition is not applicable to the permittee for this facility.

SLUDGE – INDUSTRIAL:

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

- ✓ Not applicable: this permit does not authorize land application of industrial sludge or oil from the OWS. Sludge must be removed by contract hauler, incinerated, stored in the lagoon, etc.

SPILL REPORTING:

Any emergency involving a hazardous substance must be reported to the Department's 24-hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The Department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply when the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I. <http://dnr.mo.gov/env/esp/spillbill.htm>.

Underground and above ground storage devices for petroleum products, vegetable oils and animal fats are subject to control under SPCC and are expected to be managed under those provisions. Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) which are transported, stored, or used for maintenance, cleaning or repair shall be managed according to the provisions of RCRA and CERCLA. These storage devices are not covered under this general permit because to do so would create a double jeopardy for the permitted facility. Permit requirements cover those fueling areas and storage devices which fall below the threshold of SPCC, RCRA and CERCLA regulations.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITATIONS:

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 which may be discharged into the stream without endangering its water quality.

- ✓ Not Applicable: no mixing is allowed under general permits because the permit must protect for the lowest flow of all rivers and streams in the state therefore a low flow of zero is established; Water Quality Standards are used in place of Wasteload Allocations.

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 include in each NPDES permit conditions to achieve water quality established under Section 303 of the CWA, including state narrative criteria for water quality.

Part IV – Effluent Limitations Determination

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

TABLE A

EFFLUENT LIMITATIONS FOR DISCHARGES FROM OWS:

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
FLOW	MGD	*	*	SAME	ONCE/YEAR	ONCE/YEAR	24 HR. EST
BENZENE	µg/L	*	*	NEW	ONCE/YEAR	ONCE/YEAR	GRAB
ETHYLBENZENE	µg/L	320	320	SAME	ONCE/YEAR	ONCE/YEAR	GRAB
OIL & GREASE	mg/L	15	10	SAME	ONCE/YEAR	ONCE/YEAR	GRAB
pH **	SU	6.5-9.0	--	SAME	ONCE/YEAR	ONCE/YEAR	GRAB

* Monitoring and reporting requirement only.

** Report the minimum and maximum pH values; pH is not to be averaged.

DERIVATION AND DISCUSSION OF LIMITATIONS:

Flow

The estimated volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. The facility will report the estimated flow in millions of gallons per day (MGD).

Benzene

Monitoring only, new to this permit. The previous permit did not require monitoring for this parameter on the basis that there is no aquatic life water quality standards for this parameter; however, the permit writer determined there are human health water quality standards for this parameter. EPA recommends Benzene as the primary indicator for failure of petroleum removal BMPs.

The previous permit writer intended ethylbenzene to be used as an indicator pollutant for benzene and other petroleum in the discharge. DMRs showed detections of ethylbenzene at some facilities. As this permit authorizes discharge in many settings around the state, the permit writer believes benzene should be monitored as well to ensure human health is being protected. The human health water quality standard for benzene is 71 µg/L, meaning it is significantly lower than the aquatic life protection of ethylbenzene. If benzene is found in comparable levels as ethylbenzene in the discharges, there is potential for the need for limitations to protect human health. Monitoring is instituted so the data may be evaluated at next renewal of this permit.

Ethylbenzene

Daily maximum limit of 320 µg/L, monthly average limit of 320 µg/L, continued from the previous permit. Inadequately maintained OWS fail to properly remove pollutants from stormwater. This allows pollutants, including petroleum, to flow through the OWS and into waters of the state. Determining failure of petroleum removal BMPs requires sampling for compounds found in petroleum. Four major compounds found in most petroleum products are benzene, toluene, ethylbenzene, and xylene. Protection of aquatic life limits for ethylbenzene are 320 µg/L daily maximum and 320 µg/L monthly average.

Oil & Grease

15 mg/L daily maximum; 10 mg/L monthly average; continued from the previous permit. DMR data from permitted facilities showed exceedances of oil and grease; therefore, limitations are continued to protect receiving water bodies. Oil and grease is considered a conventional pollutant, and is one of the primary pollutants of concern in OWS discharges. OWS are used for treatment of wastewater and stormwater to remove oil and grease constituents. If the separator is improperly sized or operated, significant oils may be discharged from the device.

Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or toluene, but these constituents are often lost during testing due to their boiling points. It is recommended to perform separate testing for these constituents if they are a known pollutant of concern at the site, i.e., aquatic life toxicity or

human health is a concern. Results do not allow for separation of specific pollutants within the test, they are reported, totaled, as “oil and grease”.

Per 10 CSR 20-7.031 Table A1: *Criteria for Designated Uses*; 10 mg/L is the standard for protection of aquatic life. This standard will also be used to protect the general criteria found at 10 CSR 20: 7.031 (4). 10 mg/L is the level at which sheen is expected to form on receiving waters. Oils and greases of different densities will possibly form sheen or unsightly bottom deposits at levels which vary from 10 mg/L. To protect the general criteria, it is the responsibility of the permittee to visually observe the discharge and receiving waters for sheen or bottom deposits.

pH

6.5 to 9.0 SU – instantaneous grab sample. Water quality limits [10 CSR 20-7.031(5)(E)] are applicable to this outfall, continued from the previous permit. DMRs showed exceedances of this parameter, therefore limits are continued.

TABLE B

EFFLUENT LIMITATIONS FOR LAND APPLICATION OPERATIONAL MONITORING:

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
IRRIGATION PERIOD	hours	*	--	SAME	ONCE/YEAR	ONCE/YEAR	TOTAL MEASURED
VOLUME IRRIGATED	gallons	*	--	SAME	ONCE/YEAR	ONCE/YEAR	TOTAL MEASURED
APPLICATION AREA	acres	*	--	SAME	ONCE/YEAR	ONCE/YEAR	TOTAL MEASURED
APPLICATION RATE	inches	*	--	SAME	ONCE/YEAR	ONCE/YEAR	TOTAL MEASURED

* Monitoring and reporting requirement only

** Report the minimum and maximum pH values; pH is not to be averaged

DERIVATION AND DISCUSSION OF LIMITATIONS:

Irrigation Period, Volume Irrigated, Application Area, Application Rate

Monitoring is continued from the previous permit. These parameters are to monitor to show appropriate land application is being done performed and within amounts required by this permit.

EFFLUENT LIMITATIONS FOR LAND APPLICATION WASTEWATER MONITORING REQUIREMENTS:

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
BENZENE	mg/L	*	--	NEW	ONCE/YEAR	ONCE/YEAR	GRAB
ETHYLBENZENE	mg/L	*	--	SAME	ONCE/YEAR	ONCE/YEAR	24 HR. EST
TOLUENE	mg/L	*	--	NEW	ONCE/YEAR	ONCE/YEAR	GRAB
XYLENE	mg/L	*	--	NEW	ONCE/YEAR	ONCE/YEAR	GRAB
OIL AND GREASE	mg/L	*	--	SAME	ONCE/YEAR	ONCE/YEAR	GRAB
ANNUAL OPERATING REPORT	--	--	--	SAME	ONCE/YEAR	ONCE/YEAR	REPORT

* Monitoring and reporting requirement only

DERIVATION AND DISCUSSION OF LIMITATIONS:

Benzene, Toluene, Xylene

Monitoring only, new to this permit. Permit writer included these parameters using best professional judgment. The previous permit required ethylbenzene monitoring only; however, as this monitoring is being done on wastewater being land applied, the permit writer believes the addition of benzene, toluene, and xylene to be prudent as the land application has the potential to contact ground water in certain situations; these pollutants have both human health and groundwater water quality standards.

Ethylbenzene

Monitoring is continued from previous permit. The permittee shall monitor the wastewater being land applied once per year to ensure the amounts of ethylbenzene is within safe loading for soils. The permit writer did not have any data available for review this renewal period, meaning there is no reason for the permit writer to apply limits at this time.

Oil and Grease

Monitoring is continued from the previous permit. Oil and grease in the wastewater has the potential to impact plant growth and soil health. This parameter is monitored to ensure the amounts of oil and grease in the wastewater is within a safe loading for the receiving soils.

Annual Operating Report

Annual report required, continued from previous permit. Land application records shall be maintained and summarized into an annual operating report by January 28th of each year for the previous calendar year period and submitted via eDMR. The reports shall be stored with the records for this permit and shall be made available to Department staff upon request. The annual report shall include the following:

- (e) Record of maintenance and repairs performed during the year, average number of times per month the facility is checked to see if it is operating properly, and description of any unusual operating conditions encountered during the year;
- (f) The number of days the storage basin(s) has discharged during the year, the discharge flow, the reasons discharge occurred, and effluent analysis performed;
- (g) A summary of the land application operations including freeboard at the start and end of the year, the number of days of land application for each month, the total gallons land applied, the total acres used, crops grown, crop yields per acre, the application rate in inches/acre/ day and for the year, the monthly and annual precipitation received at the facility, a summary of testing results for process wastewater; and
- (h) A summary of any problems or deficiencies encountered, corrective action taken, and improvements planned.

EFFLUENT LIMITATIONS FOR LAND APPLICATION SOIL MONITORING REQUIREMENTS:

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
BENZENE	mg/kg	*	--	NEW	ONCE/PERMIT	ONCE/PERMIT	GRAB
ETHYLBENZENE	mg/kg	*	--	NEW	ONCE/PERMIT	ONCE/PERMIT	24 HR. EST
TOLUENE	mg/kg	*	--	NEW	ONCE/PERMIT	ONCE/PERMIT	GRAB
XYLENE	mg/kg	*	--	NEW	ONCE/PERMIT	ONCE/PERMIT	GRAB

* Monitoring and reporting requirement only

DERIVATION AND DISCUSSION OF LIMITATIONS:

Benzene, Ethylbenzene, Toluene, Xylene

Monitoring only, new to this permit. Permit writer included these parameters using best professional judgment. The previous permit did not require soil monitoring. The permit writer believes the nature of the land applied wastewater merits soil monitoring, as the components of the wastewater have the potential to cause an impairment in the soil. Benzene, ethylbenzene, toluene, and xylene have the potential to cause toxicity in the soil, and Risk Based Target Levels for soil have been developed for these parameters by the State of Missouri. See the MRBCA document and appendices at <https://dnr.mo.gov/env/hwp/mrbcadocument.htm> for values and more information.

Part V– Sampling and Reporting Requirements

SAMPLING FREQUENCY:

Sampling frequency is established in accordance with Department policy and is retained from the previous permit. Effluent limitations are expressed in a daily maximum and a monthly average. 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.”

SAMPLING TYPE JUSTIFICATION:

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

SUFFICIENTLY SENSITIVE ANALYTICAL METHODS:

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

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(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the permit. The proposed determinations are tentative pending public comment.

PUBLIC MEETING:

The public meeting for this permit was held December 6, 2018.

PUBLIC NOTICE:

The Department shall give public notice when 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 03/29/2019 to 04/29/2019. No comments were received.

DATE OF FACT SHEET: 03/14/2019

COMPLETED BY:

AMBERLY SCHULZ, ENVIRONMENTAL SPECIALIST III
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION – STORMWATER AND CERTIFICATION UNIT
(573) 751-8049
Amberly.schulz@dnr.mo.gov