

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-G822000

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= (round to the nearest whole number)

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

No-Discharge Facility - SIC Code 2011-2099 & 5812

Land Application or subsurface dispersal system of wastes from the following industries including, but not limited to, SIC 20xx - Light Commercial Food Products Industry and SIC 5812 - Eating Places (restaurant grease traps) onto grass land, crop land, or timber land for use as fertilizer and soil amendment.

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.

May 23, 2017
Effective Date


Steven Feeler, Acting Division Director, Division of Environmental Quality

May 22, 2022
Expiration Date


David J. Lamb, Acting Director, Water Protection Program

APPLICABILITY

1. This general permit authorizes the land application and subsurface dispersal of process wastewaters and sludges from light commercial food products industry, restaurant grease traps, or wastes determined by the Department of Natural Resources (department) to be fundamentally the same as these types. Permittees (facilities) that may receive coverage under this permit are those with primary Standard Industrial Classification (SIC) Codes including, but not limited to:

<u>SIC Code</u>	<u>Activity</u>
20xx	Major Group - Food and Kindred Products (2001-2099)
201x	Meat Products (2011-2015)
202x	Dairy Products (2021-2026)
203x	Canned, Frozen and Preserved Fruits, Vegetables, and Food Specialties (2032-2038)
204x	Grain Mill Products (2041-2048)
205x	Bakery Products (2051-2053)
206x	Sugar and Confectionery Products (2061-2068)
207x	Fats and Oils (2071-2079)
208x	Beverages (2082-2087)
209x	Miscellaneous Food Preparations and Kindred Products (2091-2099)
5812	Restaurants (grease trap pumping only for this permit)

2. This permit does not cover land disturbance activities. A land disturbance general permit must be obtained for coverage of land disturbance activities per the requirements set in MO-RA00000 and may be obtained through electronic permitting (ePermitting) at <https://dnr.mo.gov/env/wpp/epermit/help.htm>.
3. In the event that an earthen basin is required, a construction permit must be obtained. A construction permit is not required for oil and water separators built to meet permit requirements.
4. For the purposes of this permit, *land application* shall mean any surface application of wastes or wastewater, including materials that are incorporated into the soil or ‘knifed in.’ Subsurface *injection or dispersal* shall mean systems with primary treatment prior to wastewater entering stationary subsurface distribution lines in the soil. The distribution lines may be pressurized or non-pressurized.
5. For the purpose of this permit, a *land application facility* is a facility where process wastes are land applied or stored for subsequent land application, including earthen basins. The term *land application facility* also applies to haulers who land apply wastewater. Such haulers must obtain a permit per Standard Conditions III, Section D.
6. For the purpose of this permit, *permitted land application sites* shall be defined as sites that are owned, rented or leased by the permittee. These sites must be listed in the facility description. Land application by permitted contract haulers to sites with a spreading agreement, that are not owned, rented or leased by the facility producing or contract hauler spreading the wastewater, are not required to be listed in this permit. However the contract hauler shall maintain a list of addresses, county plat numbers, or a marked map of these sites as part of their record keeping outlined in the Land Application Management Plan.
7. This general permit only authorizes department approved subsurface dispersal systems as treatment for Commercial Food Products Industry Major Group 20 (SIC Codes 2011-2099). Per 40 CFR 144 a septic system, regardless of size, that receives any amount of industrial or commercial wastewater is considered a Class V injection well.
8. This general permit does not authorize Class V injection wells other than shallow subsurface dispersal systems. If wastewater is to be injected into a traditional well structure, a site specific permit must be obtained in order to conduct the underground injection activity. A traditional well structure is defined as a bored, drilled, or driven shaft whose depth is greater than the largest surface dimension; or dug hole whose depth is greater than the largest surface dimension; or, an improved sinkhole [40 CFR 144.3].
9. Domestic wastewater generated in association with the other industrial activities covered by this permit, such as onsite restrooms at a business, may also be processed in the land application system or subsurface dispersal system. Domestic wastewater is limited to not more than 500 gallons per day. Wastes may be land applied onto grass land, crop land, or timber land at agronomic rates suitable for beneficial use as organic fertilizer and soil conditioner.
10. Land application facilities with design flows greater than 10,000 gallons per day must obtain a site specific permit. Subsurface injection or absorption facilities with design flows greater than 1,000 gallons per day must obtain a site specific permit.
11. 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 per 10 CSR 20-6.010(13).

APPLICABILITY (continued)

12. The following setbacks apply to both surface land application and subsurface dispersal. For additional setbacks specific to surface land application facilities only, see #13 below. This permit does not authorize land application or subsurface dispersal:
 - (a) Within 300 feet of a Class W¹ or mitigated wetland,
 - (b) Within 300 feet upstream of streams, lakes, or reservoirs with the designated use of drinking water supply, any public or privately owned well or other drinking water supply;
 - (c) Within 100 feet of any classified perennial or intermittent streams or tributaries, public or privately owned ponds or lakes;
 - (d) Within 300 feet of sinkholes or other direct conduit to groundwater;
 - (e) Within 500 feet of an Outstanding State Resource Water¹ (OSRW) or Outstanding National Resource Water¹ (ONRW);
 - (f) Within 1,000 feet upstream of streams, lakes, or reservoirs identified as critical habitat for endangered species;
 - (g) Within 1,000 feet upstream of biocriteria reference locations¹.
13. In addition to the required setbacks above, surface land application shall not occur:
 - (a) Within 150 feet of an occupied residence, public building or public use area; or
 - (b) Within 50 feet of the property line, public road, or drainage ditch.
14. Within the watershed of Outstanding National Resource Waters (ONRW), which includes the Ozark National Scenic Riverways and the National Wild and Scenic Rivers System, this permit authorizes no-discharge facilities [as defined in 10 CSR 20-6.015(1)(B)] to operate. Any discharge from a no-discharge facility will be considered a violation of this permit unless a catastrophic or chronic storm event as defined in 10 CSR 20-6.015(1)(B) occurs. In the event of a catastrophic or chronic storm event, the no-discharge facility is authorized to release only the amount of stormwater required to prevent damage to the facility or established Best Management Practices (BMPs).
15. Each land application facility as defined by this permit shall have its own general permit. If wastes are being land applied in more than one department region, then a permit must be acquired for each region represented. Contact any department office for a regional boundary determination.
16. This permit is not applicable to facilities that land apply or subsurface disperse wastewater to public use areas, such as a golf course. This activity is authorized only by site specific permit.
17. 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 department determines that the quality of waters of the state may be better protected by requiring the owner/operator of a permitted site to apply for a site specific permit
 - (b) The facility is not in compliance with the conditions of the general permit;
 - (c) A Total Maximum Daily Load (TMDL) containing requirements applicable to the permit is approved.
18. The permittee will be notified in writing of the need to apply for a site specific permit or a different general permit. When a site specific permit or different general permit to replace this general permit is issued to the authorized permittee, the applicability of this general permit to the permittee is automatically terminated upon the effective date of the site specific or different general permit.
19. These requirements do not supersede nor remove liability for compliance with county or other local ordinances.

EXEMPTIONS FROM STATE PERMIT REQUIREMENTS

1. No-discharge land application facilities that generate less than 3,000 gallons per year and that are in compliance with Missouri Water Quality Standards (10 CSR 20-7.031) are exempted from the requirement to obtain an operating permit. This exemption applies only to the types of facilities described in this permit and only to those facilities applying wastewater to land surface. Construction of an earthen storage basin is still subject to construction permitting requirements.
2. Per 10 CSR 20-6.015(3)(B)12, an operating permit is not required for process waste holding structures from which the contents are hauled to a permitted treatment or disposal facility, if the owner has a written contract with the hauler and written approval from the receiving facility.
3. Per 10 CSR 20-6.015(3)(B)13 contract haulers are not required to have a permit under this rule if all waste is hauled to a permitted facility.

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

EXEMPTIONS FROM STATE PERMIT REQUIREMENTS (continued)

4. One time or short-term land application events during clean up of spills or environmental emergencies are exempted with prior approval from the department.

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) Application 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>.
 - (d) Waivers from Electronic Reporting.
 - 1) The permittee must electronically submit compliance monitoring data and reports unless a waiver is granted by the department in compliance with 40 CFR Part 127.
 - 2) The permittee may obtain a temporary or permanent electronic reporting waiver by first submitting an eDMR Waiver Request Form (Form 780-2692): <http://dnr.mo.gov/forms/780-2692-f.pdf>, by contacting the appropriate permitting office or emailing edmr@dnr.mo.gov. The department will either approve or deny this electronic reporting waiver request within 120 calendar days of receipt.
 - 3) Only permittees with an approved waiver request may submit monitoring data and reports on paper to the Department for the period that the approved electronic reporting waiver is effective.
2. The results of all samples from a discharge that are collected and analyzed must be submitted to the department as directed.
3. All permitted land application sites and subsurface dispersal locations must be maintained on a map and made available to the department upon request. In the case of permitted haulers who land apply on many different sites with spreading agreements, those sites shall be listed in the land application operational report associated with the hauler's permit along with the date wastewater was applied to each site and maintained on a map to be made available to the department upon request.
4. Permittees that use contract haulers are responsible for compliance with all the terms of this permit including final disposal, unless the hauler has a separate permit issued by the department; or the hauler transports the wastewater to another permitted facility.
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.

LAND APPLICATION AND SUBSURFACE DISPERSAL MONITORING REQUIREMENTS

TABLE A		ANNUAL MONITORING AND REPORTING REQUIREMENTS				
The facility is authorized to conduct land application of process wastewater as specified in this permit. A representative sample of wastes to be land applied shall be monitored by the facility as specified below:						
PARAMETER(S)	UNITS	FINAL LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	SAMPLING FREQUENCY	SAMPLE TYPE
Process Wastewater for SIC Codes 20XX						
Limit Set: FW						
Total Kjeldahl Nitrogen *** (TKN)	mg/L	*		Ω	annual	grab
Total Phosphorus as P**	mg/L	*		Ω	annual	grab
Total Sodium**	mg/L	*		Ω	annual	grab
Total Suspended Solids	mg/L	*		Ω	annual	grab
Total Chloride as Cl**	mg/L	*		Ω	annual	grab
pH (not to be averaged)	Standard Units	6.0 – 9.0		6.0 – 9.0	annual	grab
Oil and Grease	mg/L	*		Ω	annual	grab
Process Wastewater for SIC Code 5812						
Limit Set: GT						
Total Sodium**	mg/L	*		Ω	annual	grab
Total Suspended Solids	mg/L	*		Ω	annual	grab
Total Chloride as Cl**	mg/L	*		Ω	annual	grab
pH (not to be averaged)	Standard Units	6.0 – 9.0		6.0 – 9.0	annual	grab
Oil and Grease	mg/L	*		Ω	annual	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> VIA THE DEPARTMENT’S eDMR SYSTEM AS REQUIRED BY THE FEDERAL NPDES REPORTING RULE. SHOULD A WAIVER TO eDMR BE GRANTED BY THE DEPARTMENT, PAPER REPORTS SHALL BE SUBMITTED IN A TIMELY MANNER TO THE APPROPRIATE REGIONAL OFFICE. THE FIRST REPORT IS DUE <u>JANUARY 28, 2018</u> . IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE.						

Ω Monitor and report annually. If more than one sample is analyzed, report the average of samples collected during a particular month. In the event that no land application occurs during the monitoring period, report “conditional monitoring not required this monitoring period.”

* Monitoring requirement only.

** Conversion Factors for laboratory testing results: [mg/L or mg/kg or ppm] x [conversion factor] = [pounds per Unit Volume]

Unit Volume	Conversion Factors
lbs./acre inch	0.226
lbs./1,000 gallons	0.0083
lbs./100 cubic feet	0.0062
lbs/ton (wet weight)	0.002

LAND APPLICATION (SURFACE) RATE LIMITS

1. Land application rates shall not exceed any of the following limitations:
 - (a) Sludge shall not exceed 10 dry tons per acre per year.
 - (b) Wastewater shall not exceed 0.2 inch/hour; 0.5 inch per day; 1.0 inches per week; and 24 inches per year;
 - (c) Application rates shall not exceed the following:

TABLE B	LAND APPLICATION RATE CRITERIA
Parameter	Maximum Annual Loading
Kjeldahl Nitrogen, Total	150 lbs./acre/year
Oil and Grease	1000 lbs./acre/year
pH, Standard Units	6.0 – 9.0 in applied wastes

TABLE C		LAND APPLICATION FACILITY OPERATING REPORT REQUIREMENTS				
The facility is authorized to conduct land application of process wastewater as specified in this permit. The land application of process wastewater shall be controlled, limited, and monitored by the facility as specified below:						
PARAMETER(S)	UNITS	FINAL LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MINIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	SAMPLING FREQUENCY	SAMPLE TYPE
Earthen Storage Basin Operational Monitoring Limit Set: SB						
Storage Basin Freeboard (Note 2)	feet	*			once/month	measured
	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	SAMPLING FREQUENCY	SAMPLE TYPE
Precipitation	inches	*			daily	24 hour estimate
Land Application Operational Monitoring (Note 1) Limit Set: LA						
Irrigation Period	hours	*			daily	total
Volume Irrigated	gallons	*			daily	total
Application Area	acres	*			daily	total
Application Rate	inches	0.5			daily	total
LAND APPLICATION OPERATING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> VIA THE DEPARTMENT'S eDMR SYSTEM. SHOULD A WAIVER TO eDMR BE GRANTED BY THE DEPARTMENT, PAPER REPORTS SHALL BE SUBMITTED IN A TIMELY MANNER TO THE APPROPRIATE REGIONAL OFFICE. THE REPORT IS DUE <u>DATE 28, 20XX</u> FOR THE PREVIOUS MONTH. IT IS A VIOLATION OF THIS PERMIT TO FAIL TO REPORT IF LAND APPLICATION OCCURS.						

* Sample as required and report resulting value monthly.

Note 1 - Facilities shall report required parameters when land application occurs during the reporting period. Daily reporting is required only for days when land application occurs. If irrigation does not occur during the reporting period, no reporting is required.

Note 2 - Storage basin freeboard shall be reported as storage basin water level in feet below the overflow level and shall be reported as the daily minimum distance below the overflow and a monthly average. If the facility does not have a storage basin the facility shall not be assigned this permitted feature and storage basin operational monitoring and reporting is not required.

LAND APPLICATION FACILITY OPERATIONAL REQUIREMENTS

1. Land application of process 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;
 - (c) Shall occur during daylight hours;
 - (d) Shall not be land applied within thirty (30) days prior to crop harvesting or grazing by cattle;
 - (e) Shall not occur on slopes exceeding 20 percent (%);
 - (f) Shall not cause surface ponding or runoff of process wastewater from the application site during land application.
2. Land application facilities shall be operated as no-discharge facilities in accordance with 10 CSR 20-6.015(1)(B)7. A no-discharge facility is a facility designed and operated to hold or land apply, without direct discharge to surface or subsurface waters of the state all waste flows and associated stormwater flows up to and including a 10 year-24 hour precipitation event, which can be demonstrated using the National Weather Service's Precipitation-Frequency Atlas of the United States found at http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas14_Volume8.pdf.
3. The land application site and system shall be visually inspected daily during process wastewater land application to check for runoff and equipment malfunctions. Alarm systems are encouraged for daylight land application, but are not required. A log of inspections shall be kept onsite for 5 years and made available to the department upon request.
4. Plastic, paper, and other solid material exceeding 0.5 inch in diameter, shall not be land applied.

LAND APPLICATION FACILITY OPERATIONAL REQUIREMENTS (continued)

5. Oil and grease that is separated through use of grease traps or oil & water separators is not suitable for subsurface dispersal. As such, it shall be land applied and must be incorporated by soil tillage or “knifed-in” within six (6) hours of surface application per 40 CFR 503.33. During times when it is not possible to land apply such as frozen, snow covered or saturated soil conditions for an extended period of time, oil and grease shall be hauled to an approved treatment and disposal facility.
6. Sludge may be land applied onto grass land, crop land, timber, or other similar agricultural or silvicultural lands at agronomic rates suitable for beneficial use as an organic fertilizer and soil conditioner as long as there are no public access sites receiving land applied sludge and any root crops, or vegetable crops that receive sludge application are not used for human consumption.
7. Sludge shall not be applied to gardens, or crops to be used for human consumption or any public use area such as parks or golf courses. Facilities wishing to apply sludge to public use areas must apply for a site specific permit.
8. Wastes shall be land applied using a system that shall be operated so as to provide uniform distribution of waste materials over the entire application site. Dumping in batches or piles, or spreading of a pile using a blade, disc, or similar equipment is not acceptable.
9. Land application sites shall be well vegetated during the application periods or vegetation should be established as soon as practicable after waste incorporation within the normal crop planting and harvesting season.
10. 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.
11. A Land Application Management Plan shall be developed to address the Land Application Rate Criteria, Best Management Practices and other requirements contained in this permit. Any facility requiring more information regarding the contents of the required annual Land Application Management Plan, the department has placed the *No Discharge Operation and Maintenance Manual Checklist* fact sheet online at <http://dnr.mo.gov/pubs/pub2704.htm>. The permit contains conservative limits in order to reduce monitoring and reporting. If alternate limits are desired, a site specific permit must be obtained.
12. Annual application rates shall conform to the above mentioned Land Application Management Plan but shall not exceed the rates specified under the Land Application Rate Limits in Table B above.
13. All land application facility personnel shall be trained regarding the land application procedures as outlined in this permit and documented in the Land Application Management Plan. Proof of this training, such as a signed statement of material covered, date of training, attendees, etc., shall be made available to the department if requested. Additional information regarding wastewater management that may be used in the training process is located at: <http://extension.missouri.edu/main/DisplayCategory.aspx?C=74>, items WQ421 through WQ449.

EARTHEN STORAGE BASIN REQUIREMENTS

1. This permit does not authorize construction of earthen storage basins for waste material. A separate construction permit is required for authorization for construction of an earthen storage basin.
2. No-discharge Systems: The minimum and maximum operating water levels for the storage basin shall be clearly marked. Each basin shall be operated so that storage basin freeboard shall be no less than two feet below the Emergency Spillway except due to exceedances of the 10-year, 24-hour storm events according to National Weather Service data. Process wastewater shall be land applied whenever feasible based on soil and weather conditions and permit requirements. Storage basin(s) shall be lowered to the minimum operating level prior to each winter by November 30.
3. For storage basins which have an emergency spillway to protect the structural integrity of structures during operation at near full water levels and in the event of overflow conditions, the spillway shall be at least one foot below top of berm. It is a violation of this permit to place material in the emergency spillway or otherwise cause it to cease to function properly, as this may result in a catastrophic failure of the storage basin.
4. The storage basin berms shall be mowed and kept free of any trees, muskrat and other animal dens, or other potential sources of damage to the berms.
5. Emergency Bypass: Any unauthorized discharge from the storage basin shall be reported to the department as soon as possible but always within 24 hours of the facility becoming aware of the discharge per Standard Condition Part 1. A discharge is a violation of this permit unless it is an overflow of a storage basin caused by precipitation exceeding the 10-year, 24-hour rain event, based on the National Oceanic and Atmospheric Administration at the following sources: http://www.nws.noaa.gov/oh/hdsc/PF_documents/TechnicalPaper_No40.pdf or http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas14_Volume8.pdf. The permittee is required to record and maintain precipitation data as part of this permit. If the permittee fails to collect and record precipitation data, the department will rely upon data from the nearest reliable weather data collection station when determining compliance with this permit. Monitoring

EARTHEN STORAGE BASIN REQUIREMENTS (continued)

shall take place once per day while discharging during an emergency bypass, unless this requirement is waived in writing by the department. Test results are due on the 28th day of the month after the cessation of the discharge. During a bypass, permittees shall monitor for the constituents listed below.

Parameter	Units	Sample Type
Flow	mgd	measured
Biochemical Oxygen Demand	mg/L	grab
Total Suspended Solids	mg/L	grab
Total Ammonia Nitrogen	mg/L	grab
pH	Standard Units	grab

SUBSURFACE ABSORPTION OPERATIONAL REQUIREMENTS – CLASS V WELLS

1. In accordance with 40 CFR 144.26 and 144.83, subsurface systems dispersing industrial wastewater to a leach field are required to register as a Class V underground injection well with the department. For each active, new or modified Class V Well, submit a Class V Well Inventory Form to the Missouri Department of Natural Resources, Geological Survey Program, P.O. Box 250, Rolla, Missouri 65402. This form can be requested from the Geological Survey Program or can be found at the following website: <http://dnr.mo.gov/forms/780-1774-f.pdf>.
2. New facilities proposing a Class V well for subsurface injection must apply for an operating permit 60 days before beginning construction.
3. For all new facilities, subsurface systems shall be designed and certified by a professional engineer registered in Missouri in accordance with all applicable design regulations [10 CSR 20-8]. The facility must be built in accordance with the professional design engineer’s plans and specifications. The facility must be designed to treat the site’s industrial wastewater flows and to reduce such contaminants as Biochemical Oxygen Demand, Total Suspended Solids, and Fats, Oils and Grease so as to prevent drainfield clogging and system malfunctions. Where industrial waste strength is characterized as higher than high strength domestic wastewater, the designer must propose a pretreatment system and demonstrate that pretreatment will reduce strength to the level of high strength domestic wastewater or better before entering the soil treatment area. The design shall insure that there will be no ponding or surfacing of wastewater and that all wastewater discharged is further treated by the soil in the soil treatment area. Septic tanks shall be designed to handle industrial wastewater.
4. Facilities previously permitted under this permit for subsurface absorption or injection may maintain coverage under this permit provided there is no evidence of groundwater impacts, ponding, surfacing of wastewater or other malfunction of the system. If system failure becomes evident, any new system to be installed shall meet the requirements for new facilities in #3 above.
5. All subsurface dischargers must comply with 40 CFR 144.82, which prohibits the movement of fluids containing any contaminant into underground sources of drinking water during the construction, maintenance, conversion, and plugging or closure of injection wells.
6. Per 40 CFR 144.12(c) and 40 CFR 144.82(a)(2) , if at any time the department learns that a Class V well may cause a violation of primary drinking water regulations under 40 CFR 142, the permittee shall complete one of the following actions upon instruction of the department:
 - (a) Obtain an individual site specific permit;
 - (b) Take such actions as may be necessary to prevent the violation; or
 - (c) Comply with conditions imposed by the department during enforcement action.
7. Subsurface absorption systems are allowed to operate during snow covered conditions as long as soil is not frozen at the depth of absorption.
8. Records of maintenance for subsurface systems must be maintained for at least 5 years. Examples include filter replacement, pumping (removal) of sludge from tanks, etc. These records shall be made available during inspection, or upon department request.

STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Standard Conditions Parts I and Standard Conditions Part III, dated August 1, 2014 and March 1, 2015; and hereby incorporated as though fully set forth herein.

SPECIAL CONDITIONS

1. Water Quality Standards

- (a) To the extent required by law, discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

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 2,5-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
 - (4) One milligram per liter (1 mg/L) for antimony;
 - (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - (6) The notification level established by the department in accordance with 40 CFR 122.44(f).
- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) Five hundred micrograms per liter (500 µg/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7); or
 - (4) The level established by the Director in accordance with §122.44(f).

3. All records and reports required under this permit shall be made available for inspection by the department during normal working hours and copies of such records and reports shall be provided upon request by the department.

4. 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 a facility submits a timely and complete application in accordance with 10 CSR 20-6.010(5)(B), (5)(C), and (10)(E)1, as well as § 644.051.10, RSMo 2015, and if the department is unable, through no fault of the permittee, to issue a renewal prior to expiration of the previous permit, the terms and conditions of the expired permit are administratively continued and will remain fully effective and enforceable until such time when a permit action is taken. Failure to submit a renewal application for a facility that is still in operation is a violation of the Missouri Clean Water Law. As part of the complete application and as required by the federal NPDES eReporting rule, participation in the department's Electronic Discharge Monitoring Report Submission System (eDMR) will be required. Facilities already participating in eDMR need not re-apply upon renewal. More information can be found at: <http://dnr.mo.gov/env/wpp/edmr.htm>. Failure to apply for renewal of a permit may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

PERMIT TRANSFER

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

PERMIT TERMINATION

This permit may be terminated when activities covered by this permit have ceased and no significant materials [as defined 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. Proper closure of any storage structure is required prior to permit termination according to provisions set forth in Standard Conditions, Part 1. In order to terminate this permit, the facility shall notify the department by completing and submitting Form H (www.dnr.missouri.gov/forms/780-1409-f.pdf) and shall follow a closure plan approved by the department.

DUTY OF COMPLIANCE

The facility shall comply with all conditions of this permit, as well as all conditions set forth in Standard Conditions Part 1. 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
FOR THE PURPOSE OF RENEWAL
OF
MO-G822000
LAND APPLICATION OF WASTES FROM LIGHT COMMERCIAL FOOD PRODUCTS INDUSTRY

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 CFR 124.8, and 10 CSR 20-6.020(1)(A)2., a Fact Sheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the permit. A Fact Sheet is not an enforceable part of a Missouri State Operating Permit This Fact Sheet is for a:

Master General Permit

This updated Master General Permit contains changes from the previous version of the permit.

The most significant change is related to subsurface injection via Class V wells. Subsurface systems must submit a Class V Well Inventory Form to the Missouri Department of Natural Resources, Geological Survey Program for each active, new or modified Class V Well. New subsurface systems must be designed to treat the site specific industrial wastewater flows and to remove such contaminants as high Biochemical Oxygen Demand, Total Suspended Solids, and Fats, Oils and Grease so as to prevent drainfield clogging and system malfunctions in accordance with 10 CSR 20-6.015. Previously permitted subsurface systems may maintain coverage under this permit provided there are no signs of system malfunction. Any pre-existing systems that show evidence of malfunction and that cannot be suitably repaired to meet permit requirements must be replaced with new systems that meet the design standards set forth in this permit for new facilities.

The permit has been clarified with regard to which facilities require a permit and which ones are exempt.

Also clarified are which land application sites are to be listed as part of the permit and which ones are not.

- (a) Land application by a permitted contract hauler on fields that are not owned, rented or leased by either the source facility or the permitted contract hauler and that the contract hauler has a spreading agreement for are not required to be listed as a permitted site in this permit. The permitted contract hauler is required to keep a list of these fields as part of his land application operational documentation. A spreading agreement does not constitute the field being rented or leased by the permittee as they do not have any control over management of the field. Permit requirements still apply insofar as the facility or permitted hauler have control (i.e., wastewater monitoring requirements, application rate, etc.) and all documentation requirements for land applications activities remain in effect.
- (b) Land application sites that are owned, rented or leased by the contract hauler, or are contracted by the hauler for repeated use as a land application site, must be listed in the hauler's permit.
- (c) Land application sites that are owned, rented or leased by the originating facility, or are contracted by the facility for repeated use as a land application site, must be listed in the facility's permit.
- (d) Land application sites and subsurface dispersal sites marked on a map or listed within the permit shall use the center of the field or lateral line area as a reference.

With regard to contiguous property owned, rented or leased by the permittee that extends across a county line into a different region it is the department's policy for the two affected regions to determine which region will be the permitting authority. If a facility owns, rents, leases or has spreading agreements on one or more non-contiguous properties that are wholly contained within one of the department's regions, a separate permit is required for each region where property is located.

Land application of waste to public use areas has been removed from this permit. Citations in the previous permit were based on design guides for domestic wastewater facilities and are not applicable to industrial wastewater. In addition Standard Conditions III sets forth strict guidelines for the application of wastes to public contact sites that are not appropriate for regulation under a general permit. No other general permits allow the application of wastewater to public use areas.

Land application facilities are required to take an annual representative sample of applied wastes. Contract haulers with a permit are required to take a representative annual sample from each source of waste land applied. If a contract hauler collects and applies waste from more than one facility, they must collect and report an annual sample for each facility. Wastewater that is land applied shall be sampled at the facility, irrigation pump, wet well, or application vehicle.

Language throughout the permit has been updated to reflect the most current permit language found in MGPs. The 1000 foot setback from an Outstanding National Resource Waters (ONRWs) was removed in favor of conditions applicable to the entire watershed of the ONRW.

Any facility requiring more information regarding the contents of the required annual Land Application Management Plan, the department has placed the *No Discharge Operation and Maintenance Manual Checklist* fact sheet online at

<http://dnr.mo.gov/pubs/pub2704.htm>.

Part I – Facility Information

Facility Type: Land application
 Facility SIC Code(s): 20xx & 5812
 Facility Description: Land application or subsurface injection of various industrial wastewaters and sludges from light commercial food products and restaurant grease traps for beneficial reuse as soil conditioners or fertilizers. This permit also authorizes the operation of storage structures built to hold these wastes until conditions are suitable for land application. Discharge to waters of the state is not authorized by this permit.

CLARIFICATION:

Facilities issued this permit are exempted from having to obtain a construction permit for installing oil water separators or similar devices [Section 644.051.3, RSMo].

Outstanding National Resource Waters (ONRW) or Outstanding State Resource Waters (OSRW): At permit renewal, the department will examine monitoring reports submitted by a facility located within the watershed of an ONRW or an OSRW to determine if this permit is still appropriate for the facility. If degradation of water quality has occurred, the department may require the facility to apply for a site specific 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)]
- 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)]
- No Discharge Permit- may be issued statewide in all receiving stream settings [10 CSR 20-6.015]

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:

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

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

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

Section 303(d) 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 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

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

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

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 facility must identify all Best Management Practices (BMPs) that are reasonable and effective, taking into account environmental impacts and costs. This permit covers no discharge facilities. The prescriptive BMPs within the permit will 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.

- Not Applicable: The pollutants of concern for this permit are Total Kjeldahl Nitrogen, Total Phosphorus, Total Sodium, Total Chloride as Cl, Total suspended Solids, pH changes, Oil and Grease and Biochemical Oxygen Demand. However, the only discharges resulting from the activities allowed under this no discharge permit are short term, intermittent and are expected to be non-degrading or minimally degrading. Compliance with the effluent limitations established in this permit for the protection of General Criteria, along with the evaluation and implementation of BMPs as required in the permit, 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.

OPERATOR CERTIFICATION REQUIREMENTS

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

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:

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

- Not Applicable: These facilities are no-discharge and thus are not authorized to discharge to losing streams.

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.

- Not Applicable: This permit does not allow for a schedule of compliance.

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. Specific setbacks have been added to this permit and may be found Applicability #12 for both land application and subsurface dispersal. Setbacks that are applicable only to land surface application facilities are found under Applicability #13.

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.

- Not Applicable: At this time, the permittee is not required to develop or implement a SWPPP. Prescriptive BMPs in this permit should prevent the pollution of stormwater runoff.

VARIANCE:

Per the Missouri Clean Water Law Section 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 Section 644.006 to 644.141 or any standard, rule, or regulation promulgated pursuant to Missouri Clean Water Law Section 644.006 to 644.141.

- Not Applicable: This permit is not drafted under premises of a petition for variance.

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 that may be discharged into that stream without endangering its water quality.

- Not Applicable: WLAs are not required at this time, thus no calculations were completed.

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.

WHOLE EFFLUENT TOXICITY (WET) TEST:

Per 10 CSR 20-7.031(1)(FF), a toxicity test conducted under specified laboratory conditions on specific indicator organism; and per 40 CFR Section 122.2, the aggregate toxic effect of an effluent measured directly by a toxicity 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 facility is not required to conduct a WET test

BIOSOLIDS, & SEWAGE SLUDGE:

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e., fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater

treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address:

<http://extension.missouri.edu/main/DisplayCategory.aspx?C=74>, items WQ421 through WQ449.

- Not applicable: This condition is not applicable to the permittee for this facility. Land application of domestic wastewater sludges or biosolids are not authorized by this permit other than a *de minimis* limit of 500 gallons per day. This permit authorizes land application of industrial sludges or wastewaters only.

40 CFR 122.41(M) - BYPASSES:

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

Part IV – Effluent Limits Determination

The CWA requires that all NPDES discharges to Waters of the U.S. contain technology-based or water-quality based effluent limitations, whichever is more stringent. When the EPA has not established industry specific technology based Effluent Limitation Guidelines, Missouri uses EPA’s *Technical Support Document for Water Quality Based Toxics Control (TSD)* method for calculating site specific water-quality based effluent limitations. The TSD method is based on assumptions and statistics that apply to continuous discharges, not intermittent stormwater discharges and thus do not apply to this permit. Thus, it is the department’s policy to consult the EPA’s *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP)* or other applicable documents or guidance. However, since this permit is for No Discharge Facilities, effluent limitations do not apply. Monitoring is required to assure that there is no degradation to environmental quality.

LAND APPLICATION AND SUBSURFACE DISPERSAL MONITORING AND REPORTING REQUIREMENTS

PARAMETER	UNIT	BASIS FOR LIMITATION	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATION
<u>SIC Codes 20xx</u>							
Total Kjeldahl Nitrogen (TKN)	mg/L	1	*			No	
Total Phosphorus as P	mg/L	1	*			No	
Total Sodium	mg/L	1	*			No	
Total Chloride as Cl	mg/L	1	*			No	
Total Suspended Solids	mg/L	1	*			No	
pH (not to be averaged)	SU	1,2	6.0 – 9.0			No	6.0 – 9.0
Oil and Grease	mg/L	1,2	*			No	
<u>SIC Code 5812</u>							
Total Sodium	mg/L	1	*			No	
Total Chloride as Cl	mg/L	1	*			No	
Total Suspended Solids	mg/L	1	*			No	
pH (not to be averaged)	SU	1,2	6.0 – 9.0			No	6.0 – 9.0
Oil and Grease	mg/L	1,2	*			No	
<u>Emergency Bypass Discharge Monitoring</u>							
Flow**	mgd	1	*			No	
Biochemical Oxygen Demand ₅ (BOD)**	mg/L	1	*			No	
Total Suspended Solids **	mg/L	1	*			No	
Total Ammonia **	mg/L	1	*			No	
Nitrogen**	mg/L	1	*			No	
pH (Standard Units)**	SU	1, 2	*			No	

*Monitoring requirement only.

**During emergency discharge only

LAND APPLICATION OPERATING RECORD REPORTING REQUIREMENTS

PARAMETER	UNIT	BASIS FOR LIMITATION	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATION
Storage Basin Operational Monitoring							
Storage Basin Freeboard**	feet	1			◇	No	
Precipitation	inches	1	◇			No	
Land Application Operational Monitoring							
Irrigation Period	hours	1	◇			No	
Volume Irrigated	gallons	1	◇			No	
Application Area	acres	1	◇			No	
Application Rate	inches	1	◇			No	

◇ Sample as required and report resulting value monthly.

** Storage Basin Freeboard shall be reported as a daily minimum.

Basis for Limitations Codes:

- | | |
|---|------------------------------------|
| 1. State or Federal Regulation/Law | 7. Antidegradation Policy |
| 2. Water Quality Standards | 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 |

Part V – Land Application & Subsurface Rate Criteria

This permit does not authorize discharges; therefore effluent limits do not apply. This permit authorizes land application and subsurface injection of certain wastewaters and sludges for beneficial reuse, as soil conditioners and fertilizers. Limits on quantity and quality of land applied materials have been established to protect soil health and productivity, as well as prevent water pollution from stormwater runoff. If land application causes damage to crop yields or decreases in year-to-year plant productivity, it can no longer be classified as a beneficial reuse and would instead be a disposal practice. A site specific permit is required for any proposed disposal site, and a permit from the Solid Waste Management Program may be required.

- **Oil & Grease** - Conservative application rate limit of 1000 lbs/acre/year. Excessive application of oil and grease has the potential to kill or prevent the growth of vegetation, as well as become a source of pollutants in stormwater. Oil & grease from restaurants can also contain other potential pollutants of concern, such as chlorides and nitrogen. This conservative limit ensures that beneficial use is maintained.
- **Kjeldahl Nitrogen** - Conservative application rate limit of 150 lbs/acre/year established for protection of groundwater. Higher application rates for individual facilities can be approved in a site specific permit as part of a Plant Available Nitrogen calculation.
- **pH** - Limited to the range of 6.0-9.0 to protect soil health and condition, as well as groundwater and surface water. Causing soil to move outside this pH range not only has the potential to damage crop production, it will also cause naturally occurring elements in the soil to become soluble, thereby creating the potential to pollute stormwater runoff and groundwater. Under this permit, acidic or caustic materials that fall outside this pH range must have their pH adjusted before land application.

SAMPLING FREQUENCY:

Sampling frequency is established in accordance with department policy. Monitoring requirements are set forth in Table A on page 5 of this permit. In the case of an accidental discharge, daily monitoring is required unless discharge ceases for parameters listed in Earthen Basin Storage Requirements under the heading “Emergency Bypass.” If no emergency discharges occur during a sampling period, report as “no discharge” for discharge parameters listed or “Conditional Monitoring not required this monitoring period” if no land application occurs.

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 NOTICE:

The department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest or because of water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and facility must be notified of the denial in writing.

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

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

The Public Notice period for this permit was from February 10, 2017 to March 13, 2017. No comments were received.

DATE OF FACT SHEET: January 25, 2016

COMPLETED BY:

SUSAN HIGGINS

ENVIRONMENTAL SPECIALIST

MISSOURI DEPARTMENT OF NATURAL RESOURCES

WATER PROTECTION PROGRAM

OPERATING PERMITS SECTION

573- 526-1002

Susan.Higgins@dnr.mo.gov