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, hereinafter, the Law), as amended,

Permit No.	MO-0140643
Owner:	VR Development Services LLC
Address:	133 Boston Post Road, Weston, MA 02493
Continuing Authority:	Washington AD 1, LLC
Address:	1740 Bieker Rd, Washington, Missouri 63090
Facility Name:	Washington AD 1, LLC
Facility Address:	1740 Bieker Rd, Washington, Missouri 63090
Legal Description:	See following page(s)
UTM Coordinates:	See following page(s)
Receiving Stream:	See following page(s)
First Classified Stream and ID:	See following page(s)
USGS Basin & Sub-watershed No.:	See following page(s)

authorizes activities pursuant to the terms and conditions of this permit in accordance with the Missouri Clean Water Law; it does not apply to other regulated activities.

FACILITY DESCRIPTION

No-Discharge Facility; SIC code #4922

March 27, 2025
Effective Date

March 26, 2030
Expiration Date

John Hoke, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

This facility will accept solid and liquid organic food waste and livestock manure, collectively referred to as feedstock. Feedstock will be anaerobically digested for the primary purpose of capturing methane, which can be refined into pipeline-quality natural gas. As a result of the anaerobic digestion process, a by-product (digestate) is produced. Digestate is rich in nutrients nitrogen, phosphorus, and potassium, which can be beneficially used as an agricultural amendment. The facility intends to beneficially reuse digestate via land application as a fertilizer/agricultural amendment on agricultural fields. Digestate is proposed to be bulk land applied one-to-two times per year (between cropping cycles). No discharge allowed.

PERMITTED FEATURE #001 – Covered Wastewater Holding Structure; wastewater residuals; incidental stormwater; anaerobically digested; pumped; covered earthen digestate basin; discharge is prohibited.

Legal Description:	NE¼, SW¼, Sec.01, T43N, R01W, Franklin County
UTM Coordinates:	X = 676060, Y= 4263599
Receiving Stream if Discharged:	Tributary to Dubois Creek
First Classified Stream and ID:	Presumed Use Stream (C) WBID# 5068
USGS Basin & Sub-watershed No.:	10300200-0601
Storage Capacity, Maximum Volume:	21.18 million gallons
Freeboard Minimum:	2.0 feet
Total Depth:	20 feet
Wastewater Flow, Design:	0.075 MGD
Days of Storage:	240 days

PERMITTED FEATURE #002 – Land Application Field RD-1

Legal Description:	Sec.02, T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 675395, Y = 4263711
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	12.67 total available acres

PERMITTED FEATURE #003 – Land Application Field RD-2

Legal Description:	Sec.02, T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 675315, Y = 4263846
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	4.07 total available acres

PERMITTED FEATURE #004 – Land Application Field RD-3

Legal Description:	Sec.02, T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 675312, Y = 4264009
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	2.69 total available acres

PERMITTED FEATURE #005 – Land Application Field RD-4

Legal Description:	Sec.02, T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 675503, Y = 4264024
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	0.49 total available acres

PERMITTED FEATURE #006 – Land Application Field RD-5

Legal Description:	Land Grant 01964, Franklin County
UTM Coordinates (Centroid):	X = 676033, Y = 4264630
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	4.51 total available acres

PERMITTED FEATURE #007 – Land Application Field RD-6

Legal Description:	Land Grant 01964, Franklin County
UTM Coordinates (Centroid):	X = 676198, Y = 4264464
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	9.81 total available acres

PERMITTED FEATURE #008 – Land Application Field RD-7

Legal Description:	Land Grant 01964 Franklin County
UTM Coordinates (Centroid):	X = 675753, Y = 4264343
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	4.56 total available acres

PERMITTED FEATURE #009 – Land Application Field RD-8

Legal Description:	Land Grant 01964 Franklin County
UTM Coordinates (Centroid):	X = 676271, Y = 4264229
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	7.14 total available acres

PERMITTED FEATURE #010 – Land Application Field RD-9

Legal Description:	Sec.1 T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 676053, Y = 4264062
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	40.62 total available acres

PERMITTED FEATURE #011 – Land Application Field RD-10

Legal Description:	Sec.1 T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 675791, Y = 4263866
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	3.59 total available acres

PERMITTED FEATURE #012 – Land Application Field RD-11

Legal Description:	Land Grant 01964 Franklin County
UTM Coordinates (Centroid):	X = 676893, Y = 4264510
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	6.66 total available acres

PERMITTED FEATURE #0013 – Land Application Field RD-12

Legal Description:	Land Grant 01964, Franklin County
UTM Coordinates (Centroid):	X = 677111, Y = 4264525
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	3.49 total available acres

PERMITTED FEATURE #014 – Land Application Field RD-13

Legal Description:	Land Grant 01964, Franklin County
UTM Coordinates (Centroid):	X = 677008, Y = 4264197
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	32.33 total available acres

PERMITTED FEATURE #015 – Land Application Field RD-14

Legal Description:	Land Grant 01964, Franklin County
UTM Coordinates (Centroid):	X = 676634, Y = 4264034
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	23.32 total available acres

PERMITTED FEATURE #016 – Land Application Field RD-15

Legal Description:	Sec.1 T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 676049, Y = 4263606
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	4.81 total available acres

PERMITTED FEATURE #017 – Land Application Field RD-16

Legal Description:	Sec.1 T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 675783, Y = 4263449
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	56.63 total available acres

PERMITTED FEATURE #018 – Land Application Field RD-17

Legal Description:	Sec.12 T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 675967, Y = 4262988
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	14.93 total available acres

PERMITTED FEATURE #019 – Land Application Field RD-18

Legal Description:	Sec.2 T44N, R01W, Warren County
UTM Coordinates (Centroid):	X = 674164, Y = 4274274
USGS Basin & Sub-watershed No.:	10300200-0507
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	11.42 total available acres

PERMITTED FEATURE #020 – Land Application Field RD-19

Legal Description:	Sec.2 T44N, R01W, Warren County
UTM Coordinates (Centroid):	X = 674327, Y = 4273767
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	14.7 total available acres

PERMITTED FEATURE #021 – Land Application Field RD-20

Legal Description:	Sec.2 T44N, R01W, Warren County
UTM Coordinates (Centroid):	X = 674217, Y = 4273768
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	4.64 total available acres

PERMITTED FEATURE #022 – Land Application Field RD-21

Legal Description:	Land Grant 00881, Lincoln County
UTM Coordinates (Centroid):	X = 673578, Y = 4307142
USGS Basin & Sub-watershed No.:	07110008-0409
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	3.28 total available acres

PERMITTED FEATURE #023 – Land Application Field RD-22

Legal Description:	Sec.2 T44N, R01W, Warren County
UTM Coordinates (Centroid):	X = 674478, Y = 4273957
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	32.37 total available acres

PERMITTED FEATURE #024 – Land Application Field RD-23

Legal Description:	Land Grant 00759, Warren County
UTM Coordinates (Centroid):	X = 675027, Y = 4273085
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	53.54 total available acres

PERMITTED FEATURE #025 – Land Application Field RD-24

Legal Description:	Sec.11 T44N, R01W, Warren County
UTM Coordinates (Centroid):	X = 675322, Y = 4272174
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	85.45 total available acres

PERMITTED FEATURE #026 – Land Application Field RD-25

Legal Description:	Sec.2 T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 674940, Y = 4263237
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	1.58 total available acres

PERMITTED FEATURE #027 – Land Application Field RD-26 / RD-27

Legal Description:	Sec.2 T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 675154, Y = 4263262
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	5.14 total available acres

PERMITTED FEATURE #028 – Land Application Field RD-28

Legal Description:	Sec.2 T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 675029, Y = 4264075
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	17.25 total available acres

PERMITTED FEATURE #029 – Land Application Field RD-29

Legal Description:	Sec.2 T43N, R01W, Franklin County
UTM Coordinates (Centroid):	X = 674872, Y = 4264349
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	2.78 total available acres

PERMITTED FEATURE #030 – Land Application Field RD-30

Legal Description:	Land Grant 01689, Warren County
UTM Coordinates (Centroid):	X = 676642, Y = 4269354
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	10.78 total available acres

PERMITTED FEATURE #031 – Land Application Field RD-31

Legal Description:	Land Grant 01689, Warren County
UTM Coordinates (Centroid):	X = 676975, Y = 4270017
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	73.9 total available acres

PERMITTED FEATURE #032 – Land Application Field RD-32

Legal Description:	Land Grant 01689, Warren County
UTM Coordinates (Centroid):	X = 675880, Y = 4269633
USGS Basin & Sub-watershed No.:	10300200-0601
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	39.12 total available acres

PERMITTED FEATURE #033 – Land Application Field RD-33

Legal Description:	Sec.20 T44N, R01E, St. Charles County
UTM Coordinates (Centroid):	X = 680302, Y = 4269673
USGS Basin & Sub-watershed No.:	10300200-0603
Application Rate Basis:	Hydraulic/ Nutrient/ Pollutant Loading
Vegetation Type:	Grass/Pasture/Crop: barley, soybeans, corn, oats, ryegrass, sorghum, wheat, mixed grass
Equipment Type:	Tanker and spreader, dragline, spray gun
Application Area:	120.72 total available acres

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMITTED FEATURE #001	**Table A-1** **PROCESS WASTEWATER MONITORING FOR LAND IRRIGATION**

The facility is not authorized to discharge from this feature. The final requirements shall become effective on **April 1, 2025,** and remain in effect until expiration of the permit. This feature shall be monitored and operationally controlled by the facility as specified below:

MONITORING PARAMETERS	UNITS	MONITORING REQUIREMENTS			
		DAILY MAXIMUM	MONTHLY AVERAGE	MINIMUM MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: IW					
Freeboard	feet	2		once/application event	grab
Total Nitrogen	mg/L	*		once/application event	grab
Phosphorus	mg/L	*		once/application event	grab
Total Sodium	mg/L	*		once/application event	grab
Percent Solids	%	*		once/application event	grab
Chloride	mg/L	*		once/application event	grab
Fecal Coliform	#/100mL	2,000,000		once/application event	grab
pH †	mg/L	*		once/application event	grab
Oil and Grease	mg/L	*		once/application event	grab
Aluminum	mg/kg	2,067		once/application event	grab
Arsenic	mg/kg	19		once/application event	grab
Barium	mg/kg	*		once/application event	grab
Boron	mg/kg	*		once/application event	grab
Cadmium	mg/kg	18		once/application event	grab
Chromium	mg/kg	258		once/application event	grab
Copper	mg/kg	692		once/application event	grab
Iron	mg/kg	*		once/application event	grab
Lead	mg/kg	138		once/application event	grab
Magnesium	mg/kg	*		once/application event	grab
Manganese	mg/kg	*		once/application event	grab
Mercury	mg/kg	8		once/application event	grab
Nickel	mg/kg	194		once/application event	grab
Selenium	mg/kg	46		once/application event	grab
Silver	mg/kg	103		once/application event	grab
Zinc	mg/kg	1,291		once/application event	grab

MONITORING REPORTS SHALL BE SUBMITTED MONTHLY VIA THE DEPARTMENT'S EDMR SYSTEM.
THE FIRST REPORT IS DUE MAY 28, 2025. IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE.

PERMITTED FEATURES #002 - #033	**TABLE A-2** **LAND APPLICATION OPERATIONAL MONITORING REQUIREMENTS (LIQUID)** **FOR PERMITTED LAND APPLICATION FIELDS**

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:

PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	MINIMUM MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: A					
Volume Applied	gallons	*	-	once/application♠	grab
Application Area	acres	*	-	once/application♠	grab

MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE MAY 28, 2025.

* Monitoring and reporting requirement only
† pH: the facility will report the minimum and maximum values; pH is not to be averaged.
♠ Facility will maintain records for each day land application occurred. If no application occurred, a record is not required.

B. STANDARD CONDITIONS

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

C. SPECIAL CONDITIONS

1. Spills, Overflows, and Other Unauthorized Discharges.
   (a) Any spill, overflow, or other discharge(s) not specifically authorized are unauthorized discharges.
   (b) If an unauthorized discharge cause or permit any contaminants to discharge or enter waters of the state, the unauthorized discharge must be reported to the regional office as soon as practicable but no more than 24 hours after the discovery of the discharge. If the spill or overflow needs to be reported after normal business hours or on the weekend, the facility must call the Department's 24-hour spill line at 573-634-2436.
   (c) If the unauthorized discharge was an overflow from a no-discharge wastewater structure, the report must include all records confirming operation and maintenance records documenting proper maintenance. Operations must demonstrate the ability to meet the no-discharge requirement. This requirement may be met by 1) complying with the design requirements in 10 CSR 20-8.200 or 2) or providing other acceptable documentation.

2. Site-wide minimum Best Management Practices (BMPs). At a minimum, the facility shall adhere to the following:
   (a) Provide good housekeeping practices on the site to keep trash from entry into waters of the state. Dumpsters must remain closed when not in use.
   (b) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, warehouse activities, and other areas, to prevent the contamination of stormwater from these substances.
   (c) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
   (d) Store all paint, solvents, petroleum products, petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills 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 also prevent the contamination of groundwater. Spill records shall be retained on-site or readily accessible electronically.
   (e) Ensure adequate provisions are provided to prevent surface water intrusion into the wastewater storage structure(s) and to divert stormwater runoff around the wastewater storage structure(s).
   (f) Provide sediment and erosion control sufficient to prevent or minimize sediment loss off of the property, and to protect embankments from erosion.
   (g) Wash water for vehicles, building(s), or pavement must be handled in a no-discharge manner (infiltration, hauled off-site, etc.). Describe the no-discharge method used and include all pertinent information (quantity/frequency, soap use, effluent destination, BMPs, etc.) in the application for renewal. If wash water is not produced, note this instead.

3. All permitted features must be clearly marked in the field.

4. Stormwater Pollution Prevention Plan (SWPPP)
   The facility's SIC code or description is found in 40 CFR 122.26(b)(14) and 10 CSR 20-6.200(2) and applies to the land application areas. The terms of this permit, as well as the permit application, meet the SWPPP requirements as the LAMP is taking the place of the SWPPP.

5. Land application facilities shall develop and implement a Land Application Management Plan (LAMP). A LAMP must be developed, implemented, and maintained, see Section D.

6. Reporting of Non-Detects.
   (a) Compliance analysis conducted by the facility, or any contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated. See sufficiently sensitive test method requirements in Standard Conditions Part I, §A, No. 4 regarding proper testing and detection limits used for sample analysis. For the purposes of this permit, the definitions in 40 CFR 136 apply; method detection limit (MDL) and laboratory-established reporting limit (RL) are used interchangeably in this permit. The reporting limits established by the laboratory must be below the lowest effluent limits established for the specified parameter (including any parameter's future limit after an SOC) in the permit unless the permit provides for an MDL.
   (b) The facility shall not report a sample result as "non-detect" without also reporting the MDL. Reporting "non-detect" without also including the MDL will be considered failure to report, which is a violation of this permit.

C. SPECIAL CONDITIONS (CONTINUED)

(c) For the daily maximum, the facility shall report the highest value; if the highest value was a non-detect, use the less than "<" symbol and the laboratory's highest method detection limit (MDL) or the highest reporting limit (RL); whichever is higher (e.g. <6).
(d) When calculating monthly averages, zero shall be used in place of any value(s) not detected. Where all data used in the average are below the MDL or RL, the highest MDL or RL shall be reported as "<#" for the average as indicated in item (c).

7. This permit does not authorize storage, discharge, or land application of domestic wastewater, domestic biosolids, full animal carcasses or animal manure.

8. This permit does not cover land disturbance activities.

9. All records required by this permit may be maintained electronically. These records can be maintained in a searchable format.

10. All permitted land application sites and dispersal locations must be maintained on a map and made available to the Department upon request.

11. This facility may only store or land apply food processing residuals, including meat processing, food processing and generation, animal food manufacturing, and other organic byproducts and do not contain chemicals or pollutants not covered herein. The byproducts may contain manufacturing facility residuals, but may not contain concentrated, non-food processing waste (e.g. waste chemicals). Only food processing wastewater, food processing wastewater treatment residuals, and manure are authorized for storage and treatment under this permit. Cardboard, aluminum, food containers and other waste from packaging or is prohibited in digester. Non-food wastewater or treatment residuals (i.e. solvents, cleaning products, petroleum-based oils) are prohibited other than incidental amounts that may remain after appropriate use of these materials.

12. Renewal Application Requirements.
(a) This facility shall submit an appropriate and complete application to the Department no less than 180 days prior to the expiration date listed on page 1 of the permit.
(b) Application materials shall include complete Form A, and Form C. If the form names have changed, the facility must ensure they are submitting the correct forms as required by regulation.
(c) This facility must submit Form I/R for land application of wastewater/industrial solids.
(d) Sufficiently sensitive analytical methods must be used. A sufficiently sensitive method is one that can effectively describe the presence or absence of a pollutant at or below that pollutant's permit limit or water quality standard.
(e) The facility may use the electronic submission system to submit the application to the Program, if available.
(f) This facility must submit all soil testing conducted during the last five years or permit term (whichever is longer) with the application for permit renewal.

13. Electronic Discharge Monitoring Report (eDMR) Submission System. The eDMR system is currently the only department-approved reporting method for this permit unless specified elsewhere in this permit, or a waiver is granted by the department. The facility must register in the department's eDMR system through the Missouri Gateway for Environmental Management (MoGEM) before the first report is due. All reports uploaded into the system shall be reasonably named so they are easily identifiable, such as "WET Test Chronic Outfall 002 Jan 2023", or "Outfall004-DailyData-Mar2025".

14. Earthen Digestate Structure Minimum Best Management Practices (BMPs) and Requirements.
(a) Basin must remain covered at all times; this basin was approved as a covered storage structure, not as a commingled offsite industrial wastewater or wastewater residuals open storage basin or open storage vessel.
(b) To maintain structural integrity, structures shall be inspected at least monthly, the berms of the earthen digestate basin shall be mowed and kept free of any deep-rooted vegetation, animal dens, or other potential sources of damage, any leaks or issues shall be noted and repaired as soon as possible. Discharge is not permitted.
(c) The facility shall ensure adequate berms are provided to prevent surface water intrusions and run-in into the storage structures, will also divert stormwater runoff from around the storage structures, and will protect embankments from erosion.
(d) The minimum and maximum operating water levels for the storage structures shall be clearly marked.
(e) Maintain liquid level in the no-discharge wastewater structure at least 2.0 feet from the top of the structure, or the bottom of the overflow canal, whichever is lowest.
(f) Each storage structure shall be operated and maintained to achieve and maintain no discharge status.

15. The facility shall correct any tears or damage to the cover on the earthen digestate basin within fourteen (14) days. If it is expected to take longer to repair or replace the floating cover, contact the St. Louis Regional Office to discuss the timeline and process for repairs.

16. Any stormwater collected on the cover of the earthen digestate basin must go through into the earthen digestate basin.

D. LAND APPLICATION CONDITIONS

1. Surficial land application of wastewater listed in the Facility Description of this permit is authorized and shall be conducted according to the following conditions. These land application conditions do not apply to fertilizer products receiving a current exemption under the Missouri Clean Water Law and regulations in 10 CSR 20-6.015(3)(B)8, and are land applied in accordance with the exemption. The minimum application requirements enumerated here, when followed, exempt stormwater runoff sampling requirements pursuant to 10 CSR 20-6.200(2)(B)3.B.

2. A Land Application Management Plan (LAMP) must be approved by the department prior to commencement of land application activities. All information contained in the LAMP may be maintained electronically.

3. Geohydrological evaluations must be conducted on new land application fields per 10 CSR 20-8.200(2)(B). If a land application field is found to have a significant potential for the contamination of groundwater, the following will be required:
   (a) Setbacks from wells, sinkholes, losing streams, and other sensitive features remain in place.
   (b) Any field which is found to have a significant potential to contaminate groundwater may not apply more than a year's worth of nitrogen.
   (c) All wells within 300 ft of the field shall be sampled for nitrates. If nitrates are found in excess of 8 mg/L, no land application will occur.
   (d) No land application shall occur if the gradient is greater than 10 percent on fields which have a significant potential to contaminate groundwater.

4. All land application of wastewater shall be conducted by Washington AD1, Riegel Dairy or its contractors.

5. Land application of commingled material may only take place if a storage structure is permitted for commingling and identified above. Land application is prohibited of commingled material unless the commingling structure is permitted above and monitored in accordance with Table A-1. Land application rates must be calculated based on the most recent sample results of the commingled material.

6. When sampling and monitoring more than one source of any of the categories in Tables A-1, A-2 and A-3, the following applies. The highest values of each parameter will be submitted via eDMR. An annual report shall be submitted and include all sample results from all material land applied within the last year, both original source and commingled materials.

7. The following setbacks apply to surface land application. All land application setbacks must be identified with flags or other physical markers. This permit does not authorize land application:
   (a) Within 300 feet of a Class W or mitigated wetland,
   (b) Within 300 feet of any potable water supply well not located on the property, adequate protections shall be implemented and maintained for any potable water supply well located within the application area;
   (c) 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;
   (d) Within 100 feet of any classified perennial or intermittent streams or tributaries, public or privately owned ponds or lakes;
   (e) Within 300 feet of sinkholes, losing streams, or any other physiographic structure with direct conduit to groundwater;
   (f) Within 500 feet of an Outstanding State Resource Water or Outstanding Nation Resource Water;
   (g) Within 1,000 feet upstream of streams, lakes, or reservoirs identified as critical habitat for endangered species;
   (h) Within 1,000 feet upstream of biocriteria reference locations.
   (i) Within 150 feet of an occupied residence, public building, or public use area; or
   (j) Within 50 feet of the property line, public road, or drainage ditch.
   (k) Within the 10-year floodplain.

8. Land Application Equipment Minimum Requirements
   (a) Spray application equipment shall minimize the formation of aerosols.
   (b) Application equipment shall be visually inspected daily during land application to check for equipment malfunctions and leaks. The application system shall be operated so as to provide uniform distribution of wastes over the entire land application site.
   (c) Equipment shall be calibrated at least once per calendar year to ensure even distribution of wastewater.

9. Land Application Field(s) Minimum Requirements
   (a) No land application shall occur when the soil or ground is frosted, frozen, snow covered, or saturated. Saturated soil will hold the shape of any object when pressure is applied (eg: boot prints). Daily observation of fields is required. Application activities shall cease if these conditions occur.
   (b) There shall be no application during a precipitation event or if a precipitation event of 50% chance is forecasted to occur within 24 hours of a planned application. Additionally, plan accordingly for any forecast for a storm or significant rain event. Runoff is always prohibited.

D. LAND APPLICATION CONDITIONS (CONTINUED)

(c) Public Access Restrictions: this permit does not authorize application of wastewater to public use areas.
(d) Land application is only authorized on fields under permittee's operational control or on fields under agreements restricting access. All land-use agreements must be submitted with the permit application and maintained by the permittee.
(e) If land application sites listed in this permit are also included as land application sites in another permit, the wastewater and sludge applications from all sources shall be included in the application rates in the facility description. Records from all sources must be kept for all permits.
(f) The applicant shall defer grazing or harvesting of forage crops, in accordance with 10 CSR 20-8.200(6)(E), as follows:
  (1) May 1 to October 31, the minimum grazing or forage harvest deferment shall be fourteen (14) days from application.
  (2) November 1 to April 30, the minimum grazing or forage harvest deferment shall be thirty (30) days from application.
(g) Land application fields shall be checked daily during land application for runoff.
(h) Sites utilizing spray irrigation shall monitor for the drifting of spray across property lines. Spray drift is not permissible.

10. Application Rate(s) and Loading
(a) This permit does not authorize application of materials in concentrations known to cause, or having the potential to cause, phytotoxicity in plants per 10 CSR 20-6.015(4)1. If plant stress is observed, the facility may need to reduce application of wastewaters. If phytotoxicity is observed, the facility shall cease land application activities and evaluate the applied substances to determine the cause of phytotoxicity.
(b) Wastewater application shall not exceed one inch (1") per day, three inches (3") per week, or twenty-four inches (24") per year.
(c) Wastewater application on slopes exceeding 10%:
  (1) The application rate shall not exceed one inch per day (1"/day)
  (2) In no case shall exceed one-half (1/2) inch per hour.
(d) Sludge, Semi-solids and Solid-laden wastewater application
  (1) These materials may be applied to build soil, amend soil, improve drainage, provide nutrients, provide micronutrients, increase oxygenation, provide slow-release nutrients, or for substrate for microbes.
  (2) Material shall be spread evenly on to the surface.
  (3) Between seeding/planting and harvest, solids depth can be no more than ¼ inch immediately after land application. At all other times, depth of solids cannot exceed ½ inch immediately after land application.
(e) Applications shall not exceed any agronomic rates listed in the facility description to ensure plant use of nutrients and prevent contamination of surface and groundwater. The agronomic rate is the amount of wastewater applied to a field to meet the fertilization needs of the plants.
(f) Runoff and ponding is prohibited.
(g) This permit does not authorize land disposal or the application of hazardous waste.
(h) The facility must maintain a record of all fertilizer products applied to fields by the permittee; even exempted products, to determine total nutrient loading.
(i) The fertilizer recommendation shall be based on all of the following:
  (1) The nutrient recommendation (nitrogen or phosphorus) for each crop. Recommendations can be found in University of Missouri Extension Guide EQ202 Crop/Nutrient Considerations for Biosolids or from publications by other land grant universities in adjoining states,
  (2) Realistic yield goal for each crop. Yield goals must be based on actual crop yield records from multiple years for each field. Good judgment must be used to counteract unusually high or low yields. If a field's yield history is not available, the USDA county wide average or other approved source may be used, and
  (3) The most recent soil test.
(j) Application shall be conducted according to one of the following nutrient based management practices. The facility must avoid over-application of both Nitrogen and Phosphorus simultaneously by choosing the more stringent application method of those listed below.
  (1) Nitrogen:
    i. Plant Available Nitrogen (PAN) based application. This method can be used on fields where the University of Missouri Agricultural Extension Center Soil Test Report has a phosphorus rating of medium, low, or very low. The amount of wastewater and/or sludge to be applied shall be adjusted annually for each material applied based on the PAN calculation using the current wastewater and/or sludge nutrient analysis and the following:
    ii. For non-legume crops, the nitrogen fertilizer recommendation shall be adjusted to account for nitrogen credits from a preceding legume crop and residual nitrogen from the previous year's application. Nitrogen removal rates can be found in WQ430.
    iii. For legume crops, the nitrogen removal capacity of the legume crops must be based on the estimated nitrogen content of the harvested crop as defined in WQ430 and a realistic yield goal. The estimated nitrogen content of the crop must be adjusted using nitrogen credits for residual nitrogen fertilizer from the previous year's application.
    iv. PAN = [Ammonia Nitrogen x volatilization factor*] + [Organic Nitrogen x 0.2] + [Nitrate Nitrogen]
    *Volatilization factor is 0.7 for surface application and 1 for subsurface application.

D. Land Application Conditions (continued)

v. The amount of wastewater and/or sludge applied shall not exceed the nitrogen fertilizer recommendation or the estimated nitrogen removal capacity of the planned crop during the year of the application;

(2) Phosphorus:

i. This method must be used on fields where the University of Missouri Agricultural Extension Center Soil Test Report has a phosphorus rating of high. The amount of wastewater and/or sludge to be applied shall be adjusted annually based on the phosphorus content of the current wastewater and/or sludge nutrient analysis and may be applied according to one of the following methods;

ii. The annual amount of phosphorus applied shall not exceed the planned crop's phosphorus removal estimate from WQ430, or from publications by other land grant universities in adjoining states; or,

iii. Multi-year phosphorus applications are only available on fields under the operational control of Washington AD1 and where a multi-year field management plan has been developed. Wastewater and/or sludge applications can exceed the annual planned phosphate removal estimate for the crop when a multi-year phosphorus application is utilized. The multi-year application must comply with the following conditions:

(a) The amount of phosphorus banked shall not exceed four years of the estimated crop removal rate for the planned crop rotation;

(b) The actual application rate shall not exceed the multi-year application rate; and

(c) No additional applications shall occur until the applied phosphorus has been removed from the field by crop removal or harvest.

(d) No land application can occur if the soil test for a field has a phosphorus rating that is "very high" or "excess".

iv. Phosphorus-based land application rate may be based on soluble phosphorus content, but land application based on soluble phosphorus data may only occur between spring soil analysis and the end of the first growing season. Land application rates may be based upon the field plans for the upcoming year or multi-years if covered under a nutrient management plan.

(a) If a second growing season is planned, additional land application based on soluble phosphorus-based rates may occur but only based on soluble phosphorus demand of cover or fall growth intended to be harvested or removed from the field (not tilled into the soil). Soil sampling is not required prior to the second or fall planting but is required prior to the next spring application and growing season.

11. Addition of New Land Application fields

(a) No more than 10% of the currently permitted acreage can be added without a permit modification or prior approval.

(b) Land application must be conducted in accordance with all permit conditions and limitations; all application rates must be determined based on the approved LAMP and all relevant permit conditions.

(c) All sampling, including soil sampling, required in this permit must be conducted on these additional fields.

(d) Recordkeeping and reporting are required in accordance with Section E.

12. Soil Monitoring – Required for All Land Application Fields

(a) Composite soil samples shall be collected annually prior to land application, or after harvest is complete from each field where land application has occurred in the last 12 months. No land application shall occur on fields listed in this permit if soil sample results are more than one year old.

(b) Soil sampling shall be in accordance with University of Missouri (MU) Guides G9215, Soil Sampling Pastures or G9217, Soil Sampling Hayfields and Row Crops or other methods approved by the Department. The recommendation of one composite sample per 20 acres in G9215 and G9217 is not required by this permit, however, this is a useful method to identify soil fertility fluctuations in large fields due to past management practices, soil type, and variability of crop yields. There shall be at least one composite sample per 40 acres.

(c) Soil nutrient analysis must be conducted using the University of Missouri Extension Center Soil Testing Laboratory or other lab accredited by the University of Missouri and must include an accurate assessment of future agronomic use. Land application may not occur on any field where the soil test report indicates that the phosphorus rating is very high or excess or where a current soil test report based on accurate planned field usage is not available.

(d) All other testing shall conform to Recommended Chemical Soil Testing Procedures for North Central Region (North Central Regional Research Publication 221 Revised), or Soil Testing in Missouri (MU Extension Guide EC923), or other methods approved by the Department.

(e) This sampling protocol and results shall be used to establish land application agronomic rates in accordance with 6(j) above in this subdivision.

E. Record Keeping Conditions

1. The following record keeping shall occur, be maintained for at least five years, be made available to the Department upon request, and shall be submitted with the application for renewal.
   (a) Daily land application log showing, at a minimum: date(s) of application, field identified, volume and material applied, time forecast was checked, current and next day percent chance of precipitation, and time of ending land application.
   (b) Monthly visual storage structure inspections (if applicable);
   (c) Liquid transfer and land application equipment inspections and calibrations;
   (d) Permitted land application field inspections, including runoff, saturation, and ponding;
   (e) Record of maintenance and repairs for the land application equipment that conveys wastewater;
   (f) Description of any unusual operating conditions encountered, narrative summary of any problems or deficiencies identified, corrective action taken, or improvements planned;
   (g) Annual samples for each wastewater source shall be obtained and submitted to the department with the application for renewal materials. The samples required shall contain all parameters listed in the table above and any other parameters sampled. The submission must include the date of sampling and have the wastewater identified. Submission of laboratory results sheets will likely meet this requirement.
   (h) If soil test reports identify nutrient ratings of very high or excess, land application shall cease in the field until soil test nutrient ratings return to high or lower.
   (i) Annual summary for each field used for permitted land application fields showing the following: number of days application occurred, crop grown and yield data if available, and total amount of wastewater and/or sludge applied (gallons and/or tons per acre).
   (j) A record of the agronomic rate calculation for each material applied (document actual sampling results and agronomic rate calculations based on field usage).
   (k) Monthly log of materials received, including volume at the digester from other facilities and their source location.

2. Sample results must be submitted from the laboratory to the department directly via mail at P.O. Box 176, Jefferson City, MO 65101 or email to the following: landappenf@dnr.mo.gov.

3. For land application fields not specifically listed in the permitted features, but added in accordance with D(11) above, the following records must be retained and submitted as follows:
   (a) Records must be retained and included in the annual report of all added land application fields, locations, acreage, and dates and volumes of land applied materials.
   (b) A log must be maintained for each land application event that documents, at a minimum: date(s) of application, field identified, volume and material applied, acreage used, document of forecast for the area, time of ending land application, and post-application field assessment (ponding, pooling, runoff, solids depth, if applicable). These logs must be made available for Department review upon request.
   (c) An annual report must be submitted by January 28th of each year that summarizes the land application activities and includes documentation required in 2.(a).

F. NOTICE OF RIGHT TO APPEAL

If you were adversely affected by this decision, you may be entitled to pursue an appeal before the administrative hearing commission (AHC) pursuant to 621.250 and 644.051.12 RSMo. To appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Any appeal shall be directed to:

Administrative Hearing Commission
U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102-1557
Phone: 573-751-2422
Fax: 573-751-5018
Website: https://ahc.mo.gov

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF ISSUING
MO-0140643
WASHINGTON AD 1, LLC

The Federal Water Pollution Control Act (Clean Water Act (CWA) §402 Public Law 92-500 as amended) established the National Pollutant 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 (§301 of the Clean Water Act); this permit does not authorize a discharge and is subject only to the Missouri Clean Water law and implementing regulations. After a permit is obtained, operations not in compliance with all permit terms and conditions are unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (department) under an approved program, operating in accordance with state laws (Missouri Clean Water Law 644 RSMo as amended). MSOPs may also cover underground injection, non-discharging facilities, and land application facilities. Permits are issued for a period of five (5) years unless otherwise specified for less.

PART I. FACILITY INFORMATION

Facility Type: Industrial: Land Application of Industrial Wastewater
SIC Code(s): 4922
NAICS Code(s): 486210

FACILITY DESCRIPTION

The facility will accept solid and liquid organic food waste and livestock manure, collectively referred to as feedstock. Feedstock will be anaerobically digested for the primary purpose of capturing methane, which can be refined into pipeline-quality natural gas. As a result of the anaerobic digestion process, a by-product (digestate) is produced. Digestate is rich in nutrients nitrogen, phosphorus, and potassium, which can be beneficially used as an agricultural amendment. The facility intends to beneficially reuse digestate via land application as a fertilizer/agricultural amendment on agricultural fields.

PERMITTED FEATURES TABLE

OUTFALL	AVERAGE FLOW	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#001	NEW	0.075 MGD	No-discharge, covered earthen storge basin	Process Wastewater from Anaerobic Digester
#002-#033	N/A	N/A	Land Application	Process Wastewater

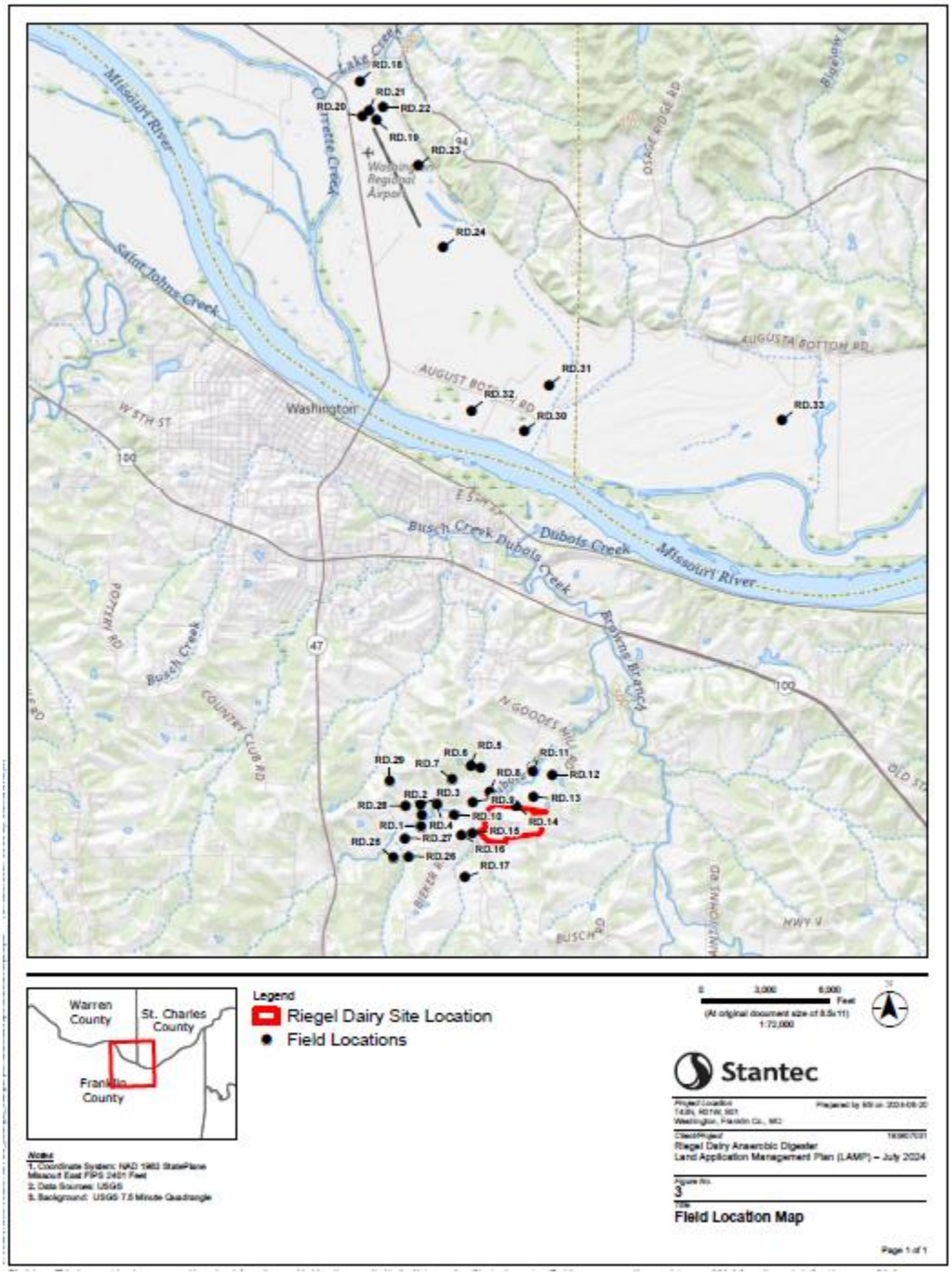
Items listed in the facility (or outfall) description, applicable to the operation, maintenance, control, and resultant effluent quality are required to be enumerated in the facility description. The facility description ensures the facility continues to operate the wastewater (or stormwater) controls listed in the permit to preserve and maintain the effluent quality pursuant to 40 CFR 122.21(e). Any planned changes to the facility (which changes the facility or outfall description) are required to be reported to the department pursuant to 40 CFR 122.41(l)(1)(ii). If the facility does not or cannot use all of their disclosed treatment devices, this is considered bypassing pursuant to 40 CFR 122.41(m) in the case of wastewater, and BMP disruption in the case of stormwater.

APPLICATION

The application was less than one year old at the time of developing permit requirements. Prior to public notice, the facility has reviewed the permit draft and coordinated with the department ensuring that the draft permit is representative of the facility operations and the application received for this facility.

FACILITY MAP

LAND APPLICATION SITES



CONTINUING AUTHORITY

Pursuant to 10 CSR 20-6.010(2)(A) and (E), the department has received the appropriate continuing authority authorized signature from the facility. The Missouri Secretary of State continuing authority charter number for this facility is FL001705697; this number was verified to be associated with the facility and precisely matches the continuing authority reported by the facility.

Pursuant to 10 CSR 20-6.010(2)(B)4, this facility is a Level 4 Authority.

- ✓ This facility is a no-discharge facility, therefore there is no requirement for a higher authority exemption.
  - ✓ Pursuant to 10 CSR 20-6.010(2)(D), the facility demonstrated the closest collection system was greater than 2,000 feet from the property line per 10 CSR 20-6.010(2)(C)3.

OTHER ENVIRONMENTAL PERMITS

In accordance with 40 CFR 122.21(f)(6), the department evaluated other environmental permits currently held by this facility. This facility holds no other permits.

PART II. RECEIVING WATERBODY INFORMATION

RECEIVING WATERBODY TABLE:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	DISTANCE TO SEGMENT	12-DIGIT HUC
#001	Tributary to Dubois Creek	n/a	n/a	n/a	0.0 mi	10300200-0601 Lower Missouri
	Presumed Use Stream	C	5068	GEN, HHP, IRR, LWW, SCR, WBC-B, WWH (ALP)	0.8 mi	

Classes are representations of hydrologic flow volume or lake basin size per 10 CSR 20-7.031(1)(E).
Designated uses are described in 10 CSR 20-7.031(1)(F).
WBID: Waterbody Identification Number per 10 CSR 20-7.031(1)(Q) and (S)
HUC: Hydrologic Unit Code https://water.usgs.gov/GIS/huc.html
Water Quality Standards Search https://apps5.mo.gov/mocwis_public/waterQualityStandardsSearch.do

EXISTING WATER QUALITY & IMPAIRMENTS

The receiving waterbody(s) segment(s), upstream, and downstream confluence water quality was reviewed. The USGS https://waterdata.usgs.gov/nwis/sw or the department's quality data database was reviewed. https://apps5.mo.gov/mocwis_public/wqa/waterbodySearch.do and https://apps5.mo.gov/wqa/ Impaired waterbodies which may be impacted by discharges from this facility were determined. Impairments include waterbodies on the 305(b) or 303(d) list and those waterbodies or watersheds under a TMDL. https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/tmdls Section 303(d) of the federal Clean Water Act requires each state identify waters not meeting water quality standards and for which adequate water pollution controls have not been required. https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/impaired-waters Water quality standards protect beneficial uses of water provided in 10 CSR 20-7.031. The 303(d) list helps state and federal agencies keep track of impaired waters not addressed by normal water pollution control programs. A TMDL is a calculation of the maximum amount of a given pollutant a water body can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards.

✓ There are no upstream or downstream impairments near this facility.

PART III. RATIONALE AND DERIVATION OF PERMIT CONDITIONS

ANTIBACKSLIDING

Federal antibacksliding requirements per CWA §402(o) and 40 CFR § 122.44(l) https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122#p-122.44(l) generally prohibit a reissued permit from containing effluent limitations that are less stringent than the previous permit, with some exceptions. All renewed permits are analyzed for evidence of backsliding. There are several express statutory exceptions to the antibacksliding requirements, located in CWA § 402(o)(2) and 40 CFR 122.44(l). Parameters are discussed individually in Part IV of the fact sheet.

ANTIDEGRADATION REVIEW

Discharges with new, altered, or expanding flows, the department is to document, by means of antidegradation review, if the use of a water body's available assimilative capacity is justified. The facility must pay for the department to complete the review. In accordance with Missouri's water quality regulations for antidegradation 10 CSR 20-7.031(3), degradation may be justified by documenting the socio-economic importance of a discharge after determining the necessity of the discharge. Facilities must submit the antidegradation review request to the department prior to establishing, altering, or expanding discharges. Per 10 CSR 20-7.015(4)(A), new discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream, or connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

✓ Not applicable; the facility has not submitted information proposing new or expanded discharge; no further degradation proposed; therefore, no further review necessary. This is a no-discharge facility, flows from the anaerobic digester will go to the covered earthen digestate basin for land application of the wastewater.

BEST MANAGEMENT PRACTICES (BMPS)
Minimum site-wide best management practices (BMPs) are established in this permit to ensure all facilities are managing their sites equally to protect waters of the state from certain activities which could cause negative effects in receiving water bodies. While not all sites require a SWPPP because the SIC codes are specifically exempted in 40 CFR 122.26(b)(14) or 10 CSR 20-6.200(2), these best management practices are not specifically included only for stormwater purposes. These practices are minimum requirements for all industrial sites to protect waters of the state. If the minimum best management practices are not followed, the facility may violate general criteria per 10 CSR 20-7.031(4). Statutes are applicable to all permitted facilities in the state; therefore pollutants cannot be released unless in accordance with Missouri Clean Water Law. The prescribed minimum BMPs required in the permit are developed by the department pursuant to 10 CSR 20-7.031(3), and BMPs use is authorized under 40 CFR 122.44(k)(2).

CLOSURE
To properly decontaminate and close a wastewater storage structure, treatment structure, lagoon, basin, or device, the facility must draft a complete closure plan, and include the Closure Request Form #2512 https://dnr.mo.gov/document-search/facility-closure-request-form-mo-780-2512 The publication, Wastewater Treatment Plant Closure - PUB2568 found at https://dnr.mo.gov/print/document-search/pub2568 may be helpful to develop the closure plan. The regional office will then approve the closure plan and provide authorization to begin the work. The regional office contact information can be found here: https://dnr.mo.gov/about-us/division-environmental-quality/regional-office.

COMPLIANCE AND ENFORCEMENT
Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.
✓ Not applicable; the facility is not currently under Water Protection Program enforcement action.

DISCHARGE MONITORING REPORTING – ELECTRONIC (EDMR) SUBMISSION SYSTEM
The U.S. Environmental Protection Agency (EPA) promulgated a final rule on October 22, 2015, to modernize Clean Water Act reporting for municipalities, industries, and other facilities by requiring electronic data reporting. To comply with the federal rule, the department is requiring all facilities to submit discharge monitoring data and reports online. To review historical data, the department's database has a publicly facing search engine, available at https://apps5.mo.gov/mocwis_public/dmrDisclaimer.do

Registration and other information regarding MoGEM can be found at https://dnr.mo.gov/mogem. Information about the eDMR system can be found at https://dnr.mo.gov/env/wpp/edmr.htm.The first user shall register as an Organization Official and the association to the facility must be approved by the department. To access the eDMR system, use: https://apps5.mo.gov/mogems/welcome.action For assistance using the eDMR system, contact edmr@dnr.mo.gov or call 855-789-3889 or 573-526-2082. To assist the facility in entering data into the eDMR system, the permit describes limit sets designators in each table in Part A of the permit. Facility personnel will use these identifiers to ensure data entry is being completed appropriately. For example, M for monthly, Q for quarterly, A for annual, and others as identified.

DOMESTIC WASTEWATER, SLUDGE, AND BIOSOLIDS
Domestic wastewater is defined as wastewater originating primarily from the sanitary conveyances of bathrooms and kitchens. Domestic wastewater excludes stormwater, wash water, animal waste, process, or ancillary wastewater.
✓ Not applicable; this facility manages domestic wastewater by holding in a tank until a third party removes it. This also applied to facilities using chemical toilets.
Biosolids are solid materials resulting from domestic wastewater treatment meeting federal and state criteria for productive use (i.e. fertilizer) and after having pathogens removed.
✓ Not applicable, the facility holds all domestic sludge in a tank until a third party removes it. This also applies to facilities using chemical toilets.

EFFLUENT LIMITATIONS
Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality-based effluent limits (WQBELs) are reviewed. Permits are required to establish the most stringent or most protective limit per 10 CSR 20-7.015(9)(A) and 40 CFR 122.44(b)(1). The department has regulatory authorization to implement limits based on best professional judgment per 10 CSR 20-7.015(9)(I)1. Effluent limitations derived and established for this permit are based on current operations of the facility. Any flow through the outfall is considered a discharge and must be sampled and reported per permit requirements. Daily maximums and monthly averages are required for continuous discharges per 40 CFR 122.45(d)(1). Weekly limits are not available for non-POTWs.

FEDERAL EFFLUENT LIMITATION GUIDELINES
Effluent Limitation Guidelines (ELGs) are found at 40 CFR 400-499. https://www.ecfr.gov/current/title-40/chapter-I/subchapter-N These are limitations established by the EPA based on the type of activities a facility is conducting. Most ELGs are for process wastewater and some address stormwater. Effluent guidelines are not always established for every pollutant present in a point source discharge. In many instances, EPA promulgates effluent guidelines for an indicator pollutant. Industrial facilities complying with the

effluent guidelines for the indicator pollutant will also control other pollutants (e.g. pollutants with a similar chemical structure). For example, EPA may choose to regulate only one of several metals present in the effluent from an industrial category, and compliance with the effluent guidelines will ensure similar metals present in the discharge are adequately controlled. All are technology-based limitations which must be met by the applicable facility at all times. If Reasonable Potential is established for any particular parameter, and water-quality based effluent limits are more protective of the receiving water's quality, the WQBEL will be used as the limiting factor in accordance with 40 CFR 122.44(d) and 10 CSR 20-7.015(9)(A).

✓ The facility does not have an associated ELG.

FEES

Failure to pay fees associated with this permit is a violation of the Missouri Clean Water Law (644.055 RSMo). Fee amounts are listed in 644.052 and 644.053 RSMo. Fees are due pursuant to 644.054 RSMo, which is each annual anniversary date of initial permit issuance until the permit is terminated. Fees are due the same month each year, regardless of whether a renewal has occurred or is occurring that year.

GENERAL CRITERIA CONSIDERATIONS

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants determined to cause, have reasonable potential to cause, or to contribute to, an excursion above any water quality standard, including narrative water quality criteria. In order to comply with this regulation, permit decisions were made by completing a reasonable potential determination on whether discharges have reasonable potential to cause or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). See Part III REASONABLE POTENTIAL for more information. In instances where reasonable potential exists, the permit includes limitations to address the reasonable potential. In discharges where reasonable potential does not exist, the permit may include monitoring to later determine the discharge's potential to impact the narrative criteria. Part I §D – Administrative Requirements of Standard Conditions included in this permit state it shall be unlawful for any person to cause or allow any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of §§644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule, or regulation promulgated by the commission. See Part IV for specific determinations.

GOOD HOUSEKEEPING PRACTICES

Good housekeeping is a practical, cost-effective way to maintain a clean and orderly facility to prevent potential pollution sources from coming into contact with stormwater. It includes establishing protocols to reduce the possibility of mishandling materials or equipment and employee training. Common areas where good housekeeping practices should be followed include trash containers and adjacent areas, material storage areas, vehicle and equipment maintenance areas, and loading docks. Good housekeeping practices must include a schedule for regular pickup and disposal of garbage and waste materials and routine inspections of drums, tanks, and containers for leaks and structural conditions. Practices also include containing and covering garbage, waste materials, and debris. Involving employees in routine monitoring of housekeeping practices is an effective means of ensuring the continued implementation of these measures.

Specific good housekeeping may include:

- ◆ Spill and overflow protection under chemical or fuel connectors to contain spillage at liquid storage tanks
- ◆ Load covers on residue hauling vehicles and ensure gates on trucks are sealed and the truck body is in good condition
- ◆ Containment curbs around loading/unloading areas or tanks
- ◆ Techniques to reduce solids residue which may be tracked on to access roads traveled by residue trucks or residue handling vehicles.
- ◆ Techniques to reduce solid residue on exit roads leading into and out of residue handling areas

Where feasible, minimizing exposure of potential pollutant sources to precipitation is an important control option. Minimizing exposure prevents pollutants, including debris, from coming into contact with precipitation and can reduce the need for BMPs to treat contaminated stormwater runoff. It can also prevent debris from being picked up by stormwater and carried into drains and surface waters. Examples of BMPs for exposure minimization include covering materials or activities with temporary structures (e.g., tarps) when wet weather is expected or moving materials or activities to existing or new permanent structures (e.g., buildings, silos, sheds). Even the simple practice of keeping a dumpster lid closed can be a very effective pollution prevention measure. For erosion and sediment control, BMPs must be selected and implemented to limit erosion on areas of your site that, due to topography, activities, soils, cover, materials, or other factors, are likely to experience erosion. Erosion control BMPs such as seeding, mulching, and sodding prevent soil from becoming dislodged and should be considered first. Sediment control BMPs such as silt fences, sediment ponds, and stabilized entrances trap sediment after it has eroded. Sediment control BMPs should be used to back-up erosion control BMPs.

The SWPPP (if required for this facility) must contain a narrative evaluation of the appropriateness of stormwater management practices that divert, infiltrate, reuse, or otherwise manage stormwater runoff so as to reduce the discharge of pollutants. Appropriate measures are highly site-specific, but may include, among others, vegetative swales, collection and reuse of stormwater, inlet controls, snow management, infiltration devices, and wet retention measures. A combination of preventive and treatment BMPs will yield the most effective stormwater management for minimizing the offsite discharge of pollutants via stormwater runoff. BMPs schedules

must also address preventive maintenance records or logbooks, regular facility inspections, spill prevention and response, and employee training.

GROUNDWATER MONITORING

Groundwater is a water of the state and is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

✓ This facility is not required to monitor groundwater for the water protection program as there are no sub-surface discharges.

ICE-MELT PRODUCT REMOVAL

The department is authorized to require BMPs for facilities per 40 CFR 122.44(k)(2). The facility must apply traction control materials judiciously. The facility should, to the extent practicable, remove large pieces of salt as soon as possible. After winter weather has ceased for the year, the facility should inspect all low-lying areas for extra salt and sand and remove these as soon as possible. Salt applied to large areas has the potential to cause freshwater salinization which could result in a fish kill of sensitive species. To reduce potential for solids entering a stream, sand or other traction control materials will need to be evaluated against the probability that these materials could cause general criteria violations of solids and bottom deposits per 10 CSR 20-7.031(4).

LAND DISTURBANCE

Land disturbance, sometimes called construction activities, are actions which cause disturbance of the root layer or soil; these include clearing, grading, and excavating of the land. 40 CFR 122.26(b)(14) and 10 CSR 20-6.200(3) requires permit coverage for these activities. Coverage is not required for facilities when only providing maintenance of original line and grade, hydraulic capacity, or to continue the original purpose of the facility.

✓ Not applicable; this permit does not provide coverage for land disturbance activities. The facility may obtain a separate land disturbance permit (MORA) online at https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance MORA permits may not cover disturbance of contaminated soils, however, site specific permits such as this one can be modified to include appropriate controls for land disturbance of contaminated soils by adding site-specific BMP requirements and additional outfalls.

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. https://dnr.mo.gov/water/business-industry-other-entities/reporting/major-water-users All major water users are required by 256.400 RSMo to register water use annually. https://dnr.mo.gov/document-search/frequently-asked-major-water-user-questions-pub2236/pub2236

MODIFICATION REQUESTS

Facilities have the option to request a permit modification from the department at any time under RSMo 644.052.8. Requests must be submitted to the Water Protection Program with the appropriate forms and fees paid per 10 CSR 20-6.011. It is recommended facilities contact the program early so the correct forms and fees are submitted, and the modification request can be completed in a timely fashion. Minor modifications, found in 40 CFR 122.63, are processed without the need for a public comment period. Major modifications, those requests not explicitly fitting under 40 CFR 122.63, do require a public notice period. Modifications to permits must be completed when: a new pollutant is found in the discharge; operational or functional changes occur which affect the technology, function, or outcome of treatment; the facility desires alternate numeric benchmarks; or other changes are needed to the permit.

Modifications are not required when utilizing or changing additives in accordance with the publication https://dnr.mo.gov/document-search/additive-usage-wastewater-treatment-facilities-pub2653/pub2653 nor are required when a temporary change or provisional discharge has been authorized by the regional office. While provisional discharges may be authorized by the regional office, they will not be granted for more than the time necessary for the facility to obtain an official modification from the Water Protection Program. Temporary provisional discharges due to weather events or other unforeseen circumstances may or may not necessitate a permit modification. The facility may ask for a Compliance Assistance Visit (CAV) from the regional office to assist in the decision-making process; CAVs are provided free to the permitted entity.

PERMIT SHIELD

The permit shield provision of the Clean Water Act (Section 402(k)) and Missouri Clean Water Law (644.051.22 RSMo) provides that when a permit holder is in compliance with its NPDES permit or MSOP, it is effectively in compliance with certain sections of the Clean Water Act, and equivalent sections of the Missouri Clean Water Law. In general, the permit shield is a legal defense against certain enforcement actions but is only available when the facility is in compliance with its permit and satisfies other specific conditions, including having completely disclosed all discharges and all facility processes and activities to the department at time of application. It is the facility's responsibility to ensure that all potential pollutants, waste streams, discharges, and activities, including wastewater land application, storage, and treatment areas, are all fully disclosed to the department at the time of application or during the draft permit review process. Previous permit applications are not necessarily evaluated or considered during permit renewal

actions. All relevant disclosures must be provided with each permit application, including renewal applications, even when the same information was previously disclosed in a past permit application. Subsequent requests for authorization to discharge additional pollutants, expanded or newly disclosed flows, or for authorization for previously unpermitted and undisclosed activities or discharges, will likely require an official permit modification, including another public participation process.

REASONABLE POTENTIAL (RP)

Regulations per 10 CSR 20-7.015(9)(A)2 and 40 CFR 122.44(d)(1)(i) require effluent limitations for all pollutants which are (or may be) discharged at a level causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times; however, acute toxicity criteria may be exceeded by permit allowance in zones of initial dilution, and chronic toxicity criteria may be exceeded by permit allowance in mixing zones. A reasonable potential analysis (RPA) is a numeric RP decision calculated using effluent data provided by the facility for parameters that have a numeric Water Quality Standard (WQS). If any given pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS or derived WQBEL, the permit must contain a WQBEL for the pollutant per 40 CFR Part 122.44(d)(1)(iii) and the most stringent limits per 10 CSR 20-7.031(9)(A). The RPA is performed using the *Technical Support Document for Water Quality Based Toxics Control (TSD)* methods (EPA/505/2-90-001) for continuous discharges. See additional considerations under Part II WATERBODY MIXING CONSIDERATIONS and Part III WASTELOAD ALLOCATIONS. Wasteload allocations are determined utilizing the same equations and statistical methodology. Absent sufficient effluent data, WQBELs are derived without consideration of effluent variability and is assumed to be present unless found to be absent to meet the requirements of antidegradation review found in 10 CSR 20-7.031(3) and reporting of toxic substances pursuant to 40 CFR 122.44(f). The department's permit writer's manual (https://dnr.mo.gov/water/business-industry-other-entities/technical-assistance-guidance/wastewater-permit-writers-manual), the EPA's permit writer's manual (https://www.epa.gov/npdes/npdes-permit-writers-manual), program policies, and best professional judgment guide each decision. Each parameter in each outfall is carefully considered; and all applicable information regarding: technology based effluent limitations, effluent limitation guidelines, water quality standards, inspection reports, stream water quality information, stream flows, uses assigned to each waterbody, and all applicable site specific information and data gathered by the facility through discharge monitoring reports and renewal (or new) application sampling.

Reasonable potential determinations (RPD) are based on physical conditions of the site as provided in Sections 3.1.2, 3.1.3, and 3.2 of the TSD using best professional judgement. An RPD consists of evaluating visual observations for compliance with narrative criteria, non-numeric information, or small amounts of numerical data (such as 1 data point supplied in the application). Narrative criteria with RP typically translate to a numeric WQBEL, so a parameter's establishment being based on narrative criteria does not necessarily make the decision an RPD vs RP—how the data is collected does, however. For example, a facility with orange discharge can have RP for narrative criteria like color, but a numeric iron limit is established to account for the violation of narrative criteria based on effluent data submitted by the facility. When insufficient data is received to make a determination on RP based on numeric effluent data, the RPD decisions are based on best professional judgment considering the type of effluent discharged, the current operational controls in place, and historical overall management of the site. In the case of iron causing excursions of narrative criteria for color, if a facility has not had iron monitoring in a previous permit, adding iron monitoring would be an RPD, since numeric data isn't being used in the determination, but observable, site-specific conditions are.

When the facility is performing surficial or subsurface land application, the volume of water, frequency of application, type of vegetation, soil type, land slopes, and general overall operating conditions are considered. 10 CSR 20-8 are regulations for the minimum operating conditions for land application; these regulations cannot be excused even if there is no RP. RP is reserved for discharging outfalls given that these outfalls are the only ones which water quality standards apply to, but the process is similar as the site conditions are compared to regulations, soil sampling, pollutant profile, and other site-specific conditions. In the case of non-discharging outfalls, an RPD is instead used to determine monitoring requirements.

The TSD RPA method cannot be performed on stormwater as the flow is intermittent and highly variable. A stormwater RPD consists of reviewing application data and discharge monitoring data and comparing those data to narrative or numeric water quality criteria. For stormwater outfalls, considerations are required per 10 CSR 20-6.200(6)(B)2: A. application and other information supplied by the facility; B. effluent guidelines; C. best professional judgment; D. water quality; and E. BMPs.

RPDs are also performed for WET testing in wastewater. While no WET regulations specific to industrial wastewater exist, 40 CFR 122.21(j)(5) implies the following can be considered: 1) the variability of the pollutants; 2) the ratio of wastewater flow to receiving stream flow; and 3) current technology employed to remove toxic pollutants. Generally, sufficient data does not exist to mathematically determine RPA for WET, but instead compares the data for other toxic parameters in the wastewater with the necessity to implement WET testing with either monitoring or limits. When toxic parameters exhibit RP, WET testing is generally included in the permit as an RPD. However, if all toxic parameters are controlled via limitations or have exhibited no toxicity in the past, then WET testing may be waived. Only in instances where the wastewater is well characterized can WET testing be waived.

WET testing is typically not implemented for stormwater. Stormwater discharges do not adhere to the same principles of wastewater RPAs because stormwater discharges are not continuous, and at the time of precipitation discharge the receiving stream is also no

longer at base (0) flow, meaning that using RP to develop WET testing requirements for stormwater is unrepresentative. The department works with the Missouri department of Conservation and has understanding of streams already exhibiting toxicity, even without the influence of industrial wastewater or stormwater. Facilities discharging to streams with historical toxicity are required to use laboratory water for dilution, instead of water from the receiving stream when performing WET tests.

TSD methods encountered may be § 3.3.2, § 5.7.3 for metals, and § 5.4.1 for chloride. Part IV EFFLUENT LIMIT DETERMINATIONS provides specific decisions related to this permit. In general, removal of a WQBEL if there is no RP is not considered backsliding, see ANTIBACKSLIDING for additional information.

✓ No statistical RPAs were performed for this permit.

REGIONAL OFFICES (ROS)

Regional Offices will provide a compliance assistance visit at a facility's request; a regional map with links to phone numbers can be found here: https://dnr.mo.gov/about-us/division-environmental-quality/regional-office. Or use https://dnr.mo.gov/compliance-assistance-enforcement to request assistance from the Region online.

✓ This facility is located in the service area of St. Louis Regional Office, which can be reached at slro@dnr.mo.gov or by phone at 314-416-2960.

RENEWAL REQUIREMENTS

Pursuant to 644.051.15, the renewal application is due at least 180 days prior to expiration. The renewal special condition permit requirement is designed to guide the facility to prepare and include all relevant and applicable information in accordance with 10 CSR 20-6.010(7)(A)-(C), and any applicable federal regulations. The department may request additional information at the time of permit renewal under 644.051.19(5) RSMo and 40 CFR 122.21(h). Prior to submittal, the facility must review the entire submittal to confirm all required information and data is provided; it is the facility's responsibility to discern if additional information is required. Failure to fully disclose applicable information with the application or application addendums may result in a permit revocation per 10 CSR 20-6.010(8)(A) and may result in the forfeiture of permit shield protection authorized in 644.051.22 RSMo. 644.076.1 RSMo indicates that false statements and negligent acts are prohibited. Sufficiently sensitive analytical methods must be used. A sufficiently sensitive method is one that can effectively describe the presence or absence of a pollutant at or below that pollutant's permit limit or water quality standard, whichever is less. Forms are located at: https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/wastewater This facility shall submit an appropriate and complete application to the department no less than 180 days prior to the expiration date listed on page 1 of the permit.The facility may email cleanwaterpermits@dnr.mo.gov to submit the application to the Program. A paper copy is not necessary if submitted via email. For larger applications, a drop-box type service may also be used.

✓ Application materials shall include complete Form A, Form C, Form I (for irrigation), Form R (for land application) and LAMP completed in accordance with the Industrial Nutrient Management Technical Standard.

SAMPLING FREQUENCY JUSTIFICATION

This facility is a new facility monthly sampling is required to determine if the facility will be in compliance with the operating permit in accordance with Appendix U of Missouri's Water Pollution Control Permit Manual.

SAMPLING TYPE JUSTIFICATION

The sampling types are representative of the discharges and are protective of water quality. Discharges with altering effluent will consider implementing 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. For further information on sampling and testing methods see 10 CSR 20-7.015(9)(D)2.

SPILLS, OVERFLOWS, AND OTHER UNAUTHORIZED DISCHARGE REPORTING

Any emergency involving a hazardous substance must be reported to the department's 24-hour Environmental Emergency Response hotline at (573) 634-2436 (or the National Response Center) at the earliest possible moment after discovery pursuant to 260.500-260.550 RSMo. The department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I. https://revisor.mo.gov/main/OneSection.aspx?section=260.500&bid=13989&hl=

Any other spills, overflows, or unauthorized discharges reaching waters of the state must be reported to the regional office during normal business hours, or after normal business hours, to the department's 24-hour Environmental Emergency Response spill line at 573-634-2436.

Certain industrial facilities are subject to the self-implementing regulations for Oil Pollution Prevention in 40 CFR 112, and are required to initiate and follow Spill Prevention, Control, and Countermeasure (SPCC) Plans. This permit, as issued, is not intended to

be a replacement for any SPCC plan, nor can this permit's conditions be automatically relaxed based on the SPCC plan if the permit is more stringent than the plan.

SLUDGE – INDUSTRIAL

Industrial sludge is solid, semi-solid, or liquid residue generated during the treatment of industrial process or non-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 any material derived from industrial sludge. Industrial sludge could also be derived from holding structure dredging or other similar maintenance activities. Certain oil sludge, like those from oil water separators, are subject to self-implementing federal regulations under 40 CFR 279 for used oils.

✓ Applicable; this permit authorizes land application of industrial sludge in accordance with Part A and Special Conditions of this permit; see additional information below in Part IV.

STANDARD CONDITIONS

The standard conditions Part I attached to this permit incorporate all sections of 10 CSR 20-6.010(8) and 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions must be reviewed by the facility to ascertain compliance with this permit, state regulations, state statutes, federal regulations, and the Clean Water Act.

SUFFICIENTLY SENSITIVE ANALYTICAL METHODS

Please review Standard Conditions Part 1, §A, No. 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 or 40 CFR 136 unless alternates are approved by the department and incorporated within this permit. 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 any 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. The reporting limits established by the chosen laboratory must be below the lowest effluent limits established for the specified parameter (including any parameter's future limit after an SOC) in the permit unless the permit provides for an ML or if the facility provides a written rationale to the department. It is the facility's responsibility to ensure the laboratory has adequate equipment and controls in place to quantify the pollutant. Inflated reporting limits will not be accepted by the department if the reporting limit is above the parameter value stipulated in the permit. 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 facility is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS

Per 10 CSR 20-2.010; definitions, the WLA is the maximum amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Only streams with available load allocations can be granted discharge allowances. Outfalls afforded mixing allocations provide higher limits because the receiving stream is able to accept more pollutant loading without causing adverse impacts to the environment or aquatic life.

✓ Not applicable, this is a no-discharge permit therefore WLAs were not calculated.

WASTELOAD ALLOCATION (WLA) MODELING

Facilities may submit site specific studies to better determine the site specific wasteload allocations applied in permits.

✓ Not applicable; a WLA study was either not submitted or determined not applicable by department staff.

PART IV. EFFLUENT LIMIT DETERMINATIONS

PERMITTED FEATURE #001

PROCESS WASTEWATER MONITORING FOR LAND IRRIGATION

PARAMETERS	UNIT	DAILY MAX	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
FREEBOARD	FEET	2	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
TOTAL NITROGEN	MG/L	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
PHOSPHORUS	MG/L	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
TOTAL SODIUM	MG/L	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
PERCENT SOLIDS	%	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
CHLORIDE	MG/L	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
FECAL COLIFORM	#/100ML	2,000,000	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
PH†	MG/L	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
OIL AND GREASE	MG/L	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
ALUMINUM	MG/KG	2,067	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
ARSENIC	MG/KG	19	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
BARIUM	MG/KG	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
BORON	MG/KG	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
CADMIUM	MG/KG	18	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
CHROMIUM	MG/KG	258	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
COPPER	MG/KG	692	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
IRON	MG/KG	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
LEAD	MG/KG	138	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
MAGNESIUM	MG/KG	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
MANGANESE	MG/KG	*	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
MERCURY	MG/KG	8	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
NICKEL	MG/KG	194	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
SELENIUM	MG/KG	46	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
SILVER	MG/KG	103	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB
ZINC	MG/KG	1,291	NEW	ONCE/APPLICATION EVENT	ONCE/MONTH	GRAB

Total Nitrogen
Monitoring only. Monitoring for Total Nitrogen is included to determine nutrient loading rates on the land application fields.

Phosphorus
Monitoring only. Monitoring for Phosphorus is included to determine nutrient loading rates on the land application fields.

Total Sodium
Monitoring only. Monitoring for Total Sodium is included to determine nutrient loading rates on the land application fields.

Percent Solids
Monitoring only. Monitoring for Percent Solids is included to determine nutrient loading rates on the land application fields.

Chloride
Chloride is a pollutant commonly found in food products and food processing waste. Chloride may be phytotoxic to some plants, but chloride toxicity concentrations are highly variable depending on lant response and soil conditions. As such, limits are not established beyond the general prohibition of phytotoxicity in land application. But, as this is a pollutant of concern for this wastewater, and as this pollutant may cause phytotoxicity, monitoring is required.

Fecal Coliform
Monitoring with a daily maximum limit of 2,000,000 colony forming units. Using best professional judgement, this limit was established based on the science used by the U.S. Environmental Protection Agency in the development of 40 CFR 503 for best management of land application of material containing fecal coliform.

pH
Monitoring requirement only. Monitoring for pH is included to ensure that soil pH is in the optimal range for plant growth and nutrient utilization.

Oil and Grease
Monitoring only. 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. Facilities applying oily wastewater to the surface must ensure the oily water is not entrained in stormwater and must not run off the field. If a discharge of oily sheen is observed, the permittee is in violation of the general criteria pursuant to 10 CSR 20-7.031(4). Facilities may opt to pretreat any oily wastewater prior to application with adsorbent pads or booms and remove the sheen.

Metals: (Aluminum, Arsenic, Barium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Zinc)
Monitoring is required to ensure the land application system does not have reasonable potential to cause or contribute to phytotoxicity. Ceiling concentrations have been included as daily maximum limits for aluminum, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc. Using best professional judgement, these ceiling concentrations were established based on the science used by the U.S. Environmental Protection Agency in the development of 40 CFR 503 for best management of land application of material contains such metals and as such will be implemented in this permit.

PERMITTED FEATURE #002-#033

LAND APPLICATION OPERATIONAL MONITORING

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
IRRIGATION ACTIVITY							
APPLICATION AREA	ACRES	*	*	NEW	ONCE/APPLICATION	ONCE/MONTH♠	RECORD
VOLUME APPLIED	GALLONS	*	*	NEW	ONCE/APPLICATION	ONCE/MONTH♠	RECORD

♠ Facility will maintain records for each day land application occurred. If no application occurred, a record is not required.

LAND APPLICATION OPERATIONAL MONITORING:

Application Area
Recording and reporting requirement only. In order to determine compliance with 10 CSR 20-6.015 and 10 CSR 20-8.200, reporting the area utilized will allow the Department to ensure compliance with setback distances. Adhering to the required setbacks prevents illicit discharges to waterbodies.

Volume Applied
Recording and reporting requirement only. In order to determine compliance with 10 CSR 20-6.015 and 10 CSR 20-8.200, monitoring of application activity is required. Monitoring the volume irrigated will allow the Department to ensure over application does not occur. This will also help prevent runoff and illicit discharges due to soil saturation.

PART V. ADMINISTRATIVE REQUIREMENTS

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

PERMIT SYNCHRONIZATION
Permits are normally issued on a five-year term, but to achieve watershed synchronization some permits will need to be issued for less than the full five years as allowed by regulation. The intent is all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow the Department to explore a watershed based permitting effort at some point in the future.

✓ Industrial permits are not being synchronized.

PUBLIC NOTICE
The Department shall give public notice a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in or with 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. https://dnr.mo.gov/water/what-were-doing/public-notices The Department must issue public notice of a draft operating permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wishing to submit comments regarding this proposed operating permit, please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments. All comments must be in written form.

✓ The Public Notice period for this operating permit started February 7, 2025, and ended March 10, 2025. Minor administrative errors were corrected, specifically references to the applicable laws and regulations. In response to a comment on the public notice draft, requirements for per- and polyfluoroalkyl substances (PFAS) sampling were removed from the draft permit prior to issuance. Neither the department nor EPA have determined a cleanup level, and as a result, there is not an established threshold or limit for in-soil concentrations. The department is not proposing or promulgating PFAS regulations at this time.

DATE OF FACT SHEET: DECEMBER 6, 2024
COMPLETED BY:
KYLE O'ROURKE, ENVIRONMENTAL ANALYST/SCIENTIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
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STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

Part I – General Conditions
Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
   b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.

2. **Monitoring Requirements**.
   a. Records of monitoring information shall include:
      i. The date, exact place, and time of sampling or measurements;
      ii. The individual(s) who performed the sampling or measurements;
      iii. The date(s) analyses were performed;
      iv. The individual(s) who performed the analyses;
      v. The analytical techniques or methods used; and
      vi. The results of such analyses.
   b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.

3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

4. **Test Procedures**. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 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 that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are 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 minimum level is at or below the level of the applicable water quality criterion for the pollutant 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 that 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. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.

5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

6. **Illegal Activities.**
   a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four (4) years, or both.
   b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

Section B – Reporting Requirements

1. **Planned Changes.**
   a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
      i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
      ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42;
      iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
      iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.

2. **Non-compliance Reporting.**
   a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

b. The following shall be included as information which must be reported within 24 hours under this paragraph.
   i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
   ii. Any upset which exceeds any effluent limitation in the permit.
   iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.

c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.

3. **Anticipated Noncompliance**. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.

4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.

5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.

6. **Other Information**. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

7. **Discharge Monitoring Reports.**
   a. Monitoring results shall be reported at the intervals specified in the permit.
   b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
   c. Monitoring results shall be reported to the Department no later than the 28th day of the month following the end of the reporting period.

Section C – Bypass/Upset Requirements

1. **Definitions.**
   a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
   b. *Severe Property Damage*: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
   c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. **Bypass Requirements.**
   a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.
   b. Notice.
      i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
      ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
   c. Prohibition of bypass.
      i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
         1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
         2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
         3. The permittee submitted notices as required under paragraph 2. b. of this section.
      ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.

3. **Upset Requirements.**
   a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
   b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      i. An upset occurred and that the permittee can identify the cause(s) of the upset;
      ii. The permitted facility was at the time being properly operated; and
      iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
      iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
   c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

Section D – Administrative Requirements

1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
   a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
   b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement

imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri 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. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed $10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

2. **Duty to Reapply.**
   a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
   b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
   c. A permittees with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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

5. **Proper Operation and Maintenance**. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. **Permit Actions.**
   a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
      i. Violations of any terms or conditions of this permit or the law;
      ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
      iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
      iv. Any reason set forth in the Law or Regulations.
   b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. **Permit Transfer.**
   a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
   b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
   c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.

8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
    a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
    d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.

12. **Closure of Treatment Facilities.**
    a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
    b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.

13. **Signatory Requirement.**
    a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
    b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
    c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.

14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.