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),

Permit No.	MO-0140759
Owner:	Simmons Animal Nutrition, Inc.
Address:	601 N. Hico Street, Siloam Springs, AR 72761
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Simmons ReGen Facility
Facility Address:	10700 South State Highway 43, Southwest City, MO 64863
Legal Description:	Sec. 22, T21N, R34W, McDonald County
UTM Coordinates:	See following page
Receiving Stream:	Tributary to Tributary to Cave Spring Branch
First Classified Stream and ID:	Tributary to Cave Spring Branch (C) WBID# 3960, Losing
Second Classified Stream and ID:	Cave Spring Branch (C) WBID #3941, Losing, TMDL
USGS Basin & Sub-watershed No.:	11070206-0302: Middle Honey Creek

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

Natural gas generation from poultry processing; This facility does not require a certified wastewater operator per 10 CSR 20-9.030 as this facility is privately owned. Domestic wastewater is sent to the Simmons Southwest Treatment Plant for processing. Treatment methods include anaerobic digesters, nutrient recovery, biogas generation process. No discharge allowed. Land application of wastewater and wastewater residuals, byproducts, and final products is not authorized by this permit.

July 18, 2025
Effective Date

July 17, 2030
Expiration Date

John Hoke, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

PERMITTED FEATURE #101 – Earthen Digester
Wastewater & wastewater residuals; incidental stormwater; anaerobically digested; pumped; earthen anaerobic digester with floating cover; natural gas collection system; discharge is prohibited.

UTM Coordinates:	X = 356509; Y = 4045052
Wastewater Flow, Design:	0.288 MGD
Storage Capacity, Maximum Volume:	3.04 MG
Storage Capacity, Actual Time:	10.6 days
Freeboard Minimum:	2.0 foot
Total Depth:	17 foot

PERMITTED FEATURE #102 – Internal Monitoring Point, Process Condensate Line to Simmons – Southwest City, MO-0036773, from includes the process condensate line from the nutrient recovery system; discharge is prohibited.

UTM Coordinates:	X = 356552, Y = 4045319
Return Flow, Design:	0.15 MGD

PERMITTED FEATURE #103 – Internal Monitoring Point, Solids Production
Anaerobically digested solids, undergone additional nutrient recovery; under roof; discharge prohibited.

UTM Coordinates:	X = 356803, Y = 4045128

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMITTED FEATURE #101 *no discharge wastewater structure*	**TABLE A-1** **NO DISCHARGE: FINAL MONITORING REQUIREMENTS**				
The facility is not authorized to discharge from this feature. The final requirements shall become effective upon receipt and approval of the statement of work complete completion of the construction activities outlined in CP0002519 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 MINIMUM	MONTHLY AVERAGE	MINIMUM MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: OM					
Freeboard	feet	2	*	once/month	Measured
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE ON THE 28TH DAY OF THE MONTH FOLLOWING THE RECEIPT AND APPROVAL OF THE STATEMENT OF WORK COMPLETE.					

PERMITTED FEATURE #102 *Internal monitoring point back to Simmons SW City treatment plant*	**TABLE A-2** **FINAL PROCESS WASTEWATER MONITORING REQUIREMENTS**			
The facility is not authorized to discharge from this feature. The final requirements shall become effective upon receipt and approval of the statement of work complete completion of the construction activities outlined in CP0002519 and remain in effect until expiration of the permit. This feature shall be monitored and operationally controlled by the facility as specified below:				
EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	MINIMUM MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: M – MONTHLY					
PHYSICAL					
Flow	MGD	*	*	once/week	Grab
CONVENTIONAL					
Chemical Oxygen Demand	mg/L	*	*	once/month	Grab
pH †	SU	*	*	once/month	Grab
Total Suspended Solids	mg/L	*	*	once/month	Grab
NUTRIENTS					
Ammonia as N	mg/L	*	*	once/month	Grab
Kjeldahl Nitrogen, Total (TKN)	mg/L	*	*	once/month	Grab
Nitrate plus Nitrite as Nitrogen	mg/L	*	*	once/month	Grab
Nitrogen, Total (TN) ⸸	mg/L	*	*	once/month	Grab
Phosphorus, Total (TP)	mg/L	*	*	once/month	Grab
OTHER					
Chloride	mg/L	*	*	once/month	Grab
Temperature	°F	*	*	once/month	Grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE ON THE 28TH DAY OF THE MONTH FOLLOWING THE RECEIPT AND APPROVAL OF THE STATEMENT OF WORK COMPLETE.					

* Monitoring and reporting requirement only

† pH: the facility will report the minimum and maximum values; pH is not to be averaged.

⸸ Total Nitrogen: this permit establishes reporting for total nitrogen, (TN), which is a calculation using TKN + Nitrate + Nitrite. Or alternatively, a sample may be collected and analyzed directly for TN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

PERMITTED FEATURE #103 *Product*	**TABLE A-3** **INTERIM PRODUCT SOLIDS MONITORING REQUIREMENTS**			
The facility is not authorized to discharge from this feature. These interim effluent requirements shall become effective upon receipt and approval of the statement of work complete of the construction activities outlined in CP0002519 and remain in effect for one year. This feature shall be monitored and operationally controlled by the facility as specified below:				
EFFLUENT PARAMETERS	UNITS	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	MINIMUM MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: M – MONTHLY					
PHYSICAL					
Solids produced (dry weight basis)	lbs	*	*	once/month	Total
CONVENTIONAL					
E. coli	cfu/100mL	*	*	once/month	Grab
Salmonella	mpn/4g	*	*	once/month	Grab
METALS					
Aluminum, Total Recoverable	mg/kg	*	*	once/month	Grab
Arsenic, Total Recoverable	mg/kg	*	*	once/month	Grab
Barium, Total Recoverable	mg/kg	*	*	once/month	Grab
Boron, Total Recoverable	mg/kg	*	*	once/month	Grab
Cadmium, Total Recoverable	mg/kg	*	*	once/month	Grab
Chromium, Total Recoverable	mg/kg	*	*	once/month	Grab
Copper, Total Recoverable	mg/kg	*	*	once/month	Grab
Lead, Total Recoverable	mg/kg	*	*	once/month	Grab
Mercury, Total Recoverable	mg/kg	*	*	once/month	Grab
Molybdenum, Total Recoverable	mg/kg	*	*	once/month	Grab
Nickel, Total Recoverable	mg/kg	*	*	once/month	Grab
Selenium, Total Recoverable	mg/kg	*	*	once/month	Grab
Silver, Total Recoverable	mg/kg	*	*	once/month	Grab
Thallium, Total Recoverable	mg/kg	*	*	once/month	Grab
Zinc, Total Recoverable	mg/kg	*	*	once/month	Grab
NUTRIENTS					
Nitrogen, Total (TN) ⸸	mg/kg	*	*	once/month	Grab
Phosphorus, Total (TP)	mg/kg	*	*	once/month	Grab
Total Potassium	mg/kg	*	*	once/month	Grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE ON THE 28TH DAY OF THE MONTH FOLLOWING THE RECEIPT AND APPROVAL OF THE STATEMENT OF WORK COMPLETE.					

* Monitoring and reporting requirement only
† pH: the facility will report the minimum and maximum values; pH is not to be averaged.
⸸ Total Nitrogen: this permit establishes reporting for total nitrogen, (TN), which is a calculation using TKN + Nitrate + Nitrite. Or alternatively, a sample may be collected and analyzed directly for TN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

PERMITTED FEATURE #103 *product*	**TABLE A-4 FINAL PRODUCT SOLIDS MONITORING REQUIREMENTS**			
The facility is not authorized to discharge from this feature. These final effluent limitations are effective one year after the department receives and approves the statement of work complete for construction covered under CP0002519 and remain in effect until expiration of the permit. This feature shall be monitored and operationally controlled by the facility as specified below:				
EFFLUENT PARAMETERS	UNITS	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	MINIMUM MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: Q – QUARTERLY SEE NOTE ◊					
PHYSICAL					
Solids produced (dry weight basis)	lbs	*	*	once/quarter ◊	total
CONVENTIONAL					
E. coli	cfu/100mL	*	*	once/quarter ◊	grab
Salmonella	mpn/4g	*	*	once/quarter ◊	grab
METALS					
Aluminum, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Arsenic, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Barium, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Boron, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Cadmium, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Chromium, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Copper, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Lead, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Mercury, Total	mg/kg	*	*	once/quarter ◊	grab
Molybdenum, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Nickel, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Selenium, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Silver, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Thallium, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
Zinc, Total Recoverable	mg/kg	*	*	once/quarter ◊	grab
NUTRIENTS					
Nitrogen, Total (TN) ⸸	mg/kg	*	*	once/quarter ◊	grab
Phosphorus, Total (TP)	mg/kg	*	*	once/quarter ◊	grab
Total Potassium	mg/kg	*	*	once/quarter ◊	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY.					

* Monitoring and reporting requirement only

† pH: the facility will report the minimum and maximum values; pH is not to be averaged.

⸸ Total Nitrogen: this permit establishes reporting for total nitrogen, (TN), which is a calculation using TKN + Nitrate + Nitrite. Or alternatively, a sample may be collected and analyzed directly for TN.

◊ Quarterly sampling

MINIMUM QUARTERLY SAMPLING REQUIREMENTS			
QUARTER	**MONTHS**	**QUARTERLY EFFLUENT PARAMETERS**	**REPORT IS DUE**
First	January, February, March	Sample at least once during any month of the quarter	April 28th
Second	April, May, June	Sample at least once during any month of the quarter	July 28th
Third	July, August, September	Sample at least once during any month of the quarter	October 28th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28th

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. CONSTRUCTION CONDITIONS

Upon completing construction covered under this permit submit a Statement of Work Completed form (https://dnr.mo.gov/document-search/wastewater-construction-statement-work-completed-mo-780-2155) to the department in accordance with 10 CSR 20-6.010(5)(N). The department will activate permitted features #101, #102, and #103 upon receipt and approval of the Statement of Work Completed Form.

D. SOLIDS PRODUCT SPECIAL CONDITIONS

1. Prior to, and in conjunction with any potential, approval under the commercial fertilizer permit exemption regulations pursuant to 10 CSR 20-6.015(3)(B)8, the facility shall do all of the following to obtain and maintain the permit exemption for land application of these commercial fertilizers:
   (a) Monitor monthly as listed in Table A-3 and submit a written request to the department including a summary of the sampling results and continue monitoring as outlined herein to demonstrate the product consistency and accurate labeling for *each* container, as required for the permit exemption in accordance with 644.051.6. RSMo.
   (b) The facility will also submit a copy of the proposed labeling, which must meet the minimum requirements established in 266.321 RSMo.

2. This permit does not authorize storage, discharge, or land application of domestic wastewater, domestic biosolids, full animal carcasses, or animal manure in areas exposed to stormwater.

3. This facility may only store processing residuals, including meat processing, food processing and generation, animal food manufacturing, and other organic byproducts. The byproducts may contain manufacturing facility residuals, but may not contain concentrated, non-food processing waste (e.g. waste chemicals). All storage must not be exposed to stormwater.

4. Record Keeping. The following record keeping shall occur, be maintained for at least five years, be made available to the Department upon request. Records may be maintained electronically per RSMo 432.255.
   (a) Monthly log of materials received from other poultry processing facilities and their source location.
   (b) Monthly visual storage structure inspections;
   (c) Record of maintenance and repairs;
   (d) Description of any unusual operating conditions encountered, narrative summary of any problems or deficiencies identified, corrective action taken, or improvements planned;

5. Earthen Digester Structure Minimum Best Management Practices (BMPs) and Requirements.
   (a) To maintain structural integrity, structures shall be inspected at least monthly, the berms of the earthen digester structures 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.
   (b) The facility shall ensure adequate berms are provided to prevent surface water intrusion and run-in into the storage structures, will also divert stormwater runoff from around the storage structures, and will protect embankments from erosion.
   (c) The minimum and maximum operating water levels for the storage structures shall be clearly marked.
   (d) Each storage structure shall be operated and maintained to achieve and maintain no discharge status.

6. The facility shall correct any tears or damage to the floating cover on the earthen digester within 14 days. If it is expected to take longer to repair or replace the floating cover, contact the Southwest Regional Office to discuss the timeline and process for repairs.

7. Any stormwater collected on the floating cover of the earthen digester must go through the digester or be returned to the Simmons SW City plant through the process condensate line.

8. Any product not meeting the requirements of the commercial fertilizer permit exemption may be:
   (a) pumped and hauled to an accepting Missouri-permitted wastewater treatment facility, including a facility permitted to land apply such material,
   (b) Managed outside of Missouri, (the permit does not authorize land application or violations of other state requirements),
   (c) or otherwise properly disposed.

9. Spills, Overflows, and Unauthorized Discharges.
   (a) Any spill, overflow, or discharge(s) not specifically authorized are a violation of this permit.
   (b) If an unauthorized discharge causes or permits 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.

10. No-Discharge Wastewater Holding Structure(s) Minimum Best Management Practices (BMPs):
   (a) To prevent releases and unauthorized discharges, the no-discharge wastewater structure must be properly designed, operated, and maintained to contain all wastewater plus any inadvertent stormwater run-in and/or direct precipitation.
   (b) 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.
   (c) Monthly inspection of no-discharge wastewater structures(s) shall occur. Inspection notes will be kept at the facility and made available to the department upon request. The inspection will include a thorough inspection of the cover for tears, stretches, or other possible problems. Any issues noted must be addressed as soon as possible.
   (d) The inspections will note any issues with the no-discharge structure and will record the level of liquid as indicated by the depth marker or electronic measuring device, which must be visible with cover(s) in place.

11. Electronic Discharge Monitoring Report (eDMR) Submission System. The NPDES Electronic Reporting Rule, 40 CFR Part 127, reporting of effluent monitoring data and any report required by the permit (unless specifically directed otherwise by the permit), shall be submitted via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data for the NPDES program. 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".

12. Reporting 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 ML.
   (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) 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).

13. All permitted features must be clearly marked.

14. This permit does not cover land disturbance activities.

15. This permit does not allow stream channel or wetland alterations unless approved by Clean Water Act §404 permitting authorities.

16. This permit does not authorize in-stream treatment, the placement of fill materials in flood plains, placement of solid materials into any waterway, the obstruction of stream flow, or changing the channel of a defined drainage course.

17. All records required by this permit may be retained electronically. These records should be saved in a searchable format.

18. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with provisions of the Missouri Clean Water Law equivalent to Sections 301, 302, 306, 307, and 403

of the federal Clean Water Act, except for standards imposed under Section 307 for toxic pollutants injurious to human health, in accordance with Section 644.051 RSMo and CWA §402(k).

19. Any discharges (or qualified activities such as land application) not expressly authorized in this permit, and not clearly disclosed in the permit application, cannot become authorized or shielded from liability under CWA section 402(k) or Section 644.051 RSMo, by disclosure to EPA, state, or local authorities after issuance of this permit via any means, including any other permit applications, funding applications, the SWPPP, discharge monitoring reporting, or during an inspection. Submit a permit modification application, and an antidegradation determination if appropriate, to request authorization of new or expanded discharges.

20. 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, with a cover letter discussing operations at the facility. If the form names have changed, the facility must ensure they are submitting the correct forms as required by regulation.
    (c) 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.
    (d) The facility may use the electronic submission system to submit the application to the Program, if available.

D. 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 NEW FACILITY OF
MO-0140759
SIMMONS REGEN FACILITY

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). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is 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 federal and state laws (Federal Clean Water Act and 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 years unless otherwise specified for less.

Per 10 CSR 20-6.020(1)(A)2 a factsheet shall be prepared to give pertinent information regarding applicable regulations, rationale for the development of limitations and conditions, and the public participation process for the Missouri State Operating Permit (MSOP or permit) listed below. A factsheet is not an enforceable part of a permit.

PART I. FACILITY INFORMATION

Facility Type: Industrial: No- discharge, non-categorical, <1 MGD
Application Date: October 15, 2024

FACILITY DESCRIPTION

Wastewater feedstocks come from the Southwest City poultry processing plant and other nearby poultry processing plants, owned by or contracted with Simmons Animal Nutrition, Inc. It is expected the 50 percent of the wastewater feedstock will come from the adjacent Simmons-Southwest City Processing Plant. These feedstocks are pumped into a reception pit which is designed for 1 day of hydraulic retention time (HRT). The reception pit is thoroughly mixed and then pumped into one of four 1.8-million gallons Continuously Stirred Tank Reactors (CSTRs). The CSTRs will anaerobically digest the volatile solids in the wastewater to produce biogas.

Biogas produced will be processed to make natural gas and will be utilized by Simmons' Southwest City processing plant. The effluent from the CSTRs will be pumped into the covered earthen basin. There will be transfer pumps associated with the CSTRs and these pumps will be utilized to transfer the liquid into the earthen basin on a continuous basis. The primary intent of the covered earthen basin is to provide liquid (and gas) storage between the CSTRs and the Nutrient Recovery Process. Approximately 90 percent of the volatile solids destruction will be done in CSTRs with >25 days of HRT while the earthen basin is designed for ~10 days of HRT.

The anaerobic digestion process is used both in domestic wastewater biosolids and with industrial wastewater and wastewater residuals to thicken the solids and reduce and destroy pathogens and bacteria to create a solids material for future use. It involves temperatures greater than 100 °F for a period of time, typically more than 20 days total. This process will be considered a multi-stage anaerobic digester as first its industrial wastewater and wastewater residuals from the Simmons Southwest City plant and the reception pit will be put in the CSTRs and then to the Anaerobic Covered Earthen Basin digester prior to the nutrient recovery system.

The facility applied for construction permit, CP0002519, for the covered earthen digester and integrated piping and pumping systems for the basin. An Engineering Certification was submitted for the anaerobic digesters and other parts of the system for compliance with 10 CSR 20-6.010(7)(B)2.F, see Appendix A.

While this facility does have comingled wastewater and wastewater residuals from offsite locations, it is a covered process and not subject to the requirements in 644.051.8, RSMo. This facility is not a discharging facility therefore is not subject to the Federal Clean Water Act but remains subject to all applicable provisions to Missouri Clean Water Law.

The facility expects to sell the product created, receive a commercial fertilizer license, and receive the operating permit exemption under 6 CSR 250-11.030 and 10 CSR 20-6.015(3)(B)8. To ensure the consistency of the product being produced, monthly sampling is required for the 1st year of operation and then quarterly sampling is required for the subsequent years of this operating permit, per 644.051.6, RSMo.

Domestic wastewater generated at the Simmons ReGen facility will be treated at the Simmons – Southwest City Wastewater treatment facility.

PERMITTED FEATURES TABLE

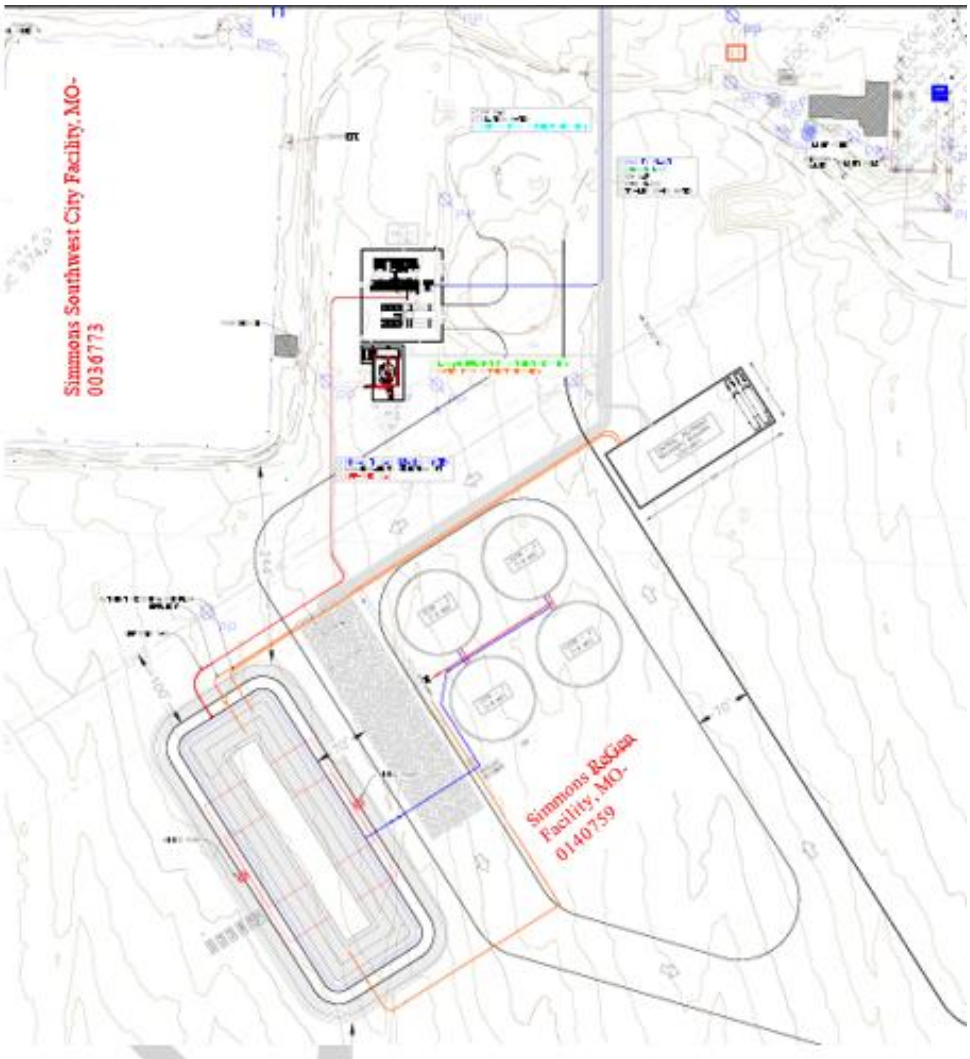
PERMITTED FEATURE	DESCRIPTION	LOCATION
#101	Digester, Internal Monitoring Point	Earthen anaerobic digester basin
#102	Internal Monitoring Point	Process condensate line back to Simmons - Southwest City Plant
#103	Internal Monitoring Point	Solids Product

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 10 CSR 20-6.010(8). Any planned changes to the facility (which changes the facility or outfall description) are required to be reported to the department pursuant to Standard Conditions Part I Section B. If the facility does not or cannot use all of their disclosed treatment devices, this is considered bypassing pursuant to Standard Conditions Part I Section C in the case of wastewater, and BMP disruption in the case of stormwater.

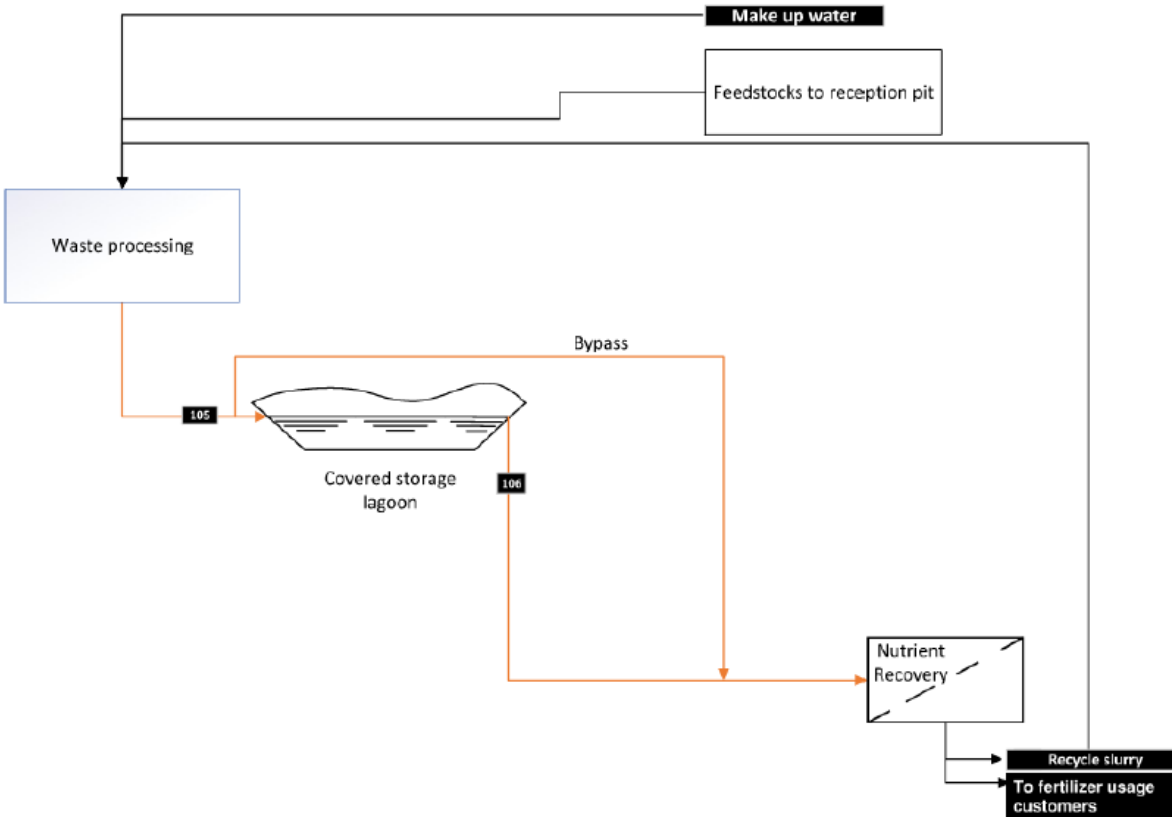
APPLICATION

The application was received October 15, 2024. 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



PROCESS DIAGRAM



FACILITY PERFORMANCE HISTORY & COMMENTS
This is a new facility; therefore, no history.

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 F00642631; 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.
- ✓ 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
The department evaluated other environmental permits currently held by this facility.
- ✓ Simmons Animal Nutrition has applied for a de minis air permit for the anaerobic digester, https://dnr.mo.gov/document-search/simmons-animal-nutrition-application-authority-construct-october-2024

PART II. RECEIVING WATERBODY INFORMATION

This is a no-discharge Facility, the receiving waterbody information listed below is provided for reference in the event there was an unauthorized discharge.

NEARBY WATERBODY TABLE:

WATERBODY NAME	CLASS	WBID	DESIGNATED USES	TOTAL DISTANCE TO SEGMENT	12-DIGIT HUC
Tributary to Tributary to Cave Spring Branch	n/a	n/a	n/a	0.0 mi 0.0 mi	11070206-0302: Middle Honey Creek
Presumed Use Stream, locally known as Tributary to Cave Spring Branch	C, losing	3960	GEN, HHP, IRR, LWW, SCR, WBC-B, WWH (ALP)	~0.2 mi ~0.2 mi	
Cave Spring Branch	C, losing	3941	GEN, HHP, IRR, LWW, SCR, WBC-B, WWH (ALP)	~0.3 mi ~0.5 mi	
Cave Spring Branch (in Oklahoma)		OK121600030340_00	PPWS, CWAC, AG, PBCR, AES, HQW.	~0.6 mi ~0.8 mi	

Classes are representations of hydrologic flow volume or lake basin size as defined in 10 CSR 20-7.031(1)(F). L1: Lakes with drinking water supply - wastewater discharges are not permitted to occur to L1 watersheds per 10 CSR 20-7.015(3)(C); L2: major reservoirs; L3: all other public and private lakes; P: permanent streams; C: streams which may cease flow in dry periods but maintain pools supporting aquatic life; E: streams which do not maintain surface flow; and W: wetlands. Losing streams are defined in 10 CSR 20-7.031(1)(O) and are designated on the losing stream dataset or determined by the Department to lose 30 percent or more of flow to the subsurface.

WBID: Waterbody Identification Number: Missouri Use Designation Dataset per 10 CSR 20-7.031(1)(Q) and (S) as 100K Extent-Remaining Streams or newer; data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip; New C streams described on the dataset per 10 CSR 20-7.031(2)(A)3 as 100K Extent Remaining Streams.

Oklahoma WBID# can be found https://gis.deq.ok.gov/maps/

HUC: Hydrologic Unit Code https://water.usgs.gov/GIS/huc.html

Missouri Designated Uses can be found at 10 CSR 20-7.031(1)(C)

Oklahoma Designated Uses for CSB – Appendix A of 785:45
Water supply, Appendix A (b)(2): PPWS - Public and Private Water Supply beneficial use
Fish and Wildlife Propagation, Appendix A (b)(3)(C): CWAC, - Cool Water Aquatic Community subcategory
Agriculture, Appendix A (b)(4), Agriculture beneficial use
Recreation, Appendix A (b)(5)(A), Primary Body Contact - PBCR
Aesthetics, Appendix A (b)(7) AES - Aesthetics beneficial use; defined at 785:45-5-19, includes nutrients
Additional protection, Appendix A (c)(2)(B), HQW. indicates waters designated High Quality Waters

Other Applicable Criteria:
10 CSR 20-7.031(4): **GEN**: general criteria
Water Quality Standards Search https://apps5.mo.gov/mocwis_public/waterQualityStandardsSearch.do

WATERS OF THE STATE DESIGNATIONS
Waters of the state are divided into seven categories per 10 CSR 20-7.015(1)(B)1 through 7. The applicable water of the state category is listed below. Missouri's technology-based effluent regulations are found in [10 CSR 20-7.015] and are implemented in 10 CSR 20-7.015(2) through (8). When implementing technology regulations, considerations are made for the facility type, discharge type, and category of waters of the state. Stormwater discharges and land application sites are not subject to limitations found in 10 CSR 20-7.015. Effluent limitation derivations are discussed in PART IV: EFFLUENTS LIMITS DETERMINATIONS.

- ✓ Losing streams; a stream which distributes 30% or more of its flow through natural processes such as through permeable geologic materials into a bedrock aquifer within 2 miles flow distance downstream of an existing or proposed discharge.
- ✓ All other waters; identified at 10 CSR 20-7.015(1)(B)7 and 10 CSR 20-7.015(8)

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/ 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 such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of 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. If a water body is determined to be impaired as listed on the §303(d) list, then a watershed management plan or TMDL for that watershed may be developed.

- ✓ This facility falls within the watershed of the 2010 Cave Spring's Branch (CSB) TMDL. The CSB WBID# 3941 EPA approved TMDL for general criteria identifies nutrients as pollutants of concern. This facility is considered to be a source of nutrients; however, this facility does not discharge, and the final product produced are monitored for total phosphorus and total nitrogen concentrations.
- ✓ Oklahoma impaired waters. Cave Springs Branch flows into Honey Creek and then into Middle Grand Lake O' the Cherokees.
  - Cave Springs Branch WBID# OK121600030340_00 is impaired for *E. coli* and Total Dissolved Solids. This facility does not discharge.
  - Honey Creek WBID# OK121600030445_00 is impaired for Enterococcus, listed on the OK 2020 303(d); This facility does not discharge, however both E. Coli and Salmonella are monitored in the final product created at this facility.
  - Grand Lake O' the Cherokees, Middle, WBID# OK121600030030_00 is impaired for lead, listed on the OK 2020 303(d) list. This facility is not a discharger of lead.
- ✓ The Oklahoma TMDL for Bacteria in Neosho River Basin mentions this facility; but does not assign a WLA for fecal coliform, *E. coli*, or enterococcus https://attains.epa.gov/attains-public/api/documents/actions/OKDEQ/34857/106822 (Table 5-2) therefore this permit does not provide limits for enterococcus.
- ✓ Oklahoma waterbodies subject additional to additional protection in 785:45-5-25 as (A) "ORW" waters designated Outstanding Resource Waters; or (B) "HQW" - waters designated High Quality Waters; or (C) "SWS" - waters designated Sensitive Public and Private Water Supplies; or (D) "SWS-R" waterbodies classified as sensitive public and private water supplies downstream of this facility.

Waterbody Mixing Considerations

- ✓ Not Applicable, this is a non-discharging facility.

Part III. Rationale and Derivation of Permit Conditions

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. See https://dnr.mo.gov/document-search/antidegradation-implementation-procedure 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; this is a no-discharge facility and no further degradation proposed; therefore, no further review necessary. The facility will send process condensate wastewater flows to the Simmons Southwest City treatment plant for treatment. See Appendix B for a discussion of the Antidegradation Determination for the Simmons - Southwest City Treatment Facility.

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 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).

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 discharges domestic wastewater to an off-site permitted wastewater treatment facility, the Simmons – Southwest City Wastewater Treatment Facility

Sewage sludge is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. 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 does not manage domestic wastewater on-site.

EMERGENCY DISCHARGE
For non-discharging permits, some permits may allow a small amount of wastewater discharge under very specific circumstances.
✓ Not applicable; this permit does not contain conditions allowing emergency discharges. The earthen digester has a geotextile membrane cover with a gas recovery system, limiting the amount of stormwater that can enter the system. The other digesters and the nutrient recovery system also have covers preventing stormwater from entering those processes.

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 discharge wastewater to waters of the state.

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.

FIRE PROTECTION (HYDRANT) TESTING WATER (OUTDOOR)
The regulatory discharge allowance only extends to actual fire-fighting activities. These regulations are only found in 10 CSR 20-6.200(1)(D). Hydrant testing wastewater can be considered a water contaminant source pursuant to 644.016(25), dependent on the management strategies, which is why the department asks for additional information about these wastewaters. The Federal and State requirements necessitate a reasonable potential determination for all wastewater; hydrant testing is a type of wastewater with intermittent discharge, and is not considered an emergency. Information regarding fire protection is included under illicit discharges for MS4s, and no other regulation allows for any further exemptions, unless the department makes a finding of de minimis. Missouri Clean Water Law requires the department to perform due diligence for all wastewater discharges and all permits (general and site specific). Permit conditions now have specific requirements to manage outdoor hydrant testing logically; and relevant to the pollutants contained in the fire protection testing wastewater. If the facility follows the appropriate management strategy, the permit will cover the discharges. If the facility does not use chlorinated water in the fire protection system, then the facility may allow the wastewater to directly enter a stream or storm collection system, given that sufficient energy dissipation strategies are followed to ensure that solids from soils or other sources are not being entrained in the wastewater. For facilities with chlorinated fire protection testing water, the facility must utilize a strategy to ensure chlorinated water is not being introduced into the waterbody. This could be by allowing the water to soak into the surrounding vegetation, or by retaining the water through a permanent or temporary berm for sufficient time to infiltrate, or other appropriate BMP. Other management strategies exist, and it is the responsibility of the facility to operate all systems to minimize pollution to waters of the state and United States.

GENERAL CRITERIA CONSIDERATIONS
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.
✓ General criteria are all met; this is a non-discharging facility.

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. 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

METALS MONITORING AND LOADING RATES.

Some wastewater, solids, and residuals may contain metals, not specifically necessary for plant growth, not harmful at low rates, and some may even be considered micronutrients. Metals are not expected to be present in the solids produced, however, to verify for the labeling of the solids product and for the potential fertilizer request, metals monitoring is required. Each of these limitations are established in this permit to protect sudden phytotoxicity for the short term, future soil use, and overall plant fertility and fecundity over the long term. These requirements also protect human health and the environment. These requirements are authorized under 10 CSR 20-6.015(4)(A)1. The maximum application values found in this permit for arsenic, cadmium, copper, lead, mercury, nickel, selenium, and zinc in mg/kg for the sludge or solid is found in 40 CFR 503.13; these values were found to be protective of vegetation and the environment for all types of sludge and solids, not only sewage sludge, and the development document and science-based numeric guidelines pursuant to 40 CFR 503 Subpart B.

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.

NUTRIENT MONITORING

Nutrient monitoring is required for facilities characteristically or expected to discharge nutrients (nitrogenous compounds and/or phosphorus) when the design flow is equal to or greater than 0.1 MGD per 10 CSR 20-7.015(9)(D)8. This requirement is applicable to all Missouri waterways.

- ✓ This is a no-discharge permit; therefore, not subject to provisions found in 10 CSR 20-7.015(2)-(9) per 10 CSR 20-7.015(1)(C).
- ✓ This facility has nutrient monitoring as internal monitoring points in the production of the solids product and the process condensate line back to Simmons-Southwest City Wastewater Treatment Plant.

OIL/WATER SEPARATOR SYSTEMS AND USED OIL

Oil water separator (OWS) systems are frequently found at industrial sites where process water, wastewater, or stormwater may contain oils, petroleum, greases, oily wastewaters, or other immiscible liquids requiring separation. Food industry discharges typically require treatment prior to discharge to publicly owned treatment works. Per 10 CSR 26-2.010(2)(B), all oil water separators classified as underground storage tanks (UST) which meet the volume requirements, must be operated according to manufacturer's specifications. OWS which are USTs may be authorized in NPDES permits per 10 CSR 26-2.010(2)(B) or otherwise will be regulated as a underground petroleum storage tank under tank rules. A facility may operate an OWS which is not considered a UST for the wastewater or stormwater at any facility without specific NPDES permit authorization. Alternatively, a facility is not required to cover a UST OWS under the NPDES permit if they desire to obtain alternative regulatory compliance. OWS treating animal, vegetable, or food grade oils are not required to be authorized under 10 CSR 20-26-2.020(2)(B). All best management practices for all OWS systems must be adhered. In 2017, field-poured concrete tanks, previously exempted from the tanks rules, lost their exempt status. Facilities must re-evaluate these concrete structures pursuant to these now relevant rules. Adjacent USTs are not covered by these regulations.

Any and all water treatment systems designed to remove floating immiscible oils are termed oil water separators. If a device is intended to capture oil and separate it from water which is to be discharged, this generally qualifies that oil as used oil (if it is petroleum-based in nature). Used oil and oily sludge must be disposed of in accordance with 10 CSR 25-11.279. Pursuant to 40 CFR 279.20(b)(2)(ii)(B), separating used petroleum-based oil from wastewater generated on-site (to make the wastewater acceptable for discharge or reuse pursuant to Federal or state regulations governing the management or discharge of wastewaters) are considered used oil generators and not processors under self-implementing 40 CFR 279 Standards For The Management Of Used Oil. Oily wastes generated by OWS are also generally subject to Spill Prevention, Control, and Countermeasure (SPCC) regulations.

OPERATOR CERTIFICATION REQUIREMENTS

Operators or supervisors of operations at regulated domestic wastewater treatment facilities shall be certified in accordance with 10 CSR 20-9 and any other applicable state law or regulation.

- ✓ Not applicable; this facility is not required to have a certified operator.

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.

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.
✓ The facility is located in the Southwest Regional Office, which can be contacted at 417-891-4300 or via email at swro@dnr.mo.gov.

RENEWAL REQUIREMENTS
Pursuant to 644.051.19, 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. 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, with a cover letter describing facility operations.

SAMPLING FREQUENCY JUSTIFICATION
As the facility is proposing new processes, internal monitoring for permitted features #101 and #102 are monthly; for permitted feature #103, monitoring is monthly to allow the facility to demonstrate the consistency of the product and then it reduces to quarterly. The facility may sample more frequently if additional data is required to determine if best management operations and technology are performing as expected.

SAMPLING TYPE JUSTIFICATION
The sampling types are representative of the discharges and are protective of water quality. Discharges with uniform characteristics can have grab samples. Parameters which must have grab sampling are: pH, ammonia, *E. coli*, and total phosphorus. This is due to the holding time restriction for *E. coli*, the volatility of Ammonia, and pH cannot be preserved and must be sampled in the field. Ammonia and total phosphorus samples must be immediately preserved with acid, these samples are to be collected as a grab.
For further information on sampling and testing methods see 10 CSR 20-7.015(9)(D)2.

SCHEDULE OF COMPLIANCE (SOC)
A schedule of compliance is time allowed to meet future more stringent limitations.
✓ Not applicable; this permit does not contain a SOC.

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; sludge is removed by contract hauler or stored in the holding structure. The permitted management strategy must be followed, see permit under FACILITY DESCRIPTION. If the permitted management strategy cannot be followed, the facility must obtain a permit modification.
- ✓ Solids produced under this permit do not fall under the classification as solid waste, because the materials being produced are to be sold to provide a benefit to the agricultural land. Benefits can include the following: build soil, amend soil, improve drainage, provide nutrients, provide micronutrients, increase oxygenation, provide slow release nutrients, or for substrate for microbes.

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, and Missouri Clean Water Law.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A SWPPP must be prepared by the facility if the SIC code or facility description type is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2). A SWPPP may be required of other facilities where stormwater has been identified as necessitating better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate stream pollution from stormwater runoff.

Pursuant to 40 CFR 122.44(k), Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when: 1) Authorized under §304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) Authorized under §402(p) of the CWA for the control of stormwater discharges; 3) Numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. A BMP may take the form of a numeric benchmark. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 and again in 2021 https://www.epa.gov/sites/default/files/2021-03/documents/swppp_guide_industrial_2021_030121.pdf BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to 1) identify sources of pollution or contamination, and 2) select and carry out actions which prevent or control the pollution of storm water discharges. Additional information can be found in *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006; September 1992).

Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. The following paragraph outlines the general steps the facility can take to determine which BMPs will work to achieve the benchmark values or limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure assisting in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

The facility can review the precipitation frequency maps for development of appropriate BMPs. The online map https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mo can be targeted to the facility location and is useful when designing detention structures and planning for any structural BMP component. The stormwater map can also be used to determine if the volume of stormwater caused a disrupted BMP; and if the BMP must be re-designed to incorporate additional stormwater flows.

Areas which must be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once the potential sources of stormwater pollution have been identified, a plan shall be formulated to best control the amount of pollutant being released and discharged by each activity or source. This must include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed the facility will employ the control measures determined to be adequate to achieve the benchmark values discussed above. The facility will conduct monitoring and inspections of the BMPs to ensure they are working properly and re-evaluate any BMP not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the benchmark value, the BMP being employed is deficient in controlling stormwater pollution. Corrective action must be taken to repair, improve, or replace the failing BMP. This internal evaluation is required at least once per month but may be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial-and-error process until appropriate BMPs have been established.

For new, altered, or expanded stormwater discharges, the SWPPP shall identify reasonable and effective BMPs while accounting for environmental impacts of varying control methods. The antidegradation analysis must document why no discharge or no exposure options are not feasible. The selection and documentation of appropriate control measures shall serve as an alternative analysis of

technology and fulfill the requirements of antidegradation per 10 CSR 20-7.031(3). For further guidance, consult the antidegradation implementation procedure (https://dnr.mo.gov/document-search/antidegradation-implementation-procedure).

Alternative Analysis (AA) evaluation of the BMPs is a structured evaluation of BMPs which are reasonable and cost effective. The AA evaluation can include practices designed to be: 1) non-degrading; 2) less degrading; or 3) degrading water quality. The glossary of AIP defines these three terms. The chosen BMP will be the most reasonable and effective management strategy while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The AA evaluation must demonstrate why "no exposure" is not a feasible alternative at the facility. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.031(3) Water Quality Standards and *Antidegradation Implementation Procedure* (AIP), §II.B.

The SWPPP cannot authorize non-stormwater discharges. A permit condition or de minimis declaration is the only means that can authorize any water which is not composed entirely of rainfall or snowmelt runoff.

If parameter-specific numeric benchmark exceedances continue to occur and the facility feels there are no practicable or cost-effective BMPs which will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the facility can submit a request to re-evaluate the benchmark values. This request needs to include 1) a detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values; 2) financial data of the company and documentation of cost associated with BMPs for review and 3) the SWPPP, which must contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. This will allow the department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification, which includes an appropriate fee; the application is found at: https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/wastewater

✓ Not applicable; this facility has demonstrated there is no exposure for stormwater pursuant to 10 CSR 20-6.200(1)(C). Everything at the site is under roof or covered.

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 #101 – NO-DISCHARGE WASTEWATER STRUCTURE

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	DAILY MINIMUM	MONTHLY AVERAGE	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FREEBOARD	FEET	2.0	*	NEW	ONCE MONTH	MONTHLY	MEASUREMENT

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Freeboard
2-foot minimum freeboard level pursuant to 10 CSR 20-8.200(4)(A)3 for storage structures exposed to precipitation. Monthly monitoring of the freeboard in the structure is required to ensure proper operational controls. This permitted feature was determined to be no-discharge. As such, an antidegradation review was not conducted and discharge authorization has not been granted. To ensure the structure remains no-discharge, comply with all BMPs listed, monitor freeboard/liquid levels, and report highest reading monthly. Permits only authorize discharges after the facility has documented compliance with state and federal Clean Water laws and regulations, including antidegradation and construction requirements. Freeboard is the distance between the top of the liquid level and the bottom of the floating cover. Freeboard is measured to the nearest inch and is reported in tenths of feet.

PERMITTED FEATURE #102 – INTERNAL MONITORING POINT FOR RECYCLE FLOWS

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG.	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL						
FLOW	MGD	*	*	ONCE/MONTH	MONTHLY	24 HR. TOT
CONVENTIONAL						
CHEMICAL OXYGEN DEMAND	mg/L	*	*	ONCE/MONTH	MONTHLY	GRAB
pH †	SU	*	*	ONCE/MONTH	MONTHLY	GRAB
TOTAL SUSPENDED SOLIDS (TSS)	mg/L	*	*	ONCE/MONTH	MONTHLY	GRAB
NUTRIENTS						
AMMONIA AS N	mg/L	*	*	ONCE/MONTH	MONTHLY	GRAB
KJELDAHL NITROGEN, TOTAL (TKN)	mg/L	*	*	ONCE/MONTH	MONTHLY	GRAB
NITRATE PLUS NITRITE AS N	mg/L	*	*	ONCE/MONTH	MONTHLY	GRAB
NITROGEN, TOTAL N (TN)	mg/L	*	*	ONCE/MONTH	MONTHLY	GRAB
PHOSPHORUS, TOTAL P (TP)	mg/L	*	*	ONCE/MONTH	MONTHLY	GRAB
OTHER						
CHLORIDE	mg/L	*	*	ONCE/MONTH	MONTHLY	GRAB
TEMPERATURE	°F	*	*	ONCE/MONTH	MONTHLY	GRAB

DERIVATION AND DISCUSSION OF LIMITS:
The facility shall measure this at the process condensate line, prior to returning to Simmons main plant.

PHYSICAL:

Flow
Monitoring only for the facility to determine the amount of wastewater being returned to the treatment process from the anaerobic digesters and the nutrient recovery system. Per 40 CFR Part 122.44(i)(1)(ii) the volume of effluent discharged from each outfall is

needed to ensure compliance with permitted effluent limitations. If the facility is unable to obtain effluent flow, then it is the responsibility of the facility to inform the department, which may require the submittal of an operating permit modification. The facility will report the total maximum daily flow and average in millions of gallons per day (MGD).

CONVENTIONAL:

Chemical Oxygen Demand (COD)
Monitoring only for the facility to determine the demand the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system. There is no numeric water quality standard for COD; however, increased oxygen demand may impact treatment processes. COD is also a valuable indicator parameter.

pH
Monitoring only for the facility to determine the impact the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system. As the pH from the nutrient recovery line is expected to be a lower pH than the digester and the existing treatment process.

Total Suspended Solids
Monitoring only for the facility to determine the impact the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system.

NUTRIENTS:

Ammonia, Total as Nitrogen
Monitoring only for the facility to determine the impact the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system. Nitrogenous compounds are present in this recycle line.

Kjeldahl Nitrogen, Total (TKN)
Monitoring only for the facility to determine the impact the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system. Nitrogenous compounds are present in this recycle line.

Nitrate plus Nitrite
Monitoring only for the facility to determine the impact the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system. Nitrogenous compounds are present in this recycle line.

Nitrogen, Total (TN)
Monitoring only for the facility to determine the impact the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system. Nitrogenous compounds are present in this recycle line. Total Nitrogen is a calculation using TKN + Nitrate + Nitrite, or alternatively, a sample may be collected and analyzed directly for TN.

Phosphorus, Total P (TP)
Monitoring only for the facility to determine the impact the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system. Phosphorus compounds are expected to be present in this recycle line.

OTHER:

Chloride
Monitoring only for the facility to determine the impact the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system.

Temperature
Monitoring only for the facility to determine the impact the process condensate wastewater may have on the treatment process from the anaerobic digesters and the nutrient recovery system, since water will be heated as part of the anaerobic digestion process to create the gases needed. This parameter must be measured within the 15-minute holding time.

PERMITTED FEATURE #103 – PRODUCT SAMPLING

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG.	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL						
SOLIDS PRODUCED (DRY WEIGHT)	lbs	*	*	MONTHLY/ QUARTERLY	MONTHLY/ QUARTERLY	TOTAL
CONVENTIONAL						
E. COLI	cfu/100mL	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
SALMONELLA	mpn/4g	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
METALS						
ALUMINUM, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
ARSENIC, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
BARIUM, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
BORON, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
CADMIUM, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
CHROMIUM, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
COPPER, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
LEAD, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
MERCURY, TOTAL	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
MOLYBDENUM, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
NICKEL, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
SELENIUM, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
SILVER, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
THALLIUM, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
ZINC, TR	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
NUTRIENTS						
NITROGEN, TOTAL N (TN)	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
PHOSPHORUS, TOTAL P (TP)	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB
TOTAL POTASSIUM	mg/kg	*	*	ONCE/MONTH ONCE/QUARTER	MONTHLY/ QUARTERLY	GRAB

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Solids Produced
The amount of solids is necessary to measure production rates.

CONVENTIONAL:

E. Coli
Monitoring requirement only to demonstrate consistency in product. As the product is planned to be sold as a fertilizer to determine the amount of bacteria present for labeling of the product.

Salmonella
Monitoring requirement only to demonstrate consistency in product. As the product is planned to be sold as a fertilizer to determine the amount of bacteria present for labeling of the product.

METALS:

Metals: (Aluminum, Arsenic, Barium, Boron, Cadmium, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Zinc)
Monitoring requirement only to demonstrate consistency in product and that it will not have reasonable potential to cause or contribute to phytotoxicity. Also monitoring in accordance with the required labeling in 266.321, RSMo and to demonstrate consistency of product per 644.051.6, RSMo.

NUTRIENTS:

Nitrogen (N)
Monitoring requirement only. Solids produced from industrial wastewater residuals contain variable concentrations of nutrients. In accordance with 10 CSR 20-20-6.015(4)(A)1 monitoring for total nitrogen will ensure that the nutrients applied are being properly utilized. Also monitoring in accordance with the required labeling in 266.321, RSMo and to demonstrate consistency of product per 644.051.6, RSMo.

Phosphorous (P)
Monitoring requirement only. Solids produced from industrial wastewater residuals contain variable concentrations of nutrients. In accordance with 10 CSR 20-20-6.015(4)(A)1 monitoring for phosphorous will ensure that the nutrients applied are being properly utilized. Also monitoring in accordance with the required labeling in 266.321, RSMo and to demonstrate consistency of product per 644.051.6, RSMo.

Potassium (K)
Monitoring requirement only. Solids produced from industrial wastewater residuals contain variable concentrations. In accordance with 10 CSR 20-20-6.015(4)(A)1 monitoring for total potassium will ensure that the nutrients applied are being properly utilized. Also monitoring in accordance with the required labeling in 266.321, RSMo and to demonstrate consistency of product per 644.051.6, RSMo.

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.

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 was December 13, 2024, to January 13, 2025. No comments were received.

DATE OF FACT SHEET: NOVEMBER 12, 2024

COMPLETED BY:
LEASUE MEYERS, EI, ENVIRONMENTAL ENGINEER
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
ENGINEERING SECTION
leasue.meyers@dnr.mo.gov

APPENDIX A: ENGINEERING CERTIFICATION

Pursuant to 10 CSR 20-6.010(7)(B)1.F., projects or portions of projects exempt from construction permitting must submit engineering certification that the exempt portions meets the minimum requirements of 10 CSR 20-8.110 – 10 CSR 20-8.210. This facility submitted engineering certification for the 4 anaerobic digesters in tanks.

ROESLEIN
ENGINEERS • MANUFACTURERS • CONSTRUCTORS

9200 Watson Rd. Suite 200, St. Louis, MO 63126
(314) 729 - 0055
www.roeslein.com

CERTIFICATION PAGE

I hereby certify this permit package for Earthen Lagoon Digester for Simmons Animal Nutrition, located in Southwest City, Missouri. All engineering calculations and design drawings included therein are in accordance with standard and appropriate engineering practices, including consideration of applicable industry standards and field conditions. This document is released for the purpose of review only and may not be used for construction or bidding purposes.

Name:	Rajeev Mathew, P.E.
P.E. License Number:	PE-2014035810
State:	Missouri
Expiration Date:	December 31, 2026

Rajeev Mathew, P.E

APPENDIX B: ANTIDEGRADATION DETERMINATION FOR CONDENSATE LINE RETURN TO SIMMONS SOUTH WEST CITY WWTP

MISSOURI DEPARTMENT OF NATURAL RESOURCES

Michael L. Parson
Governor

Dru Buntin
Director

OFFICIAL COPY VIA EMAIL: coleson.rakestraw@simfoods.com

December 11, 2024

Coleson Rakestraw
Senior Environmental Manager
Simmons Animal Nutrition, Inc.
601 N. Hico Street
Siloam Springs, AR 72761

RE: Transfer of Wastewater from Simmons ReGen Facility – Simmons Southwest City Plant, MO-0036773, ACT1710, McDonald County, Antidegradation Determination

Dear Coleson Rakestraw:

The Missouri Department of Natural Resources has reviewed the request to transfer process condensate flows from the proposed Simmons ReGen facility (MO-0140759) to the Southwest City plant (MO-0036773) submitted by Simmons Prepared Foods, Inc., on October 15, 2024. The Simmons ReGen facility will be an anaerobic digester, with a nutrient recovery system to create natural gas for use within the facility and to create a commercial fertilizer. As the process condensate line is dependent on the inputs into the digester system and the nutrient recovery system, it is estimated that it could be up to 150,000 gallons per day (gpd) transferred back to the Southwest plant.

The Simmons Southwest City treatment plant has a design capacity of 2.0 million gallons per day (MGD), with average flows of 1.86 MGD over the previous five years. The treatment plant includes equalization basin, dissolved air floatation, aerated lagoon, anaerobic lagoon, continuous flow batch reactor, activated sludge system, chemical phosphorus removal, clarification, filtration, disinfection, and recycling of approximately 10 percent of the flow. The proposed flows from the Simmons ReGen Facility will be added to the anaerobic lagoon, which has a capacity of 11 MG. If the maximum of 150,000 gpd transferred, that would be 7.5 percent of the 11 MG capacity of the lagoon.

If 150,000 gpd of process condensate water from the digesters and nutrient recovery system is sent back to the Simmons – Southwest City plant, the plant will be approaching the treatment capacity of the existing facility and pieces of the existing facility may need to be expanded in the

future, which will trigger an Antidegradation Review if new larger, treatment units need to be installed.

The Simmons – Southwest City Plant will still be required to meet all effluent limits established in the operating permit, with no increase in loading allowed in the discharge, as the operating permit limits for Total Nitrogen at 83.45 lbs/day and Total Phosphorus at 16.69 lbs/day, per the assumptions in the 2010 Total Maximum Daily Load (TMDL) for Cave Springs Branch for nutrients.

Based on the information provided, the proposed activities are exempt from Antidegradation requirements per 10 CSR 20-7.031(3)(D) and the Missouri Antidegradation Rule and Implementation Procedure, July 13, 2016 (AIP), as

- No new pollutants of concern are being introduced requiring treatment and
- The existing treatment plant has the capacity to accept and treat the proposed flow without expanding or upsizing treatment components (AIP, page 15).

Any changes to the scope of the proposed activities, including additional flows, different process lines, or increase in frequency may result in a different determination. Contact the Engineering Section if you have questions.

For questions related to this determination, please contact Leasue Meyers, review engineer, by phone at 573-751-7906, by email at leasue.meyers@dnr.mo.gov, or by mail at Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102. Thank you.

Sincerely,

WATER PROTECTION PROGRAM

Cindy LePage

Cindy LePage, P.E., Chief
Engineering Section

CL:lmj

c: Pam Hackler, Water Protection Program
Bill Brisco, Simmons Animal Nutrition

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.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
FORM A – APPLICATION FOR NONDOMESTIC PERMIT UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED
JET PAY CONFIRMATION NUMBER	

PLEASE READ ALL THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM. SUBMITTAL OF AN INCOMPLETE APPLICATION MAY RESULT IN THE APPLICATION BEING RETURNED.

IF YOUR FACILITY IS ELIGIBLE FOR A NO EXPOSURE EXEMPTION:
Fill out the No Exposure Certification Form (Mo 780-2828): https://dnr.mo.gov/forms/780-2828-f.pdf

1. REASON FOR APPLICATION:

☐ a. This facility is now in operation under Missouri State Operating Permit (permit) MO – _____, is submitting an application for renewal, and there is no proposed increase in design wastewater flow. Annual fees will be paid when invoiced and there is no additional permit fee required for renewal.

☐ b. This facility is now in operation under permit MO – _____, is submitting an application for renewal, and there is a proposed increase in design wastewater flow. Antidegradation Review may be required. Annual fees will be paid when invoiced and there is no additional permit fee required for renewal.

☑ c. This is a facility submitting an application for a new permit (for a new facility). Antidegradation Review may be required. New permit fee is required.

☐ d. This facility is now in operation under Missouri State Operating Permit (permit) MO – _____ and is requesting a modification to the permit. Antidegradation Review may be required. Modification fee is required.

2. FACILITY

NAME		TELEPHONE NUMBER WITH AREA CODE	
Simmons ReGen Facility		(417) 762-3001	
ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE
10700 South State Highway 43	Southwest City	MO	64863

3. OWNER

NAME		TELEPHONE NUMBER WITH AREA CODE	
Simmons Animal Nutrition, Inc.		(479) 736-9688	
EMAIL ADDRESS			
coleson.rakestraw@simfoods.com			
ADDRESS (MAILING)	CITY	STATE	ZIP CODE
601 N Hico St	Siloam Springs	AR	72761-2410

4. CONTINUING AUTHORITY

NAME		TELEPHONE NUMBER WITH AREA CODE	
Same as owner.			
EMAIL ADDRESS			
ADDRESS (MAILING)	CITY	STATE	ZIP CODE

5. OPERATOR CERTIFICATION

NAME	CERTIFICATE NUMBER	TELEPHONE NUMBER WITH AREA CODE	
N/A			
ADDRESS (MAILING)	CITY	STATE	ZIP CODE

6. FACILITY CONTACT

NAME	TITLE	TELEPHONE NUMBER WITH AREA CODE
Coleson Rakestraw	Sr. Environmental Manager	(479) 736-9688
E-MAIL ADDRESS		
coleson.rakestraw@simfoods.com		

7. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary.

NAME			
N/A - No Discharge Facility			
ADDRESS	CITY	STATE	ZIP CODE

8. ADDITIONAL FACILITY INFORMATION

8.1 Legal Description of Outfalls. (Attach additional sheets if necessary.)
For Universal Transverse Mercator (UTM), use Zone 15 North referenced to North American Datum 1983 (NAD83)

001 _____¼ _____¼ Sec _____ T _____ R _____ _____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

002 _____¼ _____¼ Sec _____ T _____ R _____ _____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

003 _____¼ _____¼ Sec _____ T _____ R _____ _____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

004 _____¼ _____¼ Sec _____ T _____ R _____ _____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

Include all subsurface discharges and underground injection systems for permit consideration.

8.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.
Primary SIC 4922 and NAICS 486210 SIC _____ and NAICS _____
SIC _____ and NAICS _____ SIC _____ and NAICS _____

9. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION

A. Is this permit for a manufacturing, commercial, mining, solid/hazardous waste, or silviculture facility? YES ☐ NO ☑
If yes, complete Form C.

B. Is the facility considered a "Primary Industry" under EPA guidelines (40 CFR Part 122, Appendix A) : YES ☐ NO ☑
If yes, complete Forms C and D.

C. Is wastewater land applied? YES ☐ NO ☑
If yes, complete Form I.

D. Are sludge, biosolids, ash, or residuals generated, treated, stored, or land applied? YES ☐ NO ☑
If yes, complete Form R.

E. Have you received or applied for any permit or construction approval under the CWA or any other environmental regulatory authority? YES ☐ NO ☑
If yes, please include a list of all permits or approvals for this facility:
Environmental Permits for this facility: Applying for air construction permit and land disturbance permit

F. Do you use cooling water in your operations at this facility? YES ☐ NO ☑
If yes, please indicate the source of the water: _____

G. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.

10. ELECTRONIC DISCHARGE MONITORING REPORT (eDMR) SUBMISSION SYSTEM

Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data. **One of the following must be checked in order for this application to be considered complete.** Please visit https://dnr.mo.gov/env/wpp/edmr.htmfor information on the Department's eDMR system and how to register.

☑ - I will register an account online to participate in the Department's eDMR system through the Missouri Gateway for Environmental Management (MoGEM) before any reporting is due, in compliance with the Electronic Reporting Rule.

☐ - I have already registered an account online to participate in the Department's eDMR system through MoGEM.

☐ - I have submitted a written request for a waiver from electronic reporting. See instructions for further information regarding waivers.

☐ - The permit I am applying for does not require the submission of discharge monitoring reports.

11. FEES

Permit fees may be paid by attaching a check, or online by credit card or eCheck through the JetPay system. Use the URL provided to access JetPay and make an online payment:
For new permits: https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/591

For modifications: https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/596

12. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE
Seth Walters, VP, Engineering, Reliability, Environmental	(479) 752-8771
SIGNATURE	DATE SIGNED
	10/15/2024

MO 780-1479 (04-21)