

July 1, 2024

DM Farms of Rose Hill, LLC  
1801 W. Austin  
P.O. Box 566  
Nevada, MO 64772

Dear Permittee:

Pursuant to the Federal Water Pollution Control Act, under the authority granted to the State of Missouri and in compliance with the Missouri Clean Water Law, we have issued and are enclosing your Missouri State Operating Permit for Murphy Family Ventures, LLC Ozark-Osage Pyramid.

Please read and review your permit and attached Standard Conditions. They contain important information on site management and reporting requirements. Quarterly reports required by this report must be submitted through our eDMR system.

This permit may include requirements with which you may not be familiar. If you would like The Missouri Department of Natural Resources to meet with you to discuss how to satisfy the permit requirements, an appointment can be set up by contacting the Southwest Regional Office by phone at 417-891-4300, by email at [SWRO@dnr.mo.gov](mailto:SWRO@dnr.mo.gov), or by mail at 2040 W. Woodland, Springfield, MO 65807-5912. These visits are called Compliance Assistance Visits and focus on explaining the requirements to the permit holder.

This permit is both your Federal NPDES Permit and your new Missouri State Operating Permit and replaces all previous State Operating Permits issued for this facility under this permit number. In all future correspondence regarding this facility, please refer to your State Operating Permit number and facility name as shown on page one of the permit.

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Section 621.250, RSMo. To appeal, you must file a petition with the AHC within 30 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. Contact information for the AHC is: Administrative Hearing Commission, United States Post Office Building, Third Floor, 131 West High Street, P.O. Box 1557, Jefferson City, MO 65102, phone: 573-751-2422, fax: 573-751-5018, and website: [www.oa.mo.gov/ahc](http://www.oa.mo.gov/ahc).

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Please be aware that this facility may also be subject to any applicable county or other local ordinances or restrictions.

If you have any questions concerning this permit, please do not hesitate to contact the Water Protection Program at P.O. Box 176, Jefferson City, MO 65102, or by phone at 573-751-1300. Thank you.

Sincerely,

WATER PROTECTION PROGRAM

A handwritten signature in dark ink, appearing to read "John Hoke", is written over a light gray circular background.

John Hoke  
Director

JH/pmv

Enclosures

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION



## MISSOURI STATE OPERATING PERMIT

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

Permit No MO-0131032

Owner: DM Farms of Rose Hill, LLC  
Address: 1801 W. Austin, P.O. Box 566  
Nevada, MO 64772

Continuing Authority: DM Farms of Rose Hill, LLC  
1801 W. Austin, P.O. Box 566  
Nevada, MO 64772

Facility Name: Murphy Family Ventures, LLC Ozark-Osage Pyramid  
Facility Address: 28969 S. 2775 Rd.  
Sheldon, MO 64784

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

Operation of this facility shall not cause a violation of water quality standards.

### FACILITY DESCRIPTION

Permitted Features #001 - #010, #017, #017A, #020A – Class 1A Concentrated Animal Feeding Operation, SIC #0213. No discharge of process waste. Thirteen anaerobic lagoons with secondary containment structures and a dead animal refrigeration unit. Design flow is 117, 224, 279 gallons per year (0.32 MGD)  
Design number of animals is 23,553 animal units of swine over 55 pounds and swine under 55 pounds.

SIC Code(s): 0213

CAFO Class Size: 1A

Animal Units: 23,553 animal units of swine over 55 pounds and swine under 55 pounds.

The activities permitted herein are authorized under the Missouri Clean Water Law and National Pollutant Discharge Elimination System.

July 1, 2024  
Effective Date

June 30, 2029  
Expiration Date

  
\_\_\_\_\_  
John Hoke, Director, Water Protection Program

## FACILITY DESCRIPTION (continued)

The Ozark-Osage pyramid has nine sow farrow-to-wean sites with onsite nursery and finisher, one nursery site, and one boar stud site. Each site is served by a single stage anaerobic lagoon with recycle line pumps. Secondary containments are present at all production sites. Eight sow sites utilize recycle flush systems and one sow site, nursery site, and boar stud site utilize a pull plug system. Mortalities are held in refrigeration units until removed off site for rendering.

This operating permit includes an addition of Permitted Features #017A and #020A. The addition does not change the permitted animal capacity for this pyramid. After the issuance of this operating permit, the construction permit for the proposed construction associated with Permitted Features #017A and #020A can be issued. Upon completion of the construction and receiving the Statement of Work Complete, the Permitted Features #017A and #020A and terms and conditions specific to the modifications will then be implemented in the permit and the Permitted Features #017 and #020 will be inactive.

### Permitted Feature #001 – Chestnut Sow Farm – Anaerobic lagoon and secondary containment

Legal Description: NE ¼, SE ¼, Sec. 29, T34N, R29W, Vernon County

UTM Coordinates: 400390.161/4169022.669

Receiving Stream: Tributary to Cynthia Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106-0803

Design Waste Volume: 10,994,530 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon - 365 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 6.7 feet below overflow level

### Permitted Feature #002 – Bluestem Sow Farm – Anaerobic lagoon and secondary containment

Legal Description: NE ¼, NE ¼, Sec. 29, T34N, R29W, Vernon County

UTM Coordinates: 400412.911/4169747.019

Receiving Stream: Tributary to Cynthia Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106-0803

Design Waste Volume: 10,924,085 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon - 315 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 6 feet below overflow level

### Permitted Feature #003 – Ten-Mile Sow Farm – Anaerobic lagoon and secondary containment

Legal Description: SW ¼, NE ¼, Sec. 29, T34N, R29W, Vernon County

UTM Coordinates: 399933.161/4169539.319

Receiving Stream: Tributary to Cynthia Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106-0803

Design Waste Volume: 10,673,145 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon – 280 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 6.1 feet below overflow level

### Permitted Feature #004 – Springview Sow Farm – Anaerobic lagoon and secondary containment

Legal Description: NW ¼, SE ¼, Sec. 20, T34N, R29W, Vernon County

UTM Coordinates: 399978.211/4170448.319

Receiving Stream: Tributary to Cynthia Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 7630.00

USGS# and Sub-Watershed #: 10290106 - 0803

Design Waste Volume: 10,854,370 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon – 365 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 7.3 feet below overflow level

FACILITY DESCRIPTION (continued)

Permitted Feature #005 – Driftwood Sow Farm – Anaerobic lagoon and secondary containment

Legal Description: SW ¼, SE ¼, Sec. 9, T34N, R29W, Vernon County

UTM Coordinates: 401817.810/4173357.319

Receiving Stream: Tributary to Wilkey Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 7630.00

USGS# and Sub-Watershed #: 10290106 - 0803

Design Waste Volume: 10,912,405 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon – 335 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 6.2 feet below overflow level

Permitted Feature #006 – Sawgrass Sow Farm – Anaerobic lagoon and secondary containment

Legal Description: SW ¼, SE ¼, Sec. 9, T34N, R29W, Vernon County

UTM Coordinates: 401821/4172411

Receiving Stream: Tributary to Wilkey Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106 - 0803

Design Waste Volume: 11,528,160 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon – 335 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 4.8 feet below overflow level

Permitted Feature #007 – Bear Creek Sow Farm – Anaerobic lagoon and secondary containment

Legal Description NW ¼, SE ¼, Sec. 16, T34N, R29W, Vernon County

UTM Coordinates: 401536.760/4172185.543

Receiving Stream: Tributary to Wilkey Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106 - 0803

Design Waste Volume: 11,241,635 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon – 360 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 5.5 feet below overflow level

Permitted Feature #008 – Forest Oak Nursery – Anaerobic lagoon and secondary containment

Legal Description: SE ¼, SE ¼, Sec. 10, T34N, R29W, Vernon County

UTM Coordinates: 403661.810/4173144.669

Receiving Stream: Tributary to Wilkey Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106 - 0803

Design Waste Volume: 6,575,840 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon – 255 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 7.7 feet below overflow level

Permitted Feature #009 – Cyclone Boar Stud – Anaerobic lagoon and secondary containment

Legal Description: NE ¼, NW ¼, Sec. 10, T34N, R29W, Vernon County

UTM Coordinates: 403028.511/4174459.319

Receiving Stream: Tributary to Wilkey Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106 - 0803

Design Waste Volume: 1,023,460 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon – 365 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 5.8 feet below overflow level

FACILITY DESCRIPTION (continued)

Permitted Feature #010 – Mortality Holding Station. Refrigeration units for temporary storage of mortalities.

Legal Description: NW 1/4, SE 1/4, Sec 29, T34N, R29W, Vernon County

UTM Coordinates: 400021.448/4168932.206

Receiving Stream: Tributary to McCarty Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290105 - 0102

Permitted Feature #011 – Deleted – Stream Monitoring

Permitted Feature #012 – Deleted – Stream Monitoring

Permitted Feature #013 – Deleted – Stream Monitoring

Permitted Feature #014 – Deleted – Stream Monitoring

Permitted Feature #015 – Deleted – Stormwater

Permitted Feature #016 – Deleted – Stormwater

Permitted Feature #017 – Ozark East Sow Farm – Anaerobic lagoon and secondary containment

Legal Description: NW 1/4, SW 1/4, Sec. 21, T34N, R29W, Vernon County

UTM Coordinates: 400412.911/4169747.019

Receiving Stream: Tributary to Cynthia Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106 - 0803

Design Waste Volume: 24,052,937 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon – 372 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 6.6 feet below overflow level

Permitted Feature #017A – Ozark East Sow Farm – Covered anaerobic lagoon, flow equalization lagoon, and secondary containment.

Legal Description: NW 1/4, SW 1/4, Sec. 21, T34N, R29W, Vernon County

UTM Coordinates: 400412.911/4169747.019

Receiving Stream: Tributary to Cynthia Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106 - 0803

Total Design Waste Volume: 31,950,797 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Covered lagoon and flow equalization lagoon – 494 (days) total

Covered Lagoon Upper Operating Level: 1 foot below overflow level

Covered Lagoon Lower Operating Level: 6 feet below overflow level

Flow Equalization Lagoon Upper Operating Level: 1 foot below overflow level

Flow Equalization Lagoon Lower Operating Level: 6.6 feet below overflow level

Permitted Feature #018 – Deleted – Stream Monitoring

Permitted Feature #019 – Deleted – Stream Monitoring

Permitted Feature #020 – Forest Oak Sow Farm – Anaerobic lagoon and secondary containment

Legal Description: S 1/2, SW 1/4, Sec. 10, T34N, R29W, Vernon County

UTM Coordinates: 402760.036/4173100.144

Receiving Stream: Tributary to Wilkey Creek (U)

First Classified Stream – ID#: Presumed Use Streams (C) 3960.00

USGS# and Sub-Watershed #: 10290106 - 0803

Design Waste Volume: 8,443,712 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Anaerobic Lagoon – 365 (days)

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 6.6 feet below overflow level

FACILITY DESCRIPTION (continued)

Permitted Feature #020A – Forest Oak Sow Farm – Covered anaerobic lagoon, flow equalization lagoon, and secondary containment

Legal Description SE ¼, SW ¼, Sec. 10, T34N, R29W, Vernon County

UTM Coordinate: X = 402949, Y = 4173100

Receiving Water: Tributary to Wilkey Creek

First Classified Stream and ID: 100K Extent – Remaining Streams (C) (3960)

USGS Basin & Sub-Watershed No: 10290106-0803

Design Waste Volume: 13,597,479 gallons/year

Storage Structure Type(s) and Design Storage Period (days): Covered lagoon and flow equalization lagoon – 588 (days) total

Covered Lagoon Upper Operating Level: 1.0 foot below overflow level

Covered Lagoon Lower Operating Level: 6.6 feet below overflow level

Flow Equalization Lagoon Upper Operating Level: 1 foot below overflow level

Flow Equalization Lagoon Lower Operating Level: 6.2 feet below overflow level

## **A. STANDARD CONDITIONS**

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

## **B. GENERAL CONDITIONS**

### **1. EMERGENCY OR UNAUTHORIZED DISCHARGE**

Wastewater shall be stored and land applied during suitable conditions so that there is no discharge from the storage structures or land application sites. An emergency discharge from wastewater storage structures may only occur in accordance with Special Condition #2 of this permit. **Discharges for any other reason from production or land application areas shall constitute a permit violation and shall be reported in accordance with Standard Conditions, Part I, Section B.2.b.** Monitoring shall take place once per day while discharging. Test results are due on the 28<sup>th</sup> day of the following month after the cessation of the discharge. Permittee shall monitor for the following constituents:

| <b>Constituent</b>                     | <b>Units</b> |
|--|--------------|
| Flow                                   | MGD          |
| Biochemical Oxygen Demand <sub>5</sub> | mg/L         |
| Ammonia as N                           | mg/L         |
| pH – Units                             | SU           |
| Dissolved Oxygen                       | mg/L         |
| Duration                               | Hours        |

### **2. REPORTING OF NON-DETECTS**

- An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
- The permittee shall not report a sample result as “Non-Detect” without also reporting the detection limit of the test. Reporting as “Non-Detect” without also including the detection limit will be considered failure to report, which is a violation of this permit.
- The permittee shall report the “Non-Detect” result using the less than sign and the minimum detection limit (e.g. <10).
- Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for that parameter.
- See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
- When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the “<MDL” shall be reported as indicated in item (C).

### **3. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).**

### **4. DEFINITIONS**

Definitions are as listed in the “Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard” and in State Regulations in 10 CSR 20 Chapter 2, Chapter 6.300, Chapter 8.300, and Chapter 14.

### **5. CONSTRUCTION PERMIT REQUIREMENTS**

- A construction permit is required for any point source that proposes to construct an earthen storage structure to hold, convey, contain, store or treat domestic, agricultural, or industrial process wastewater.
- Any point source system designed to hold, convey, contain, store or treat domestic, agricultural or industrial process waste shall be designed by a professional engineer registered in Missouri in accordance with 10 CSR 20-8.300 and constructed according to the design plans.

### **6. REOPENER CLAUSE**

This permit may be reopened and modified, or alternatively revoked and reissued, to:

- Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
  - contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
  - controls any pollutant not limited in the permit.



## **GENERAL CONDITIONS (continued)**

- b. Incorporate new or modified State of Missouri Statutes or Regulations.
- c. Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
- d. Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act as applicable.

### **7. PERMIT RENEWAL**

Unless terminated, the permittee shall submit an application for the renewal of this permit by submitting *Form W Concentrated Animal Feeding Operation (CAFO) Operating Permit Application MO 780-2112* <https://dnr.mo.gov/document-search/form-w-concentrated-animal-feeding-operation-cafo-operating-permit-application-mo-780-2112> no later than one hundred eighty (180) days prior to the permit's expiration date.

When a facility submits a timely and complete application in accordance with 10 CSR 20-6.010(10)(C)1, and the Department is unable through no fault of the permittee to issue a renewed permit prior to expiration of the previous permit, the terms and conditions of the expired permit are administratively continued and will remain fully effective and enforceable until such time when a permit action is taken. Failure to submit a renewal application is a violation of the Missouri Clean Water Law. Failure to apply for renewal of a permit may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

### **8. PERMIT MODIFICATION**

An application for permit modification must be submitted, with modified permit issued, prior to new construction or expansion of an existing CAFO, demonstrating compliance with all applicable CAFO laws and regulations including 640.715 RSMo and 10 CSR 20-6.300. Expansion includes, but it is not limited to, expansion of the production areas or buildings, expansion or structural changes to the waste storage structure, or increase in animal units resulting in a new class size. Addition of new permitted features and changes to land application authority (e.g. changing from an export-only facility to conducting land application at CAFO land application areas) must be included in a permit modification prior to implementation or use. Please contact the Operating Permits section if you need further clarification at (573) 522-4502 or [CAFO@dnr.mo.gov](mailto:CAFO@dnr.mo.gov).

### **9. PERMIT TRANSFER**

This permit may be transferred to a new owner by submitting a "Concentrated Animal Feeding Operation (CAFO) Operating Permit Application" along with the appropriate modification fee.

### **10. 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 644.051.6 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>

## **C. SPECIAL CONDITIONS**

### **1. Effluent Limitations**

The permittee is authorized to discharge process wastewater and storm water in accordance with the effluent limitations in this permit and 40 CFR 412. The effluent limitations shall become effective upon issuance and remain in effect until such time this permit is no longer effective. Such discharges shall be managed, controlled, limited and monitored by the permittee as specified below.

### **2. CAFO Production Area Requirements**

Requirements applicable to all CAFO production area(s) as defined in 10 CSR 20-6.300:

- a. There shall be no discharge of manure, litter, or process wastewater into waters of the state from production area point sources except as provided in subsection e. below.
- b. A chronic weather event is a series of wet weather events and conditions that can delay planting, harvesting, and prevent land application and dewatering practices at wastewater storage structures. When wastewater storage structures are in danger of an overflow due to a chronic weather event, CAFO owners should take reasonable steps to lower the liquid level in the structure through land application, or other suitable means, to prevent overflow from the storage structure. Reasonable steps include those described in the department's current guidance (PUB2422) entitled "Wet Weather Management Practices for CAFOs." Other measures may be used with prior approval by the department. The chronic weather determination will be based upon an evaluation of the 1 in 10-year return rainfall frequency over a 10-day, 90-day, 180-day, and 365-day operating period. The operator shall notify the appropriate Regional Office as soon as practicable but no less than 24 hours in advance of implementing the Department's "Wet Weather Management Practices for CAFOs" during a chronic weather event.
- c. Manure, litter or wastewater management activities occurring outside the production area but upon land controlled by the permittee shall be addressed in the permittee's Nutrient Management Plan (NMP). Activities that should be addressed include, but are not limited to, stockpiling of raw materials, manure, or litter or other animal feeding related items that have the potential to contribute pollutants to waters of the state. As necessary, the NMP shall identify controls, measures or BMPs to manage stormwater runoff and meet applicable water quality standards. This paragraph applies only to activities on land that is under the control of the CAFO owner or operator, whether it is owned, rented, or leased.
- d. Stockpiling of uncovered dry process waste within the production area without runoff collection is not allowed unless runoff collection system is present and operational and must be designed and operated to meet the standards and best management practices established in Publication 2503, *Requirements and Best Management Practices for Temporary Stockpiles of Poultry Litter and Other Dry Process Waste*.
- e. CAFO staff and contractors shall not dispose of inorganic solid waste or chemicals into the wastewater system, including but not limited to insemination tubes, disposable medical equipment, masks, and other trash, unless the system is specifically designed to manage, filter or treat for the waste or chemicals.
- f. To maintain structural integrity, the berms of the storage basin(s) shall be mowed and kept free of any deep-rooted vegetation, livestock, animal dens, or other potential sources of damage; any leaks or issues shall be noted and repaired as soon as possible.
- g. The facility shall prevent surface water intrusion and run-in into the storage basin(s) and to protect embankments from erosion.
- h. It is a violation of this permit to place material in the emergency spillway or otherwise cause it to cease to function properly, as this may result in a catastrophic failure of the storage basin, unless authorized by the Department. h. The permittee must request written approval prior to the addition or change in any chemicals being used and released into the wastewater storage structure, including but not limited to truck wash soaps, chemicals, and disinfectants. Changes in brands, manufacturers or solutions that do not result in changes in the pollutant(s) and their concentration or load in the wastewater do not require written approval. Written approval may be via e-mail communication.
- i. Additional requirements for uncovered liquid storage structures. Whenever a precipitation related event causes an overflow of manure, litter, or process wastewater; pollutants may be discharged through the emergency spillway of the earthen basin or uncovered storage structure provided:
  - (1) The storage structure is properly designed, constructed, operated, and maintained to contain all manure, litter, process wastewater, plus the runoff and direct precipitation from the 25-year, 24-hour design storm event for the location of the CAFO.
  - (2) The design storage volume is adequate to contain all manure, litter, and process wastewater accumulated during the storage period including the following:
    - (a) The volume of manure, litter, process wastewater, and other wastes accumulated during the storage period;
    - (b) 1 in 10 year 365 day annual rainfall minus evaporation during the storage period;
    - (c) 1 in 10 year 365 day normal runoff during the storage period;
    - (d) The direct precipitation from the 25-year, 24-hour storm;
    - (e) The runoff from the 25-year, 24-hour storm event;

### **SPECIAL CONDITIONS (continued)**

- (f) A minimum treatment volume for treatment earthen basins.
- (3) All open surface liquid impoundments must have a depth marker which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event. In the case of new sources subject to effluent limitations established pursuant to § 412.46(a)(1) of this part, all open surface manure storage structures associated with such sources must include a depth marker which clearly indicates the minimum capacity necessary to contain the maximum runoff and direct precipitation associated with the design storm used in sizing the impoundment for no discharge.
- (4) Discharge is allowed via overflow through the emergency spillway of the earthen basin or uncovered storage structure when caused by a weather event that exceeds the catastrophic storm or the chronic weather event requirement. Only that portion of storm water flow, which exceeds the design storm event(s) may be discharged. Process wastewater discharge is not allowed by pumping, siphoning, cutting of berms, or by any other method, except as authorized herein, unless prior approval is obtained from the Department.
- (5) All discharges of process wastewater to waters of the state or a release that crosses property boundaries shall be reported to the Department as soon as practicable but no later than 24 hours after the operator becomes aware of the discharge. See Section 8.e. for additional requirements.
- (6) If a discharge occurs, monitor the discharge at the point immediately prior to entering the receiving stream or at the property boundary, whichever occurs first.
- (7) All open storage structures shall maintain a visual reference gauge showing the depth of liquids in the structure, the lower operating level, the upper operating level, and the emergency spillway level.
- (8) Upper and Lower Storage Operating Levels:
  - (a) During normal weather conditions, the liquid level in the storage structure shall be maintained below the upper operating level, so that adequate storage capacity is available for use during adverse weather periods when conditions are not suitable for proper land application. The lower operating level shall be used as an operational guideline; however, under normal operating conditions the level should not be lower than two feet above the earthen basin floor.
  - (b) The liquid level in the storage structure should be lowered on a routine schedule based on the design storage period and Nutrient Management Plan. Typically, this should be accomplished prior to expected seasonal wet and winter climate periods.
  - (c) The upper operating level for uncovered storage structures is one foot below the emergency overflow level unless specified otherwise the Department approved construction permit or plans.
  - (d) The operation shall be managed so that the level of liquids in the storage structure does not exceed the upper operating level except when a catastrophic storm or chronic weather event occurs.
- (9) Storage Safety Volume (10 CSR 20-8.300(4)(D)2.B.: When a chronic or catastrophic design storm event occurs, the "safety volume" may be used to contain storm water until conditions are suitable for land application. The required safety volume shall be maintained between the overflow level and the upper operating level.

### **3. CAFO Land Application Areas**

These requirements are applicable to all land application areas as defined in 10 CSR 20-6.300:

- a. There shall be no discharge of manure, litter, process wastewater, or mortality by-products to surface waters of the state or that crosses property boundaries from a CAFO as a result of the land application of manure, litter, process wastewater, or mortality-by-products to land application areas, except where it is an agricultural storm water discharge. When manure, litter, process wastewater, or mortality by-products has been land applied in accordance with the CAFOs Nutrient Management Plan (NMP), and the *Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard* (NMTS), a precipitation related discharge of manure, litter, process wastewater, or mortality-by-products from land application is considered to be an agricultural storm water discharge.
- b. Truck wash wastewater not included within the NMP must be applied in accordance with a department approved land application management plan.
- c. All land application areas must be included in the CAFO's nutrient management plan before any land application of manure, litter or process wastewater can occur. When manure litter or process wastewater generated by the permitted CAFO is sold, given away, or applied to agricultural lands that do not meet the land application area definition, the permittee shall comply with the requirement of Special Condition #6.
- d. Temporary stockpiling of solid manure within the land application areas shall be bermed or otherwise prevent runoff. No location shall be used for stockpiling for more than two weeks unless the stockpile is covered.
- e. Land application shall only occur during daylight hours. Land application may only occur during nighttime hours if conducted in accordance with a department-approved plan, submitted in accordance with 10 CSR 20-6.300(3)(G)3.
- f. Effective and efficient native plants and vegetation, appropriate for the region and site, are encouraged for land application area vegetated buffers.
- g. This permit does not authorize land disposal or the application of hazardous waste.

## **SPECIAL CONDITIONS (continued)**

### **4. Nutrient Management Plan**

- a. In accordance with 10 CSR 20-6.300(3)(G) and the *Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard* (NMTS), the permittee shall implement a Nutrient Management Plan (NMP) that at a minimum addresses the following.
  - (1) Ensures adequate storage of manure, litter and process wastewater, or mortality by-products, including procedures to ensure proper operation and maintenance of the storage facilities.
  - (2) Ensures proper management of mortalities.
  - (3) Ensures that clean water is diverted from the production area. This shall include as necessary, controls, measures, or BMPs to properly manage storm water runoff in or around the production area and land application areas that is under the operational control of the CAFO. Activities that should be addressed include, but are not limited to, winter feeding areas, stockpiling of raw materials, manure, litter or other animal feeding related items that have the potential to contribute pollutants to waters of the state.
  - (4) Prevents direct contact of confined animals with waters of the state.
  - (5) Ensures that chemicals and other contaminants handled within animal production facilities are not disposed of in any manure, litter, process wastewater, mortality by-products, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.
  - (6) Identifies appropriate site-specific conservation practices to be implemented including, at a minimum, appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the state.
  - (7) Identifies protocols for appropriate testing of manure, litter, process wastewater, mortality by-products, and soil.
  - (8) Establishes protocols to land apply manure, litter, or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater.
  - (9) Identifies specific records that will be maintained.
- b. The permittee shall maintain the NMP in accordance with 10 CSR 20-6.300(3)(G)2. Revisions of the NMP made after the effective date of this permit must be submitted to the department for review and approval prior to implementing those revisions.

### **5. Transfer of Manure, Litter, and Process Wastewater**

In cases where CAFO-generated manure, litter, process wastewater, or mortality by-products is sold, given away, or applied on land not under the operational control of the CAFO, the permittee must comply with the following conditions:

- a. Maintain records showing the date, recipient name and address, and amount of manure, litter, and/or process wastewater that leaves the permitted operation (The recipient is the broker or end user, not merely the truck driver). These records must be retained on-site, for a period of five (5) years and made available upon request;
- b. Provide the recipient(s) with the current nutrient analysis of the manure, litter, and/or process wastewater;
- c. Provide the recipient with a paper copy of, or electronically a link to, the Manure Export Guidance (MEG); and
- d. Complete and submit the summary manure export report, in accordance with Special Condition 11.

### **6. Mortality Management**

- a. In accordance with 10 CSR 20-6.300(3)(A)5, 10 CSR 20-6.300(5)(B), 40 CFR 412.37(a)(4) and 40 CFR 412.47(a), mortalities must not be disposed of in any liquid manure or process wastewater system that is not specifically designed to treat animal mortalities. Mortalities must be handled in such a way as to prevent the discharge of pollutants to surface waters and prevent the creation of a public health hazard. Class I operations may not use burial as a permanent mortality management method to dispose of routine mortalities.
- b. Routine animal mortalities must be promptly removed from any area where the carcass will impact normal facility waste management operations (e.g. scrapers or wastewater transfer points).
- c. There shall be no free-draining liquids from dead animal collection areas or holding areas (dumpsters, holding tanks, stockpiles within livestock production buildings, refrigeration units, etc.).
- d. In the event of significant numbers of unexpected mortalities (i.e. mass mortalities), operations shall first receive approval of an emergency plan of disposal by the State Veterinarian. The Missouri Geological Survey shall review proposed burial sites prior to burial to determine if there is the potential for major groundwater contamination and assist the State Veterinarian in locating proper burial sites. Approval of burial sites can be obtained prior to a mass mortality event by contacting the Missouri Geological Survey. Rendering, composting, incineration, or landfilling, are acceptable options and do not require prior approval from the Department. For the additional information, please see the Department's publication 12150, "Animal Production Mortalities Emergency Procedures," <https://dnr.mo.gov/document-search/animal-production-mortalitiesemergency-procedures-pub1250/pub1250>.

## **SPECIAL CONDITIONS (continued)**

### **7. Inspections**

The following minimum visual inspections shall be conducted by the CAFO operator.

- a. For confinement buildings that utilize wet handling flush system, a visual inspection shall be conducted once per week of the gravity outfall lines, recycle pump stations; recycle force mains, and appurtenances for any release to secondary containment structure. A daily visual inspection shall also be conducted of any process wastewater impoundment that serves a wet handling flush system when the liquid level is less than twelve (12) inches from the emergency spillway.
- b. Daily inspections must be conducted of water lines including wastewater, drinking water, and cooling water lines that can be visually observed within the production area. The inspection of the drinking water and cooling water lines shall be limited to the lines that possess the ability to leak or drain to wastewater storage structures or may come in contact with any process waste.
- c. Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices that channel contaminated storm water to the process wastewater storage and divert storm water runoff away from the production area.
- d. Weekly inspections of the manure, litter, and process wastewater impoundments. The inspection will note the level in liquid impoundments as indicated by the depth marker.
- e. Weekly inspections of the collection or holding areas for dead animals, including all composting or holding containers prior to transport off-site. Equipment and devices used for the transfer of dead animal for delivery and disposal off-site are not considered a collection or holding area, therefore, are not required to be part of the daily inspection requirement.
- f. Conduct leak inspections on equipment used for land application, daily when in use.
- g. Inspections during land application as follows:
  - (1) Monitor the perimeter of the application fields where runoff is likely to occur to ensure that applied wastewater does not run off the fields where applied.
  - (2) Monitor for drifting of spray during spray irrigation. If drift from spray irrigation of wastewater is observed crossing property boundaries, the irrigation equipment shall be moved, or the irrigation stopped until conditions are more favorable.
  - (3) Hourly inspections of aboveground irrigation pipelines when in use.
  - (4) Twice daily inspections of pressurized underground lines including one inspection that should be completed immediately following startup.
- h. Any deficiencies found as a result of inspections shall be documented and corrected as soon as possible.
- i. Records of inspections shall be kept and maintained for a period of five (5) years and made available to the Department upon request.

### **8. Record Keeping**

The following records shall be kept on-site by the CAFO operator for a period of five (5) years from the date they are created and shall be made available to the department upon request:

- a. A copy of permits, permit applications, and a current copy of the CAFO's NMP.
- b. The visual inspections required in Special Condition #7 shall be recorded once per week.
- c. Weekly records of the depth of process wastewater in the liquid impoundments as indicated by the depth marker. Report the liquid level as feet below the emergency overflow level.
- d. Records documenting any actions taken to correct deficiencies. Deficiencies not corrected within thirty (30) days shall be accompanied by an explanation of the factors preventing immediate correction.
- e. Records of mortalities management and practices used by the operation to ensure proper management of mortalities to ensure they are not disposed of in a liquid manure, stormwater or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities.
- f. Records of the date, time, location, duration, estimated volume and corrective actions taken for any discharge of manure, litter, process wastewater, or mortality by-products to waters of state or release that cross property boundaries. Monitor a discharge at the point immediately prior to entering the receiving stream or a release at the property boundary. Report flow as cubic feet per second (CFS) based on an instantaneous estimate of the flow at the time of sampling.  $CFS = \text{flow width in feet} \times \text{flow depth in feet} \times \text{flow velocity in feet per second}$ . Estimates of stream channel width and depth may be used and flow velocity can be measured by timing how many feet a floating object moves within a one-second interval. Small flows may also be estimated based on gallons per minute (GPM) measurement using a container and stopwatch; 450 gpm = 1.0 CFS. Other similar means of estimating may be used.
- g. For open liquid manure storages only, record the inches of precipitation received daily near the production site. CAFOs may use nearby weather reporting station data to satisfy this requirement.
- h. Additional record keeping requirements are found in the NMTS that document implementation of appropriate Nutrient Management Plan protocols. In addition to the requirements found in the Nutrient Management Technical Standard, the CAFO shall also test and record the potassium levels in the soils while testing nitrogen and phosphorus.

## **SPECIAL CONDITIONS (continued)**

- i. The inches of precipitation received at the production site with an uncovered liquid impoundment, recorded daily and reported for daily amounts, monthly totals, and cumulative total.
- j. For Land Application Area(s):
  - (1) Expected and actual crop yields;
  - (2) The date(s) and rates of manure, litter, process wastewater, or mortality by-product applications to each field;
  - (3) Weather conditions at time of application and for twenty-four (24) hours prior to and following application;
  - (4) Test methods used to sample and analyze manure, litter, process wastewater or mortality-by-products, and soil;
  - (5) Results from manure, litter, process wastewater or mortality-by-products, and soil sampling;
  - (6) Explanation of the basis for determining manure application rates, as provided in the NMTS;
  - (7) Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than manure, litter, process wastewater or mortality by-products;
  - (8) Total amount of nitrogen and phosphorus actually applied to each field for each application, including documentation of calculations for the total amount applied;
  - (9) The method used to apply the manure, litter, process wastewater or mortality-by-products;
  - (10) Record of runoff from the land application field that resulted in a direct release off of the CAFO property or a discharge to waters of the state, and the response; and
  - (11) Date(s) of manure application equipment inspection.

## **9. Reporting Requirements**

- a. Any spill, overflow, or other discharge(s) not specifically authorized are unauthorized.
- b. If an unauthorized discharge causes or permits any contaminants to discharge or enter waters of the state, or a release that crosses property boundaries, the unauthorized discharge or releases 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 a discharge occurs the owner or operator must submit to the Department for review and approval within fifteen days the following documentation:
  - 1) The date, time, cause, duration, and approximate volume of the discharge
  - 2) A detailed explanation of the steps taken by the CAFO to permanently address the cause of the discharge that will ensure that a discharge from this cause does not occur in the future.
  - 3) All reports or information submitted to the department shall be signed by the owner or operator of the CAFO.
- d. Spills or leaks that are contained on the property shall be reported to the Department within 24 hours, if the spill or leak exceeds 1,000 gallons per day. This includes leaks from sewer lines; recycle lines, flushing systems, earthen basins, irrigation systems etc.
- e. Within seven (7) days of the date that an earthen basin's level comes within four (4) inches of the upper operating level, the permittee shall notify the Department with information that identifies the earthen basin(s), the basin level in inches below the emergency spillway and actions taken to reduce the basin levels.
- f. Any unauthorized discharge from a flush system animal waste wet handling system that crossed property lines or entered waters of the state shall be reported within 24 hours in accordance with 640.735 RSMo.
- g. The Annual Report shall be submitted by January 28 of each year for the previous growing season from October 1 through September 30 or an alternate 12-month period approved by the Department;
- h. The daily and weekly records of the wastewater depth in the liquid impoundments as required by Special Condition 6c.
- i. All monitoring results from an emergency or unauthorized discharge as required by Special Condition 16.

## **10. 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. The facility must register in the department's eDMR system through the Missouri Gateway for Environmental Management (MoGEM) no later than December 31, 2023. All reports uploaded into the system shall be reasonably named so they are easily identifiable, such as "CAFOAnnualManureExportReport2023", or "CAFOAnnualReport2023". Information about eDMR, including the waiver request form, may be found on our webpage: <https://dnr.mo.gov/water/business-industry-other-entities/reporting/electronic-discharge-monitoring-reporting-system-edmr>

An Annual Report shall be submitted by **January 28** of each year for the previous growing season from October 1 through September 30 or an alternate 12-month period approved by the department. The report can be submitted at the following link <https://apps5.mo.gov/mogems/welcome.action> and the report shall include:

**SPECIAL CONDITIONS (continued)**

- (1) The number and type of animals confined at the operation.
- (2) The estimated amount of manure, litter, and process wastewater or mortality by-products generated in the previous twelve months.
- (3) The total number of acres for land application covered by the Nutrient Management Plan.
- (4) The total number of acres under control of the operation that were used for land application of manure, litter and process wastewater in the previous twelve months.
- (5) A summary of all manure, litter, and process wastewater discharges from the production area that have occurred in the previous twelve months, including date, time, and approximate volume. Report as no-discharge if a discharge did not occur during the monitoring period.
- (6) A statement indicating whether the current Nutrient Management Plan was developed or approved by a certified nutrient management planner.
- (7) The crops planted and actual yields, the amount and nutrient content of the manure, litter, and process wastewater applied to the land application area(s) and the results of any soil testing from the previous twelve months.
- (8) The daily and weekly records of the wastewater depth in the liquid impoundments as required in Special Condition #8b.
- (9) The actual operation numbers compared to the permitted design parameters described in Special Condition #12.
- (10) All monitoring results from an emergency or unauthorized discharge as required in General Condition #9.
- (11) All reports or information submitted to the department shall be signed by the owner or operator of the CAFO.

**11. Secondary Containment Structures**

The following requirements are applicable to secondary containments that may capture process wastewater;

- a. Containment structures or earthen dams shall be maintained down gradient of all confinement buildings with a wet handling flush system to retain wastewater discharges from spills or pipeline breaks. The containment structure shall be able to collect a minimum volume equal to the maximum pumping capacity of flushing in any 24-hour period from all gravity outfall lines, recycle pump stations and recycle force mains.
  - b. Containment structures that do not serve confinement buildings with a wet handling flush system are not required but are subject to the requirements of this section.
  - c. Any wastewater or stormwater that has been contaminated by coming into contact with manure, litter, wastewater, feed or silage captured in secondary containments shall be pumped into the lagoon or directly land applied in accordance with the NMP and the NMTS.
  - d. Stormwater captured in secondary containment structures that have not come into contact with manure, litter, feed, or silage may be released. Best Management Practices should be implemented to prevent stormwater from being contaminated.
  - e. Existing storm water flows from areas that drain potential releases from gravity outfall lines, recycle pump stations, recycle force mains and appurtenances shall not be diverted around or allowed to bypass the secondary containment structure, even when the flush system is not in use, without the prior approval of the Water Protection Program. Additional storm water may be directed to the secondary containment if desired by the permittee.
  - f. If the wet handling flush system has been replaced or is no longer used, a secondary containment is no longer required. Secondary containments that are left in place whether required or not, are subject to the requirements of this section.
12. The permittee is responsible for all "land application area(s)" as defined in 10 CSR 20-6.300, and they must be included in the facility's nutrient management plan. The addition of land application area(s) that are not already included in a current NMP and the Terms of the NMP in this permit must follow permit modification procedures prior to land application of manure, litter, or process wastewater unless otherwise approved by the Department.
13. Underground tile inlets for field terraces or subsurface field drainage tiles shall be shown on the site maps for all land application sites.

**14. Operating Capacity**

This permit authorizes operation of the CAFO waste management system as described in the "FACILITY DESCRIPTION" along with the permit application and associated engineering plans. The Facility Description lists a total design capacity in animal units. The CAFOs animal unit operating level at any given time shall be based on a "rolling 12-month average". The rolling 12-month average is determined by averaging the weekly facility wide inventory for the last 12 months. The CAFO may change animal numbers and weights, and the rolling 12-month average may exceed the total design capacity in the Facility Description but shall not subsequently violate applicable effluent limitations in 10 CSR 20-6.300(4) or adversely impact the storage and handling capacities of the waste management system. If the waste management system is adversely impacted by increased animal units or animal weight, the facility shall increase storage capacity, increase land application, or reduce the animal unit operating level.



## **SPECIAL CONDITIONS (continued)**

### **15. Nutrient Management Technical Standard**

The permittee and the permittee's Nutrient Management Plan, shall follow "Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard", dated March 4, 2009, which is hereby incorporated as though fully set forth herein. The NMTS is available on the Department's website at <https://dnr.mo.gov/document-search/missouri-concentrated-animal-feeding-operation-nutrient-management-technical-standard-march-4-2009>

### **16. Discharges – All permitted facilities**

#### **Emergency or Unauthorized Discharge**

Wastewater shall be stored and land applied during suitable conditions so that there is no discharge from the storage structures or land application sites. An emergency discharge from wastewater storage structures may only occur in accordance with Special Condition 2.b. of this permit. **Discharges for any other reason from production or land application areas shall constitute a permit violation and shall be reported in accordance with Standard Conditions, Part I, Section B.2.b.** Monitoring shall take place once per day while discharging from any of the permitted waste or wastewater management or storage structures. Test results are due on the 28<sup>th</sup> day of the following month after the cessation of the discharge. Permittee shall monitor for the following constituents:

| <b>Constituent</b>                     | <b>Units</b> |
|--|--------------|
| Flow                                   | MGD          |
| Duration                               | Hours        |
| Biochemical Oxygen Demand <sub>5</sub> | mg/L         |
| Ammonia as N                           | mg/L         |
| pH – Units                             | SU           |
| Temperature                            | °F           |
| Total Suspended Solids                 | mg/L         |

If a discharge occurs monitor the discharge at the point immediately prior to entering the receiving stream or at the property boundary, whichever occurs first.

### **17. Closure of Waste Storage Structures**

Class I CAFOs which cease operation shall continue to maintain a valid operating permit until all earthen basins and waste storage structures are properly closed according to a closure plan approved by the Department. CAFOs that plan to close an earthen basin or other liquid waste storage structure shall submit for Department review and approval a closure plan that complies with the following minimum closure requirements:

- Earthen basins and waste storage structures shall be closed by removal and land application of all wastewater and sludge;
- The removed wastewater and sludge shall be transferred, or land applied at agricultural rates not to exceed the maximum nutrient utilization of the land application site and vegetation grown and shall be applied at controlled rates so that there will be no discharge to waters of the state; and
- After removal and proper land application of wastewater and sludge, the earthen basins may be demolished by removing the berms, grading, and revegetating the sit; or the basin may be left in place for future use as a farm pond or similar uses.

### **18. Adverse Impact**

The permittee shall take all necessary steps to minimize any adverse impacts to waters of the state resulting from noncompliance with any effluent limitations specified in this permit or set forth in the Missouri Clean Water Law and Regulations, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

### **19. Right Of Entry**

For the purpose of inspecting, monitoring, or sampling the point source, water contaminant source for compliance with the Clean Water Law and regulations, authorized representatives of the Department, shall be allowed by the permittee at reasonable times, upon presentation of credentials and following the operations biosecurity plan;

- to enter upon permittee's premises in which a point source, water contaminant source is located or in which any records are required to be kept under terms and conditions of the permit;
- to have access to, or copy, any record required to be kept under terms and conditions of the permit;
- to inspect any monitoring equipment or method required in the permit;
- to inspect any collection or treatment facility covered under the permit; and
- to sample any wastewater at any point in the collection system or treatment process.



## **SPECIAL CONDITIONS (continued)**

### 20. Terms of the NMP

- a. 40 CFR 122.23 requires portions of the NMP pertaining to land application protocols to be incorporated into the operating permit as terms of the NMP. Revisions of the NMP after the effective date of this permit that result in significant changes to the terms of the NMP as outlined in 40 CFR 122.23 require a modification of the permit prior to implementing those revisions. The completed attachment contains permit terms that are an enforceable component of this permit and are hereby incorporated as though fully set forth herein.

| <b>TERMS OF THE NUTRIENT MANAGEMENT PLAN</b> |                                     |                  |                          |                          |         |                         |          |                         |
|--|-------------------------------------|------------------|--------------------------|--------------------------|---------|-------------------------|----------|-------------------------|
| Field Name                                   | Legal Description                   | Spreadable Acres | P Loss Risk <sup>1</sup> | N or P Based Application | Crop #1 |                         | Crop #2  |                         |
|  |                                     |                  |                          |                          | Crop    | Yield Goal <sup>2</sup> | Crop     | Yield Goal <sup>2</sup> |
| Ozark A                                      | Sec. 29<br>Twn. 34N<br>Rng. 29W     | 62               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Ozark A1                                     | Sec. 29<br>Twn. 34N<br>Rng. 29W     | 17.5             | Medium                   | N                        | Bermuda | 5 t/a                   |          |                         |
| Ozark B                                      | Sec. 29<br>Twn. 34N<br>Rng. 29W     | 34.5             | Medium                   | N                        | Bermuda | 5 t/a                   |          |                         |
| Ozark B1                                     | Sec. 29<br>Twn. 34N<br>Rng. 29W     | 14               | Low                      | N                        | Bermuda | 5 t/a                   |          |                         |
| Ozark C                                      | Sec. 20, 29<br>Twn. 34N<br>Rng. 29W | 134              | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Ozark D                                      | Sec. 20<br>Twn. 34N<br>Rng. 29W     | 72               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Ozark D1                                     | Sec. 20<br>Twn. 34N<br>Rng. 29W     | 20               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Ozark D2                                     | Sec. 20<br>Twn. 34N<br>Rng. 29W     | 24               | Medium                   | N                        | Fescue  | 3 t/a                   |          |                         |
| Ozark D3                                     | Sec. 20<br>Twn. 34N<br>Rng. 29W     | 16               | Low                      | N                        | Fescue  | 2 t/a                   |          |                         |
| Ozark E                                      | Sec. 20<br>Twn. 34N<br>Rng. 29W     | 112              | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Ozark E1                                     | Sec. 20<br>Twn. 34N<br>Rng. 29W     | 32               | Low                      | N                        | Fescue  | 2 t/a                   |          |                         |
| Ozark F                                      | Sec. 20<br>Twn. 34N<br>Rng. 29W     | 130              | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Ozark F1                                     | Sec. 20<br>Twn. 34N<br>Rng. 29W     | 6                | Very low                 | N                        | Fescue  | 2 t/a                   |          |                         |
| Ozark G                                      | Sec. 28<br>Twn. 34N<br>Rng. 29W     | 240              | Medium                   | N                        | Fescue  | 2 t/a                   |          |                         |
| Ozark S                                      | Sec. 29<br>Twn. 34N<br>Rng. 29W     | 80.2             | Medium                   | N                        | Corn    | 130 bu/a                | Fescue   | 3 t/a                   |
| Osage A                                      | Sec. 16<br>Twn. 34N<br>Rng. 29W     | 97               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Osage A1                                     | Sec. 16<br>Twn. 34N<br>Rng. 29W     | 25               | Medium                   | N                        | Fescue  | 2 t/a                   |          |                         |
| Osage C                                      | Sec. 16<br>Twn. 34N<br>Rng. 29W     | 19               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Osage D                                      | Sec. 16<br>Twn. 34N<br>Rng. 29W     | 75               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Osage D1                                     | Sec. 16<br>Twn. 34N<br>Rng. 29W     | 18               | Medium                   | N                        | Fescue  | 2 t/a                   |          |                         |
| Osage D2                                     | Sec. 16<br>Twn. 34N<br>Rng. 29W     | 32.6             | Medium                   | N                        | Fescue  | 2 t/c                   |          |                         |
| Osage E                                      | Sec. 9<br>Twn. 34N<br>Rng. 29W      | 45               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Osage F                                      | Sec. 9<br>Twn. 34N<br>Rng. 29W      | 57               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Osage G                                      | Sec. 9<br>Twn. 34N<br>Rng. 29W      | 17               | Low                      | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |

| TERMS OF THE NUTRIENT MANAGEMENT PLAN |                                 |                  |                          |                          |         |                         |          |                         |
|---------------------------------------|---------------------------------|------------------|--------------------------|--------------------------|---------|-------------------------|----------|-------------------------|
| Field Name                            | Legal Description               | Spreadable Acres | P Loss Risk <sup>1</sup> | N or P Based Application | Crop #1 |                         | Crop #2  |                         |
|                                       |                                 |                  |                          |                          | Crop    | Yield Goal <sup>2</sup> | Crop     | Yield Goal <sup>2</sup> |
| Osage H                               | Sec. 10<br>Twn. 34N<br>Rng. 29W | 67               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Osage I                               | Sec. 10<br>Twn. 34N<br>Rng. 29W | 126              | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| Osage J                               | Sec. 10<br>Twn. 34N<br>Rng. 29W | 35               | Medium                   | N                        | Bermuda | 3 t/a                   |          |                         |
| Osage K                               | Sec. 10<br>Twn. 34N<br>Rng. 29W | 24               | Medium                   | N                        | Fescue  | 3 t/a                   |          |                         |
| Osage L                               | Sec. 10<br>Twn. 34N<br>Rng. 29W | 36               | Medium                   | N                        | Fescue  | 3 t/a                   |          |                         |
| Osage M                               | Sec. 10<br>Twn. 34N<br>Rng. 29W | 14               | Low                      | N                        | Bermuda | 3 t/a                   |          |                         |
| OzarkEast G                           | Sec. 21<br>Twn. 34N<br>Rng. 29W | 68.3             | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| OzarkEast G1                          | Sec. 21<br>Twn. 34N<br>Rng. 29W | 40               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| OzarkEast H                           | Sec. 21<br>Twn. 34N<br>Rng. 29W | 62               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| OzarkEast I                           | Sec. 21<br>Twn. 34N<br>Rng. 29W | 66               | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| OzarkEast J                           | Sec. 21<br>Twn. 34N<br>Rng. 29W | 29.4             | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| OzarkEast K                           | Sec. 21<br>Twn. 34N<br>Rng. 29W | 36.6             | Medium                   | N                        | Corn    | 130 bu/a                | Soybeans | 40 bu/a                 |
| OzarkEast L                           | Sec. 21<br>Twn. 34N<br>Rng. 29W | 15.2             | Medium                   | N                        | Fescue  | 2 t/a                   |          |                         |
| OzarkEast M                           | Sec. 21<br>Twn. 34N<br>Rng. 29W | 35               | Low                      | N                        | Fescue  | 2 t/a                   |          |                         |
| OzarkEast N                           | Sec. 21<br>Twn. 34N<br>Rng. 29W | 121.1            | Medium                   | N                        | Fescue  | 3 t/a                   |          |                         |
| OzarkEast O                           | Sec. 21<br>Twn. 34N<br>Rng. 29W | 40.6             | Medium                   | N                        | Fescue  | 3 t/a                   |          |                         |

<sup>1</sup> Soil Test P Rating or P Index Rating may be used.

<sup>2</sup> Express yield in Bu=Bushels or T=Tons per acre.

- b. The table below lists alternative crops and yield goals. These crops may be planted in any field in the Terms of the Nutrient Management Plan table in Special Condition 20a.

| Crop              | Yield Goal |
|-------------------|------------|
| Corn              | 130 bu/a   |
| Corn              | 150 bu/a   |
| Corn silage       | 12 t/a     |
| Corn silage       | 15 t/a     |
| Soybeans          | 40 bu/a    |
| Alfalfa           | 4 t/a      |
| Fescue            | 3 t/a      |
| Fescue            | 2 t/a      |
| Matua             | 4 t/a      |
| Bermuda           | 5 t/a      |
| Bermuda           | 3 t/a      |
| Orchard grass     | 4 t/a      |
| Rye               | 3 t/a      |
| Sudan grass       | 5 t/a      |
| Wheat             | 60 bu/a    |
| Cool season grass | 3 t/a      |
| Warm season grass | 3 t/a      |

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0131032**  
**MURPHY FAMILY VENTURES, LLC OZARK-OSAGE PYRAMID**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 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" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for Industrial Land Application.

**Part I – Facility Information**

Facility Type: No-discharge Concentrated Animal Feeding Operation/land application– SIC 0213

**Facility Description:**

The Ozark-Osage Pyramid has nine sow farrow-to-wean sites with onsite nursery and finisher, one nursery site, and one boar stud site. Each site is served by a single stage anaerobic lagoon with recycle line pumps. Secondary containments are present at all production sites. Eight sow sites utilize recycle flush systems and one sow site, nursery site, and boar stud site utilize a pull plug system. Mortalities are held in refrigeration units until removed off site for rendering.

The 2024 construction is to construct two new earthen lagoons on Ozark-Osage Pyramid. One new earthen lagoon will be a new covered lagoon to be used as a primary lagoon at the Ozark East Sow farm. The existing lagoon at Ozark East Sow farm will be used as a flow equalization basin. Manure from the Ozark East Sow farm barns will be re-routed to the new primary covered lagoon. The second new earthen lagoon will be an uncovered secondary earthen basin for the Forest Oak Sow farm. The existing Forest Oak Sow farm lagoon will be covered. The purpose of the project is to provide de-gassed recycle water to pull/ plug barns and to capture biogas production from under the lagoon covers. This project will not change the permitted animal capacity for this pyramid.

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?

✓ No.

Application Date: 03/09/2023

Expiration Date: 09/30/2023

**PERMITTED FEATURE(S) TABLE:**

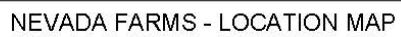
| PERMITTED FEATURE | TREATMENT LEVEL  | EFFLUENT TYPE     |
|-------------------|------------------|-------------------|
| All               | Land Application | Animal wastewater |

**Facility Performance History:**

This facility was last inspected on March 12, 2024, and was found to be in compliance.

FACILITY MAP:





## **Part II – Operator Certification Requirements**

✓ This facility is required to have a certified operator.

Operators or supervisors of CAFO waste management systems shall be certified in accordance with 10 CSR 20-14.010. This facility currently requires a CAFO supervisor with an A Certification Level or a CAFO operator with a B Certification Level.

Operator's Name: Kurt Strauch

Certification Number: 5490

Certification Level: A

## **Part III – Receiving Stream Information**

10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1<sup>st</sup> classified receiving stream's beneficial water uses to be maintained, are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(4)].

**RECEIVING STREAM(S) TABLE:**

| WATERBODY NAME             | CLASS | WBID* | DESIGNATED USES**             | 12-DIGIT HUC  |
|----------------------------|-------|-------|-------------------------------|---------------|
| Tributary to Cynthia Creek | N/A   | N/A   | General Criteria              | 10290106-0803 |
| Tributary to Wilkey Creek  | N/A   | N/A   | General Criteria              |               |
| Presumed Use Streams       | C     | 5056  | AQL, IRR, LWW, SCR, WBCB, HHP |               |
| Tributary to Cynthia Creek | N/A   | N/A   | General Criteria              | 10290105-0102 |
| Presumed Use Streams       | C     | 5055  | AQL, IRR, LWW, SCR, WBCB, HHP |               |

n/a not applicable

\* The previous permit identified WBID# 3960 and 100K Extent-Remaining Stream/Lake; these changes are due to a new numbering system and new naming convention for streams and lakes based on the HUC8 watershed number, the actual receiving stream has not changed.  
As per 10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1<sup>st</sup> classified receiving stream's beneficial water uses to be maintained are in the receiving stream table in accordance with [10 CSR 20-7.031(1)(C)].

\*\* Uses which may be found in the receiving streams table, above:

10 CSR 20-7.031(1)(C)1.:

**AQL** = Protection of aquatic life (Current narrative use(s) are defined to ensure the protection and propagation of fish shellfish and wildlife, which is further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses AQL effluent limitations in 10 CSR 20-7.031 Table A for all habitat designations unless otherwise specified.)

10 CSR 20-7.031(1)(C)2.: Recreation in and on the water

**WBC** = Whole Body Contact recreation where the entire body is capable of being submerged;

**WBC-A** = Whole body contact recreation that supports swimming uses and has public access;

**WBC-B** = Whole body contact recreation that supports swimming;

**SCR** = Secondary Contact Recreation (like fishing, wading, and boating).

10 CSR 20-7.031(1)(C)3. to 7.:

**HHP** (formerly HHF) = Human Health Protection as it relates to the consumption of fish;

**IRR** = Irrigation for use on crops utilized for human or livestock consumption;

**LWW** = Livestock and wildlife watering (Current narrative use is defined as LWP = Livestock and Wildlife Protection);

**DWS** = Drinking Water Supply;

**IND** = Industrial water supply

10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Table A currently does not have corresponding habitat use criteria for these defined uses)

**WSA** = Storm- and flood-water storage and attenuation; **WHP** = Habitat for resident and migratory wildlife species;

**WRC** = Recreational, cultural, educational, scientific, and natural aesthetic values and uses; **WHC** = Hydrologic cycle maintenance.

10 CSR 20-7.031(6): **GRW** = Groundwater

**303(d) List:**

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (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 waters that are impaired but not addressed by normal water pollution control programs.

- ✓ Applicable. Horse Creek is listed on the 2010 Missouri 303(d) List for aquatic macroinvertebrate bioassessment and low dissolved oxygen. Clear Creek is listed on the 2006 Missouri 303(d) List for low dissolved oxygen.
- ✓ This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of Horse Creek or Clear Creek.

**Total Maximum Daily Load (TMDL):**

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected; 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 will be developed that shall include the TMDL calculation.

- ✓ Applicable. Clear Creek is associated with the 2006 EPA approved TMDL for total suspended solids. Permitted Feature #010 is the only permitted feature associated with this TMDL.
- ✓ This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of Clear Creek.

**Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions**

**ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

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

- ✓ Not Applicable; The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)] or is an existing facility.

**ANTI-BACKSLIDING:**

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

- ✓ Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
- ✓ The department determined that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b). The requirements for stormwater and in-stream monitoring were removed from state regulations in 2012 and therefore not included with this permit renewal. Stormwater runoff and in-stream monitoring conducted by the facility from 1996 to 2012 was reviewed and shows no indication that a reasonable potential exists for the Murphy Family Ventures, LLC Ozark-Osage Pyramid to violate water quality standards when it is managed and operated in accordance with permit requirements.

**ANTIDEGRADATION:**

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)], the department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- ✓ No degradation proposed and no further review necessary. Facility did not apply for authorization to increase pollutant loading or to add additional pollutants to their discharge.

**AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:**

As per [10 CSR 20-6.010(3)(B)], ...An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the department.



#### **BIOSOLIDS & SEWAGE SLUDGE:**

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address:

<http://extension.missouri.edu/main/DisplayCategory.aspx?C=74>, items WQ422 through WQ449.

- ✓ Permittee land applies biosolids in accordance with Standard Conditions III and a department approved biosolids management plan.

#### **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 permittee/facility is not currently under Water Protection Program enforcement action.

#### **NUTRIENT MANAGEMENT AND LAND APPLICATION**

The agronomic rate is the amount of wastewater applied to a field to supply the amount of nutrients needed to meet the fertilizer recommendation. For more information on nutrient management, soil sampling, PAN calculations, and land application best management practices, consult the following University of Missouri Extension Guides:

G9112 Interpreting Missouri Soil Test Reports  
G9215 Soil Sampling Pastures  
G9217 Soil Sampling Hayfields and Row Crops  
EQ0215 Laboratory Analysis of Manure  
G9177 Preplant Nitrogen Test for Adjusting Corn Nitrogen Recommendations  
G9186 Calculating Plant-Available Nitrogen and Residual Nitrogen Fertilizer Value in Manure  
G9180 Phosphorus in Missouri Soils  
EQ0202 Land Application Considerations for Animal Manure  
EQ327 Calibration of Lagoon Irrigating Equipment  
G1270 Calibrating Field Sprayers

#### **SCHEDULE OF COMPLIANCE (SOC):**

Per 644.051.4 RSMo, a permit may be issued with a Schedule of Compliance (SOC) to provide time for a facility to come into compliance with new state or federal effluent regulations, water quality standards, or other requirements. Such a schedule is not allowed if the facility is already in compliance with the new requirement, or if prohibited by other statute or regulation. A SOC includes an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit. *See also* Section 502(17) of the Clean Water Act, and 40 CFR §122.2. For new effluent limitations, the permit includes interim monitoring for the specific parameter to demonstrate the facility is not already in compliance with the new requirement. Per 40 CFR § 122.47(a)(1) and 10 CSR 20-7.031(10), compliance must occur as soon as possible. If the permit provides a schedule for meeting new water quality based effluent limits, a SOC must include an enforceable, final effluent limitation in the permit even if the SOC extends beyond the life of the permit.

A SOC is not allowed:

- For effluent limitations based on technology-based standards established in accordance with federal requirements, if the deadline for compliance established in federal regulations has passed. 40 CFR § 125.3.
- For a newly constructed facility in most cases. Newly constructed facilities must meet applicable effluent limitations when discharge begins, because the facility has installed the appropriate control technology as specified in a permit or antidegradation review. A SOC is allowed for a new water quality based effluent limit that was not included in a previously public noticed permit or antidegradation review, which may occur if a regulation changes during construction.
- To develop a TMDL, UAA, or other study associated with development of a site-specific criterion. A facility is not prohibited from conducting these activities, but a SOC may not be granted for conducting these activities.

In order to provide guidance to Permit Writers in developing SOC's, and attain a greater level of consistency, on October 25, 2012 the department issued a policy on development of SOC's. This policy provides guidance to Permit Writers on the standard time frames for schedules for common activities, and guidance on factors that may modify the length of the schedule such as an affordability analysis.

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



**SPILL REPORTING:**

Per 10 CSR 24-3.010, any emergency involving a hazardous substance must be reported to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply 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.

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP):**

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water 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.

✓ Not Applicable; At this time, the permittee is not required to develop and implement a SWPPP.

**VARIANCE:**

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

✓ Not Applicable; This operating permit is not drafted under premises of a petition for variance.

**WATER QUALITY STANDARDS:**

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

**40 CFR 122.41(M) - BYPASSES:**

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

✓ Not Applicable; This facility does not anticipate bypassing.

**Part V – Permit Limits Determination**

**GENERAL CRITERIA CONSIDERATIONS:**

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants which have been determined to cause, have the reasonable potential to cause, or to contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The rule further states pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above a narrative criterion within an applicable State water quality standard, the permit shall contain a numeric effluent limitation to protect that narrative criterion. The previous permit included the narrative criteria

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

- (A) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.
  - For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because the permit does not allow manure, litter, or process wastewater to be discharged from the facility.
- (B) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.
  - For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because the permit does not allow manure, litter, or process wastewater to be discharged from the facility.
- (C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.
  - For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because the permit does not allow manure, litter, or process wastewater to be discharged from the facility.
- (D) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life.
  - For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because the permit does not allow manure, litter, or process wastewater to be discharged from the facility.
- (E) There shall be no significant human health hazard from incidental contact with the water.
  - For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because the permit does not allow manure, litter, or process wastewater to be discharged from the facility.
- (F) There shall be no acute toxicity to livestock or wildlife watering.
  - For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because the permit does not allow manure, litter, or process wastewater to be discharged from the facility.
- (G) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community.
  - For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because the permit does not allow manure, litter, or process wastewater to be discharged from the facility.
- (H) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
  - There are no solid waste disposal activities or any operation that has reasonable potential to cause or contribute to the materials listed above being discharged through any outfall.

#### **All Permitted Features and Land Application Areas – Emergency Discharge**

There are no effluent limits associated with all Permitted Features and land application areas for the no-discharge facility. However, the following is required for an emergency discharge. Monitoring requirement only based on best professional judgment.

**EMERGENCY DISCHARGE TABLE:**

| PARAMETER                  | UNIT   | DAILY<br>MAXIMUM | WEEKLY<br>AVERAGE | MONTHLY<br>AVERAGE | MODIFIED | PREVIOUS PERMIT<br>LIMITATIONS |
|----------------------------|--|------------------|-------------------|--------------------|----------|--------------------------------|
| Flow                       | MGD  | *                |                   |                    | NO       | *                              |
| Biochemical Oxygen Demands | mg/L   | *                |                   |                    | NO       | *                              |
| Ammonia as N               | mg/L   | *                |                   |                    | NO       | *                              |
| pH                         | SU   | *                |                   |                    | NO       | *                              |
| Dissolved Oxygen           | mg/L   | *                |                   |                    | NO       | *                              |
| Duration                   | hours  | *                |                   |                    | NO       | *                              |
| Temperature                | °C   | removed          |                   |                    | YES      | *                              |
| Monitoring Frequency       | Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below. |                  |                   |                    |          |                                |

\* - Monitoring requirement only

• **Minimum Sampling and Reporting Frequency Requirements.**

| PARAMETER                  | SAMPLING FREQUENCY         | REPORTING FREQUENCY  |
|----------------------------|----------------------------|--|
| Flow                       | once/day while discharging | Test results are due on the 28 <sup>th</sup> day of the month after the cessation of the discharge |
| Biochemical Oxygen Demands | once/day while discharging |  |
| Ammonia as N               | once/day while discharging |  |
| pH                         | once/day while discharging |  |
| Dissolved Oxygen           | once/day while discharging |  |
| Duration                   | once/day while discharging |  |

## **Part VI – Administrative Requirements**

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

### **PERMIT SYNCHRONIZATION:**

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than 4 years old, that data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit.

- ✓ Permit synchronization is not occurring at this time.

### **PUBLIC NOTICE:**

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

The department must issue public notice of a pending operating permit or of a new or reissued statewide general 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 wanting to submit comments regarding this proposed operating permit, then 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.

- ✓ The Public Notice period for this operating permit began June 17, 2024, and ended July 2, 2024. Comments were received.

**DATE OF FACT SHEET:** 6/17/2024

### **COMPLETED BY:**

**PAIGE MASSEY, ENVIRONMENTAL ASSISTANT  
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