Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Michael L. Parson, Governor
Carol S. Comer, Director

MAY 5 2020

United Hog Systems, LLC
P.O. Box 158
Marshall, MO 65340

Dear United Hog Systems, LLC:

Pursuant to the Missouri Code of State Regulations, under the Missouri Department of Natural Resources and in compliance with the Missouri Clean Water Law, we have issued and are enclosing a General State Operating Permit for Z-8 Sow Farm.

Please review the requirements of your permit. Monitoring reports that may be required by this permit must be submitted on a periodic basis. Copies of the necessary report forms, if required, are enclosed and should be mailed to the Department. Please contact that office for additional forms.

This permit is 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 Sections 644.051.6 and 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 as follows: 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, website: www.oa.mo.gov/ahc.

Please be aware that this facility may also be subject to any applicable county or other local ordinances or restrictions. Please note the expiration date of this permit. If your permit is issued within 30 days of the expiration date of the attached permit, this letter also serves as a notification to resubmit an application for renewal or termination.

If you have any questions concerning this permit, please do not hesitate to contact the Department's Water Protection Program by mail at P.O. Box 176, Jefferson City, MO 65102-0176, or by phone at 573-522-4502. Thank you.

Sincerely,

WATER PROTECTION PROGRAM

Chris Wieberg

Chris Wieberg
Director

CW/vs

Enclosure

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

General Operating Permit

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo as amended, hereinafter, the Law),

Permit No	MOGS10606
Owner:	United Hog Systems, LLC
Address:	P.O. Box 158 MARSHALL, MO 65340
Continuing Authority:	United Hog Systems, LLC P.O. Box 158 MARSHALL, MO 65340
Facility Name:	Z-8 Sow Farm
Facility Address:	8040 Liv 506 CHILLICOTHE, MO 64601

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

FACILITY DESCRIPTION

State No-Discharge Concentrated Animal Feeding Operation (CAFO) - Process wastes are collected and managed as fertilizer by spreading onto agricultural fields at agricultural rates in accordance with this permit.

SIC Code(s): 0213

CAFO Class Size: IC

Animal Units: 1732

This permit applies to only process wastewater, including storm water, under the Missouri Clean Water Law. This permit may be appealed in accordance with Section 644.051.6 and 621.250 RSMo.

May 04, 2020
Effective Date

Edward B. Galbraith, Director
Division of Environmental Quality

January 28, 2023
Expiration Date

Chris Wieberg, Director
Water Protection Program

Detailed Operation Description
For Concentrated Animal Feeding Operations

Feature: 001
Legal Description: Sec. 08, T59N, R24W, Livingston County
UTM Coordinates: 445833.754/4422094.227
Receiving Stream: Tributary to Thompson R.(U)
First Classified Stream - ID#: 100K Extent-Remaining Streams (C) 3960.00
USGS# and Sub Watershed#: 10280102 - 1402

Animal Type(s) and Number: Swine Over 55 lbs 3860; Swine Under 55 lbs 1880

Storage Structure Type(s) and Design Storage Period (days): Mortality Composter - 365 (days); Undefloor Pits - 454 (days)

General Description:

APPLICABILITY

1. This permit provides coverage under regulations found in the Missouri Clean Water Law and regulations found in 10 CSR 20-Chapter 6 and 10 CSR 20-Chapter 8 for point source related discharges at Concentrated Animal Feeding Operations (CAFOs) in the State of Missouri.

2. CAFOs that may be covered by this general permit are Class I CAFOs and Class II Animal Feeding Operations (AFO) that are defined as a CAFO or required by an enforcement action to be permitted and that do not discharge and do not seek coverage under a National Pollution Discharge Elimination System (NPDES) permit. CAFOs that are eligible for coverage under this permit are those that have a design capacity of less than 7,000 animal units. Once an operation obtains coverage under this permit, the requirements set forth herein apply to all manure, litter, process wastewater, or mortality by-products generated within the CAFO production area.

3. Operations must demonstrate the ability to meet the no discharge requirement. This requirement can be met by showing compliance with design requirements in 10 CSR 20-8.300, compliance with previous permits, or other acceptable documentation.

4. This permit authorizes the operation of a no-discharge CAFO. A discharge, regardless of the reason, is prohibited and is a violation of the permit.
   a. In the event a discharge occurs at a CAFO covered under this permit, the CAFO will be allowed to maintain coverage under this permit when the following two conditions are met:
      (1) The Department determines that the specific cause has been appropriately corrected so that the CAFO does not discharge; and
      (2) The CAFO has not had two discharges at a given site for the same cause in any five year period.
   b. If a CAFO has two separate discharge events brought about by the same cause, the Department may terminate this permit and the CAFO will be required to seek coverage under a NPDES permit.

5. If at any time the owner or operator of the operation should desire to apply for a general NPDES or site specific permit, the owner or operator may do so.

6. If at any time, the Department determines that a general NPDES or site specific permit is necessary to ensure protection of the waters of the state, the Department will require the CAFO to apply for one.

7. Continuation of this permit- When this permit expires, the terms and conditions of this permit will be continued automatically pending issuance of a new permit if the permittee has submitted a timely and complete renewal application and the Department is unable, through no fault of the permittee, to issue a new permit before the expiration date of the previous permit. Permits continued under this paragraph will remain fully effective and enforceable.

8. This permit applies only to requirements under the Missouri Clean Water Law and their implemented regulations and does not apply to other environmental laws and regulations.

9. This permit does not supersede nor remove liability for compliance with county and other local ordinances.

10. Construction of an earthen storage basin requires a construction permit. All wastewater systems and major system modifications shall be designed and constructed in accordance with 10 CSR 20-8.300 but do not require a construction permit.

GENERAL REQUIREMENTS

1. Definitions are as listed in the "Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard" and in State Regulations under 10 CSR 20 2, 6.300, and 8.300.

2. AUTHORIZATION:

   This permit authorizes operation of the CAFO waste management system as described in the "Facility Description", permit application and associated engineering plans. The CAFO is allowed to operate at an animal unit level not to exceed its respective class size (i.e. Class IC or IB) as listed in the "Facility Description". When determining the appropriate classification a rolling 12 month average will be used. The rolling 12 month average shall at no time exceed the upper threshold limit of the CAFO's designated class size. The CAFO may change animal numbers and weights within its respective class size; however, such changes must not adversely impact the storage and handling capacities of the waste management system.

GENERAL REQUIREMENTS (continued)

3. TERMINATION OF PERMIT:

If activities covered by this permit have ceased, and the operation has been closed in accordance with the regulations and this permit, the permittee shall request termination of this permit.

4. REOPENER CLAUSE:

The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), §304(b)(2), and §307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit.

5. PERMIT RENEWAL:

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than 30 days prior to the permit's expiration date.

STANDARD CONDITIONS

1. NO-DISCHARGES:

This permit does not authorize discharge of manure, litter, process wastewater, or mortality by-products to surface waters of the state.

2. CAFO PRODUCTION AREA REQUIREMENTS:

Requirements applicable to all CAFO production area(s):

a. There shall be no discharge of manure, litter, process wastewater, or mortality by-products into waters of state or release that crosses property boundaries from the production area.
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 discharging due to a chronic weather event, CAFO owners shall take reasonable steps to lower the liquid level in the structure through land application, or other suitable means, to prevent an overflow from the storage structure. Reasonable steps may include, but are not limited to following the Department's current guidance (PUB2422) entitled "Wet Weather Management Practices for CAFOs". This guide was designed specifically to help minimize or eliminate water quality impacts from CAFOs during extreme wet weather periods. 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 permittee shall notify the Water Protection Program 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. Stockpiling of uncovered solid manure within the production area, without runoff collection, is not allowed.
d. Additional Requirements for Uncovered Liquid Storage Structures.
   (1) The storage structure must be properly operated and maintained to contain all manure, litter, process wastewater plus runoff and direct precipitation.
   (2) 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 in an earthen basin 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.

STANDARD CONDITIONS (continued)

(3) The required safety volume shall be maintained between the overflow level and the upper operating level except during chronic and catastrophic weather events.

3. CAFO LAND APPLICATION AREA REQUIREMENTS:

The Land Application Area is agricultural land which is under the operational control of the CAFO owner or operator; whether it is owned, rented, or leased; to which manure, litter, process wastewater, or mortality by-products from the production area is or may be applied.

Requirements applicable to all CAFO land application area(s):

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 stockpile or as a result of the land application of manure, litter, process wastewater, or mortality by-products to land application areas under the operational control of the CAFO, 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 this permit, the 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 areas under the operational control of the CAFO is considered to be an agricultural storm water discharge.
b. All land application area(s), as defined in 10 CSR 20-6.300, must be included in the CAFO's nutrient management plan. When the permittee applies dry process wastes or process wastewater to agricultural lands that are not owned, rented, leased or otherwise under the operational control of the CAFO owner or operator, the permittee shall do so in accordance with Section 4 below.
c. Temporary stockpiling of solid manure within the land application areas shall be in accordance with 10 CSR 20-8.300(10)(B). No location shall be used for stockpiling for more than two weeks unless the stockpile is covered.
d. Land application may occur during nighttime hours provided staff is present at all times to monitor the irrigation system during irrigation periods. The irrigation system shall be inspected once per night for equipment malfunctions. If an automated system is in place that is capable to send notification to staff in the event of a pressure drop or an equipment malfunction, staff is not required to be present at all times. Regardless of the application system utilized, the inspections in Special Condition 6.e-g shall be conducted during a nighttime application even if previously conducted earlier in the day. Nighttime application includes the period between one half hour before sunset and one half hour after sunrise except for an application the begins in daylight and extends no more than two hours after sunset.

4. TRANSFER OF MANURE, LITTER, AND PROCESS WASTEWATER TO OTHER PERSONS:

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 and amount of manure, litter, and/or process wastewater that leaves the permitted operation;
b. Record the name and address of the recipient (The recipient is the broker or end user, not merely the truck driver);
c. Provide the recipient(s) with the current nutrient analysis of the manure, litter, and/or process wastewater;
d. Provide the recipient with a copy of the NMTS; and
e. These records must be retained on-site, for a period of five (5) years and made available upon request.

5. MORTALITY MANAGEMENT:

a. Mortalities must not be disposed of in any liquid manure or process wastewater system that is not specifically designed to treat animal mortalities. Animals shall be disposed of in a manner to prevent contamination of waters of the state or creation of a public health hazard. Class I operations may not use burial as their primary mortality management method to dispose of routine mortalities.
b. There shall be no-discharge from dead animal collection areas or holding areas (dumpsters, holding tanks, stockpiles within livestock production buildings, refrigeration units, etc.).
c. In the event of significant numbers of unexpected mortalities (i.e. mass mortalities), operations shall first receive approval of proposed burial sites from the departments' Missouri Geological Survey prior to burial. 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.

STANDARD CONDITIONS (continued)

6. INSPECTIONS:

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

a. 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.
b. Weekly inspections of all BMPs, including 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.
c. Weekly inspections of the manure, litter, process wastewater, or impoundments. The inspection will note the level in liquid impoundments as indicated by the depth marker.
d. Periodically conduct leak inspections on equipment used for land application.
e. Monitoring of 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.
f. Monitor for drifting from 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.
g. Hourly inspections of aboveground irrigation pipelines when in use.
h. Any deficiencies found as a result of inspections shall be documented and corrected as soon as practicable.

7. RECORD KEEPING FOR PRODUCTION AREA:

The following records shall be maintained 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 Requirement and Standard Condition #6 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 verify compliance with Special Requirements and Standard Conditions #5.
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 surface waters of state or release that crosses property boundaries. Monitor a discharge at the point immediately prior to entering the receiving stream or a release at the property boundary.
g. Report flow as cubic feet per second (CFS) based on an instantaneous estimate of the flow at the time of sampling. CFS = flow width in feet x flow depth in feet x 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 stop watch; 450 gpm = 1.0 CFS. Other similar means of estimating may be used.
h. 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.

8. RECORD KEEPING FOR LAND APPLICATION AREA:

The following records shall be maintained 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. Expected and actual crop yields;
b. The date(s) and rates of manure, litter, process wastewater or mortality by-product applications to each field;
c. Weather conditions at time of application and for twenty-four (24) hours prior to and following application;
d. Test methods used to sample and analyze manure, litter, process wastewater or mortality by-products, and soil;
e. Results from manure, litter, process wastewater or mortality by-products and soil sampling;
f. Explanation of the basis for determining manure application rates, as provided in the NMTS;
g. 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;
h. Total amount of nitrogen and phosphorus actually applied to each field for each application, including documentation of calculations for the total amount applied;
i. The method used to apply the manure, litter, process wastewater or mortality by-products;

STANDARD CONDITIONS (continued)

j. Date(s) of manure application equipment inspection.
k. Additional record keeping requirements are found in the NMTS that document implementation of appropriate NMP protocols.

9. REPORTING REQUIREMENTS:

An annual report shall be submitted by the 15th day of February for the previous calendar year. The first report is due on the next annual report date after permit issuance including partial report periods. Annual Report forms, supplied by the Department, or other equivalent forms, may be used. The report shall include:

a. The number and type of animals confined at the operation.
b. The estimated amount of manure, litter, process wastewater, or mortality by-products generated in the previous twelve months.
c. The estimated amount of manure, litter, process wastewater, or mortality by-products transferred to other persons in the previous twelve months.
d. The total number of acres for land application covered by the Nutrient Management Plan.
e. The total number of acres under the operational control of the operation that were used for land application of manure, litter, process wastewater, or mortality by-products in the previous twelve months.
f. The date the soil tests were taken that was used in development of the NMP.
g. The date, time, location, duration and estimated volume of any process wastewater discharges to surface waters of state or release that crossed property boundaries. Report as no-discharge, if there was no discharge during the monitoring period.
h. All reports or information submitted to the Department shall be signed by the owner or operator of the CAFO.

10. NONCOMPLIANCE REPORTING REQUIREMENTS:

a. Any discharge of manure, litter, process wastewater, or mortality by-products to surface waters of state or release that crosses property boundaries shall be reported to the Department as soon as practicable but no later than 24 hours after the permittee becomes aware of the discharge.
b. 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.
c. All reports or information submitted to the Department shall be signed by the owner or operator of the CAFO.

11. NUTRIENT MANAGEMENT PLAN:

a. In accordance with 10 CSR 20-6.300(3)(G)1, the permittee shall develop, implement, and maintain a current Nutrient Management Plan. A portion of a CAFOs NMP includes the engineering design and construction related documents within a CAFO's construction and operating permit application and annual reports. This plan must comply with the requirements found within the Nutrient Management Technical Standard (See # 13 below). The NMP must, at a minimum, address the following areas:

   (1) Ensures adequate storage of manure, litter, 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 as 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.

STANDARD CONDITIONS (continued)

(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.

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.

12. GROUNDWATER MONITORING PLAN:

When groundwater monitoring is required by the Department, the permittee shall prepare and fully implement a Department approved "groundwater monitoring plan". An approved groundwater monitoring program may be required around the perimeter of a manure storage site and/or land application areas to facilitate groundwater monitoring. The necessity of a groundwater monitoring program, which may include monitoring wells and/or lysimeters, will be determined by the Water Protection Program based on a recommendation by the Missouri Geological Survey on a case-by-case basis and be based on the potential to contaminate a drinking water aquifer due to soil permeability, bedrock, distance to aquifer, etc. Where the Missouri Geological Survey has deemed groundwater monitoring necessary, geohydrological site characterization will be required prior to the design of the groundwater monitoring program.

13. 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 http://dnr.mo.gov/env/wpp/cafo/.

14. CLOSURE OF WASTE STORAGE STRUCTURES:

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

a. Lagoons and waste storage structures shall be closed by removal and land application of all wastewater and sludge;
b. 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
c. After removal and proper land application of wastewater and sludge, the earthen basins may be demolished by removing the berms, grading, and revegetating the site; or the basin may be left in place for future use as a farm pond or similar uses.

15. 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.

16. 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;
a. to enter upon permittee's premises in which a point source, water contaminant source is located or in which any records area required to be kept under terms and conditions of the permit;
b. to have access to, or copy, any record required to be kept under terms and conditions of the permit;
c. to inspect any monitoring equipment or method required in the permit;

STANDARD CONDITIONS (continued)

d. to inspect any collection or treatment facility covered under the permit; and
e. to sample any wastewater at any point in the collection system or treatment process.

17. 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.

Missouri Department of Natural Resources
Concentrated Animal Feeding Operation
State No-Discharge Master General Permit Factsheet
MO-GS10000

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. Permits in Missouri 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).

A Factsheet gives pertinent information regarding the applicable regulations, rational for the development of the Missouri State Operating Permit (operating permit), and the public participation process for operating permit listed below.

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

This Factsheet is for a Master General Permit

Part I - Facility Information

The following facility information shall appear on the coverage document issued to a General Permit Covered Facility.

Facility Type: No-discharge Concentrated Animal Feeding Operation (CAFO)
Facility SIC Code(s): 0211, 0213, 0214, 0241, 0251, 0252, 0253, 0259, 0272
CAFO Class Size
Animal Units

State No-Discharge Concentrated Animal Feeding Operation - Process wastes are collected and managed as fertilizer by spreading onto agricultural fields at agricultural rates in accordance with this permit. Information will include; animal number and type(s), storage structure type(s), days of storage and a General Description.

Summary of Changes

- Voluntary permits for Class II and smaller AFO will no longer be issued. Class II and smaller AFO that are required to obtain permit coverage as part of an enforcement action will be issued a permit.
- Individual definitions were deleted from the permit. Previous permit contained definitions of terminology associated with CAFO. This was only a small portion of the definitions that are in the regulations that pertain to CAFOs. Permittees are encouraged to familiarize themselves with the definitions and the regulations.
- The addition of a requirement to notify the appropriate Regional Office twenty four (24) hours in advance of implementing Wet Weather Practices.
- Procedures regarding night time land applications.
- The Standard Condition of Design Parameters has been deleted. Regulations allow operations to operate at an animal number level not to exceed their permitted class size. Because design flow, i.e. manure productions is based on animal numbers this condition is no longer applicable to the permit.
- The department only has authority to enforce the Missouri Clean Water Law and Clean Water Commission regulations. Therefore, the references to Missouri Department of Agriculture (MDA) requirements have been removed from the permit. Producers should check with MDA for their requirements regarding mortality management.
- The allowance for nighttime application has been added to the permit. The requirements in Special Condition 3.d.for nighttime application is consistent with the requirements for a night time application plan that would be submitted to the department for approval. Compliance with the requirements in Special Condition 3.d., constitutes an approved night time application.

Part II – Operator Certification Requirements

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

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 1st 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)].

- ✓ Missouri or Mississippi River [10 CSR 20-7.015(2)]
- ✓ Lakes or Reservoirs [10 CSR 20-7.015(3)]
- ✓ Losing Streams [10 CSR 20-7.015(4)]
  Metropolitan No-Discharge Streams [10 CSR 20-7.015(5)]
- ✓ Special Streams [10 CSR 20-7.015(6)]
- ✓ Subsurface Waters [10 CSR 20-7.015(7)]
- ✓ All Other Waters [10 CSR 20-7.015(8)]

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.

- ✓ Applicable; All limits in this permit are at least as protective as those previously established; therefore, backsliding does not apply.

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.

- ✓ Not applicable; sludge is not land applied at this facility.

NUTRIENT MANAGEMENT AND LAND APPLICATION
The agronomic rate is the amount of manure, litter and process 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

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.

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

All Permitted Features and Land Application Areas – No 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.

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 these facilities are operated as no discharged.

(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.

(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.

(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.

(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.

(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.

(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.

(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.

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.

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 was from July 7, 2017 to August 7, 2017. Two responses received.

DATE OF FACT SHEET: SEPTEMBER 28, 2017

COMPLETED BY:

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WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION – INDUSTRIAL PERMITS UNIT
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