

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

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

Permit No.	MO-0131059
Owner:	DM Farms of Rose Hill, LLC
Address:	1801 W. Austin Suite F, PO Box 566, Nevada, MO 64772
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Murphy Family Ventures, LLC Dover Pyramid
Address:	Highway B at S. 2425 Road, Sheldon, MO 64784
Legal Description:	See following pages
Latitude/Longitude:	See following pages
Receiving Stream:	See following pages
First Classified Stream and ID:	See following pages
USGS Basin & Sub-watershed No:	See following pages

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

Outfalls #001- #007 – Class IB Concentrated Animal Feeding Operation - SIC #0213. No discharge of process wastewater. Six anaerobic lagoons, mortality refrigeration units, and two truck washes.
Design flow is 70,486 gallons per day
Design number of animals is 6,270 animal units of swine over 55 pounds and swine under 55 pounds.

This permit authorizes wastewater and stormwater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas.

April 1, 2022
Effective Date

March 31, 2027
Expiration Date


Chris Wieberg, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

The Dover Pyramid has a finishing site, sow farrow-to-wean site, nursery site, small depot facility, internal truck wash, and an external truck wash. Each site is served by a single stage anaerobic lagoon. Confinement buildings are shallow pit with pull plug systems and manure is flushed to lagoons using recycled lagoon water. The external and internal truck washes are each served by an anaerobic lagoon with wastewater land applied. Mortalities are held in refrigeration units until removed off site for rendering.

Permitted Feature #001 – Dover Sow Farm - Anaerobic lagoon

Legal Description: NE ¼, NE ¼, Sec. 4, T33N, R30W, Barton County

UTM Coordinate: X = 392298, Y = 4166827

Receiving Water: Tributary to Clear Creek

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

USGS Basin & sub-watershed No: 10290105-0101

Design Waste Volume: 8,253,848 gallons/year

Design Storage: 335 days

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 7.3 feet below overflow level

Permitted Feature #002 – Dover Finisher - Anaerobic lagoon

Legal Description: SW ¼, SE ¼, Sec. 34, T34N, R30W, Vernon County

UTM Coordinate: X = 393363, Y = 4167243

Receiving Water: Tributary to Clear Creek

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

USGS Basin & sub-watershed No: 10290105-0101

Design Waste Volume: 11,736,012 gallons/year

Design Storage: 285 days

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 5.7 feet below overflow level

Permitted Feature #003 – Dover Nursery - Anaerobic lagoon

Legal Description: NW ¼, NE ¼, Sec. 34, T34N, R30W, Vernon County

UTM Coordinate: X = 393630, Y = 4168376

Receiving Water: Tributary to Clear Creek

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

USGS Basin & sub-watershed No: 10290105-0101

Design Waste Volume: 4,335,470 gallons/year

Design Storage: 305 days

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 6.4 feet below overflow level

Permitted Feature #004 – Dover Depot - Anaerobic lagoon

Legal Description: SE ¼, NE ¼, Sec. 34, T34N, R30W, Vernon County

UTM Coordinate: X = 393783, Y = 4167948

Receiving Water: Tributary to Clear Creek

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

USGS Basin & sub-watershed No: 10290105-0101

Design Waste Volume: 567,940 gallons/year

Design Storage: 180 days

Upper Operating Level: 1 foot below overflow level

Lower Operating Level: 5.5 feet below overflow level

Permitted Feature #005 – Dover External Truck Wash - Anaerobic lagoon

Legal Description: SE ¼, NE ¼, Sec. 34, T34N, R30W, Vernon County

UTM Coordinate: X = 393816, Y = 4168219

Receiving Water: Tributary to Clear Creek

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

USGS Basin & sub-watershed No: 10290105-0101

Design Waste Volume: 337,625 gallons/year

Design Storage: 180 days

Upper Operating Level: 1 foot below overflow level
Lower Operating Level: 4.3 feet below overflow level
Permitted Feature #006 – Dover Internal Truck wash - Anaerobic lagoon
Legal Description: NW ¼, NE ¼, Sec. 34, T34N, R30W, Vernon County
UTM Coordinate: X = 393791, Y = 4168361
Receiving Water: Tributary to Clear Creek
First Classified Stream and ID: 100K Extent-Remaining Streams (C) 3960
USGS Basin & sub-watershed No: 10290105-0101
Design Waste Volume: 212,795 gallons/year
Design Storage: 180 days
Upper Operating Level: 1 foot below overflow level
Lower Operating Level: 4.1 feet below overflow level

Permitted Feature #007 – Mortality Holding Station. Refrigeration units for temporary storage of mortalities.
Legal Description: NE ¼, SE ¼, Sec. 34, T34N, R30W, Vernon County
UTM Coordinate: X = 394051, Y = 4167816
Receiving Water: Tributary to Clear Creek
First Classified Stream and ID: 100K Extent-Remaining Streams (C) 3960
USGS Basin & sub-watershed No: 10290105-0101

Permitted Feature #008 – Deleted – Stream Monitoring

Permitted Feature #009 – Deleted – Stream Monitoring

Permitted Feature #010 – Deleted – Stream Monitoring

Permitted Feature #011 – Deleted – Stream Monitoring

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfalls #001 - #006 Emergency Discharge	TABLE A-1 FINAL MONITORING REQUIREMENTS			
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in Special Condition D.1.(e) and 40 CFR 412. The final effluent limitations shall become effective upon issuance of the permit and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:				
EFFLUENT PARAMETERS	UNITS	MONITORING REQUIREMENTS		
		DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: U				
PHYSICAL				
Flow	MGD	*	once/event [‡]	event total
Duration	Hours	*	once/event [‡]	event total
CONVENTIONAL				
Biological Oxygen Demand, 5 Day	mg/L	*	once/event [‡]	grab
Dissolved Oxygen (Minimum [◊])	mg/L	*	once/event [‡]	grab
pH [†]	SU	*	once/event [‡]	grab
Total Suspended Solids	mg/L	*	once/event [‡]	grab
NUTRIENTS				
Ammonia as N	mg/L	*	once/event [‡]	grab
MONITORING REPORTS SHALL BE SUBMITTED BY THE 28 TH DAY OF THE MONTH FOLLOWING DISCHARGE CESSATION.				

* Monitoring and reporting requirement only.

◊ Report the minimum value obtained if more than one sample was taken.

† Report the range (minimum and maximum values) if more than one sample is obtained.

‡ Once per event means the facility must take a sample at least once per discharge event. If there was no discharge, a report is not necessary; if a discharge occurred, the facility must report all results of sampling into the eDMR system by the 28th day of the month following the completion of the discharge.

B. 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.

C. GENERAL CONDITIONS

1. Unauthorized Discharges.
 - (a) Any spill, overflow, or other discharge(s) not specifically authorized above are unauthorized discharges
 - (b) Should an unauthorized discharge cause or permit any contaminants to discharge or enter waters of the state, the unauthorized discharge must be reported to the regional office as soon as practicable but no more than 24 hours after the discovery of the discharge. If the spill or overflow needs to be reported after normal business hours or on the weekend, the facility must call the Department's 24 hour spill line at 573-634-2436.
2. Reporting of Non-Detects:
 - (a) Compliance analysis conducted by the permittee or any contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated. See sufficiently sensitive test method requirements in Standard Conditions Part I, Section A, #4 regarding proper testing and detection limits used for sample analysis. For the purposes of this permit, the definitions in 40 CFR 136 apply; method detection limit (MDL) and laboratory established reporting limit (RL) are used interchangeably in this permit.

C. GENERAL CONDITIONS (CONTINUED)

- (b) The permittee shall not report a sample result as “non-detect” without also reporting the MDL. Reporting “non-detect” without also including the MDL will be considered failure to report, which is a violation of this permit.
 - (c) For the daily maximum, the permittee shall report the highest value; if the highest value was a non-detect, use the less than “<” symbol and the laboratory’s highest method detection limit (MDL) or the highest reporting limit (RL); whichever is higher (e.g. <6).
 - (d) When calculating monthly averages, zero shall be used in place of any value(s) not detected. Where all data used in the average are below the MDL or RL, the highest MDL or RL shall be reported as “<#” for the average as indicated in item (c).
3. Electronic Discharge Monitoring Report (eDMR) Submission System. Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent monitoring data and any report required by the permit (unless specifically directed otherwise by the permit), shall be submitted via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data for the NPDES program. The eDMR system is currently the only Department-approved reporting method for this permit unless specified elsewhere in this permit, or a waiver is granted by the Department. The facility must register in the Department’s eDMR system through the Missouri Gateway for Environmental Management (MoGEM) before the first report is due
4. Failure to pay fees associated with this permit is a violation of the Missouri Clean Water Law (644.055 RSMo).
5. 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.
6. 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 RSMo 644.051.16, 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 Clean Water Act Sections 301(b)(2)(C) and (D), §304(b)(2), and §307(a) (2), 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. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, termination, notice of planned changes, or anticipated non-compliance does not stay any permit condition.
7. Site-wide minimum Best Management Practices (BMPs). At a minimum, the permittee shall adhere to the following:
- (a) Provide good housekeeping practices on the site to keep trash from entry into waters of the state. Dumpsters must remain closed to exclude precipitation when not in use.
 - (b) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, warehouse activities, and other areas, to prevent the contamination of stormwater from these substances.
 - (c) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - (d) Store all paint, solvents, petroleum products, petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater. Spill records should be retained on-site.
 - (e) Ensure adequate provisions are provided to prevent surface water intrusion into the wastewater storage basin and to divert stormwater runoff around the wastewater storage basin.
 - (f) Provide sediment and erosion control sufficient to prevent or minimize sediment loss off of the property, and to protect embankments from erosion.
 - (g) Remove sediment from stormwater sediment pond(s) no less than every ten years, or more frequently dependent on the amount of sediment received; sediment accumulated shall be no more than 20% total volume or as prescribed in the engineering design, whichever is less. Records must be retained since last cleanout and submitted with the application for renewal.
 - (h) Wash water for vehicles, building(s), or pavement must be handled in a no-discharge manner (infiltration, hauled off-site, etc.). Describe the no-discharge method used and include all pertinent information (quantity/frequency, soap use, effluent destination, BMPs, etc.) in the application for renewal. If wash water is not produced, note this instead.
 - (i) Fire protection test water must be handled in a no-discharge manner (infiltration, hauled off-site, etc.). Describe the no-discharge method used and include all pertinent information (quantity/frequency, source water, effluent destination, BMPs, etc.) in the application for renewal. If fire protection test water is not produced, note this instead.

- (j) After snow or ice, if the facility applies sand/salt to the pavement of parking lots, sidewalks, or stairs, the facility shall sweep the lots to remove sand/salt as soon as possible after snow or ice melt, collect excess solids, and minimize and control the discharge of solids into stormwater inlets. Salt and sand shall be stored in a manner minimizing mobilization in stormwater (for example: under roof, in covered container, in secondary containment, under tarp, etc.).

8. Renewal Application Requirements.

- (a) This facility shall submit an appropriate and complete application to the Department no less than 180 days prior to the expiration date listed on page 1 of the permit.
- (b) Application materials shall include complete Form W – Concentrated Animal Feeding Operation (CAFO) Operating Permit Application. If the form names have changed, then the facility should ensure they are submitting the correct forms as required by regulation
- (c) This facility must submit a copy of the current nutrient management plan.

D. SPECIAL CONDITIONS

1. 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 shall 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.
- (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 must 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.
- (e) Additional Requirements for Uncovered Liquid Storage Structures:
 - (1) Whenever a precipitation related event causes an overflow of manure, litter, or process wastewater; pollutants may be discharged through the emergency spillway of the lagoon or uncovered storage structure provided:
 - (2) 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.
 - (3) The design storage volume is adequate to contain all manure, litter, and process wastewater accumulated during the storage period including the following:
 - (i) The volume of manure, litter, process wastewater, and other wastes accumulated during the storage period;
 - (ii) 1 in 10 year 365 day annual rainfall minus evaporation during the storage period;
 - (iii) 1 in 10 year 365 day normal runoff during the storage period;
 - (iv) The direct precipitation from the 25-year, 24-hour storm;
 - (v) The runoff from the 25-year, 24-hour storm event;
 - (vi) A minimum treatment volume for treatment lagoons.
 - (4) Discharge is allowed via overflow through the emergency spillway of the lagoon or uncovered storage structure when caused by a storm event that exceeds the design storm event(s). 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) 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.
 - (6) All open storage impoundments shall maintain a visual reference gauge showing the depth of liquids in the structure, the lower operating level, and the upper operating level.
 - (7) Upper and Lower Storage Operating Levels:
 - (i) During normal weather conditions, the liquid level in the storage structure shall be maintained below the upper operating level, as identified in the FACILITY DESCRIPTION, 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 lagoon floor.

- (ii) 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.
 - (iii) The upper operating level for uncovered storage structures is one foot below the emergency overflow level unless specified otherwise in the FACILITY DESCRIPTION.
 - (iv) 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 25-year, 24-hour storm or a 1 in 10-year chronic storm occurs.
- (8) Storage Safety Volume:
- (i) When a chronic or catastrophic design storm event occurs, the “safety volume” may be used to contain the stormwater until conditions are suitable for land application.
 - (ii) The required safety volume shall be maintained between the overflow level and the upper operating level.

2. Requirements 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) All land application areas must be included in the CAFO’s nutrient management plan and in the Special Condition 3, Terms of the NMP before any land application of manure, litter or process wastewater can occur..
- (c) 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.(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.

3. Nutrient Management Plan (NMP).

- (a) In accordance with 10 CSR 20-6.300(3)(G), the permittee shall implement a nutrient management plan that complies with the *Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard* (NMTS) and at a minimum addresses the following:
 - (1) Ensures adequate storage of manure, litter and process wastewater, 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.
 - (4) Prevents direct contact of confined animals with waters of the state.
 - (5) Ensures that chemicals and other contaminants handled on site are not disposed of in any manure, litter, process wastewater, 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, 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.

4. When manure, litter, or process wastewater generated by the permitted CAFO is transferred to or received by a third party whether sold or given away, or applied on fields that do not meet the definition of a land application area, the permittee shall comply with the following conditions:

D. SPECIAL CONDITIONS (CONTINUED)

- (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 representative information on the nutrient content of the manure, litter, and/or process wastewater.
 - (d) Provide the recipient(s) with a copy of the NMTS.
 - (e) These records must be retained on-site, for a period of five (5) years.
5. Mortality Management Requirements.
 - (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.
6. The following minimum visual inspections shall be conducted by the CAFO operator. Any deficiencies found as a result of inspections shall be documented and corrected as soon as practicable.
 - (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 be 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 channeling contaminated storm water to the process wastewater storage.
 - (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) Daily inspections of the collection or holding areas for dead animals. Equipment and devices used for the transfer of dead animals 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) Quarterly inspections, prior to use, of equipment used for land application of manure or process wastewater.
 - (g) Inspections during land application as follows:
 - (1) Monitor the perimeter of the application fields to insure that applied wastewater does not run off the fields where applied.
 - (2) 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.
 - (3) Hourly inspections of aboveground irrigation pipelines when in use.
 - (4) Hourly inspections of aboveground irrigation pipelines when in use.
 - (5) Twice daily inspections of pressurized underground lines including one inspection that should be completed immediately following startup.
7. Proper and continued operation and maintenance pursuant to 40 CFR 122.41(e). At all times the facility shall properly operate, maintain, and control all systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
8. The following records shall be kept on-site by the CAFO operator. The records for inspections for Special Condition 8.a. shall be maintained for a period of three (3) years from the date they are created, all other records shall be maintained for a period of five (5) years from the date they are created. All records shall be made available to the department upon request and may be maintained electronically:

- (a) A copy of this permit including a current copy of the facility's Nutrient Management Plan and documentation of changes/modifications made to the Nutrient Management Plan.
- (b) The daily and weekly visual inspections required in Special Condition 6, shall be recorded once per week. This includes the depth of the process wastewater in liquid impoundments as indicated by the depth marker. Report the liquid level as feet below the emergency overflow level.
- (c) 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.
- (d) Records of mortalities management used by the operation.
- (e) Records of the date, time, location, duration and estimated volume of any emergency or unauthorized process waste overflow from a lagoon or any spill exceeding 1000 gallons. 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 stop watch; 450 gpm = 1.0 CFS. Other similar means of estimating may also be used.
- (f) 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.
- (g) 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.

9. Reporting Requirements

- (a) Any wastewater discharge into waters of the state or a release that crosses property boundaries shall be reported to the Department regional office as soon as practicable but no later than 24 hours after the start of the discharge.
- (b) Spills or leaks that are contained on the property shall also be reported to the Department within 24 hours, if the spill or leak exceeds 1,000 gallons per day (24 hour period). This includes leaks from sewer lines; recycle lines, flushing systems, lagoons, irrigation systems etc. Spills or leaks that are entirely contained in a secondary containment are excluded from this reporting requirement, but not recordkeeping requirements, provided there is no discharge from the secondary containment prior to the wastewater being removed in accordance with Special Condition 11.
- (c) Within seven (7) days of the date that a lagoon's level comes within four (4) inches of the upper operating level, the permittee shall notify the department with information that identifies the lagoon(s), the lagoon level in inches below the emergency spillway and actions taken to reduce the lagoon levels.
- (d) 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.
- (e) 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 shall include:
 - (1) The actual number and type of animals confined at the operation.
 - (2) The estimated amount of manure, litter, and process wastewater generated in the previous twelve months.
 - (3) The estimated amount of manure, litter, and process wastewater transferred to other persons in the previous twelve months.
 - (4) The total number of acres for land application covered by the Nutrient Management Plan.
 - (5) 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.
 - (6) 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.
 - (7) A statement indicating whether the current Nutrient Management Plan was developed or approved by a certified nutrient management planner.
 - (8) 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.
 - (9) The daily and weekly records of the wastewater depth in the liquid impoundments as required in Special Condition 6(d).
 - (10) The actual operation numbers compared to the permitted design parameters described in Special Condition 12. The facility must be operated below the design numbers as authorized in the facility description.
 - (11) All monitoring results from an emergency or unauthorized discharge as required in General Condition #1.
- (f) The reports shall include a cover sheet with an original signature of a company representative. The reports may be printed or, saved as .pdf files or locked spreadsheets and submitted as an attachment with the eDMR system and shall be submitted to the Southwest Regional Office and the Water Protection Program, Industrial Permits Unit.

10. The following requirements are applicable to all secondary containments that may capture process wastewater:

D. SPECIAL CONDITIONS (CONTINUED)

- (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.

D. SPECIAL CONDITIONS (CONTINUED)

11. The facility's design flow in the Facility Description is an estimated parameter that is used to help predict nutrient generation and storage periods. The design flow is based on the maximum annual flows including storm water flows during the one-in-ten year return frequency for annual or 365 day rainfall minus evaporation. The design flow is based on the time period when the flows are generated at the production site and not when flows are land applied. Permittee may exceed the design flow when precipitation in any 365 day period exceeds the one-in-ten year annual precipitation amount. Any proposed increases may require a permit modification prior to the proposed change. Portions of the design flow may be stored and carried over into the following year for land application, as necessary.
12. Underground tile inlets for field terraces or subsurface field drainage tiles shall be shown on the site maps for all land application sites.
13. 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 52 weeks. 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.
14. This permit does not authorize the facility to accept, treat, or discharge wastewater from other sources unless explicitly authorized herein. If the facility would like to accept, treat, or discharge wastewater from another activity or facility, the permit must be modified to include external wastewater pollutant sources in the permit.
15. 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.

TERMS OF THE NUTRIENT MANAGEMENT PLAN														
Field Name	Legal Description	Spreadable Acres	P Loss Risk ²	N or P Based Application	Crop #1		Crop #2		Crop #3		Crop #4		Crop #5 ¹	
					Crop	Yield Goal ³	Crop	Yield Goal ³	Crop	Yield Goal ³	Crop	Yield Goal ³	Crop	Yield Goal ³
A	Sec. 34 Twn. 34N Rng. 30W	106.2	M	N	Fescue	3T	Fescue	3T	Fescue	3T	Fescue	3T	Fescue	3T
B	Sec. 34 Twn. 34N Rng. 30W	36	M	N	Alfalfa	4T	Alfalfa	4T	Alfalfa	4T	Alfalfa	4T	Alfalfa	4T
B1	Sec. 34 Twn. 34N Rng. 30W	16	M	N	Fescue	2T	Fescue	2T	Fescue	2T	Fescue	2T	Fescue	2T
C	Sec. 34 Twn. 34N Rng. 30W	18.5	M	N	Corn	130B	Soybeans	40B	Corn	130B	Corn	130B	Soybeans	40B
C1	Sec. 34 Twn. 34N Rng. 30W	25	M	N	Fescue	3T	Fescue	3T	Fescue	3T	Fescue	3T	Fescue	3T
D	Sec. 34 Twn. 34N Rng. 30W	26.5	M	N	Alfalfa	4T	Corn	130B	Corn	130B	Alfalfa	4T	Alfalfa	4T
E	Sec. 34 Twn. 34N Rng. 30W	60	M	N	Bermuda	5T	Bermuda	5T	Bermuda	5T	Bermuda	5T	Bermuda	5T
F	Sec. 34 Twn. 34N Rng. 30W	58	M	N	Bermuda	3T	Bermuda	5T	Bermuda	5T	Bermuda	5T	Bermuda	5T
F1	Sec. 3 Twn. 33N Rng. 30W	25.5	M	N	Alfalfa	4T	Corn	130B	Corn	130B	Alfalfa	4T	Alfalfa	4T
H	Sec. 3,4 Twn. 33N Rng. 30W	44	M	N	Corn	130B	Soybeans	40B	Corn	130B	Corn	130B	Soybeans	40B
H1	Sec. 34 Twn. 34N Rng. 30W	35	M	N	Bermuda	5T	Bermuda	5T	Bermuda	5T	Bermuda	5T	Bermuda	5T
I	Sec. 34 Twn. 34N Rng. 30W	17	M	N	Fescue	3T	Fescue	3T	Fescue	3T	Fescue	3T	Fescue	3T

¹ If more than five planned or alternative crops per field continue on next line.

2 Soil Test P Rating or P Index Rating may be used.
3 Express yield in Bu=Bushels or T=Tons per acre.

- (b) The table below lists alternative crops with yield goals. These crops may be planted in any field listed in the table in Special Condition 18a.

TERMS OF THE NUTRIENT MANAGEMENT PLAN - ALTERNATIVE CROPS	
Crop	Yield Goal
Corn Grain	130 bu/a
Corn Silage	12 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
Orchardgrass	4 t/a
Rye	3 t/a
Sudangrass	5 t/a
Wheat	60 bu/a
Cool Season Grass	3 t/a
Warm Season Grass	3 t/a

E. LAND APPLICATION CONDITIONS (CONTINUED)

1. Surficial land application of wastewater and/or sludge materials listed in the FACILITY DESCRIPTION of this permit is authorized and shall be conducted according to the following conditions. These land application conditions do not apply to fertilizer products receiving a current exemption under the Missouri Clean Water Law and regulations in 10 CSR 20-6.015(3)(B)8, and are land applied in accordance with the exemption. The minimum application requirements enumerated here, when followed, exempt stormwater runoff sampling requirements pursuant to 10 CSR 20-6.200(2)(B)3.B.
2. Storage Basin Minimum Best Management Practices (BMPs)
 - (a) To maintain structural integrity, basins shall be inspected at least monthly, the berms of the storage basin(s) shall be mowed and kept free of any deep-rooted vegetation, animal dens, or other potential sources of damage, any leaks or issues shall be noted and repaired as soon as possible.
 - (b) The facility shall ensure adequate berms are provided to prevent surface water intrusion and run-in into the storage basin(s), will also divert stormwater runoff from around the storage basin(s), and will protect embankments from erosion.
 - (c) The minimum and maximum operating water levels for the storage basin(s) shall be clearly marked.
 - (d) Each storage basin shall be operated and maintained to achieve and maintain no discharge status; including maximum water elevations up to the operating level of the 1-in-10 year or 25-year, 24-hour storm events.
 - (e) The minimum storage capacity for the basin shall be 120 days per 10 CSR 20-8.200(6)(C)1.A.B.C.D. for Vernon County facilities.
 - (f) Storage basins shall be lowered to the minimum operating level prior to November 30 each year.
 - (g) 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.
3. Land Application Equipment Minimum Requirements
 - (a) Spray application equipment shall minimize the formation of aerosols.
 - (b) Application equipment shall be visually inspected daily during land application to check for equipment malfunctions and leaks. The application system shall be operated so as to provide uniform distribution of wastes over the entire land application site.
 - (c) Equipment shall be calibrated at least once per calendar year to ensure even distribution of wastewater.

E. LAND APPLICATION CONDITIONS (CONTINUED)

4. Land Application Field(s) Minimum Requirements

- (a) No land application shall occur when the soil or ground is frosted, frozen, snow covered, or saturated. Daily observation of fields is required. Application activities shall cease if these conditions occur.
- (b) There shall be no application during a precipitation event or if a precipitation event likely to create runoff is forecasted to occur within 24 hours of a planned application.
- (c) Public Access Restrictions; this permit does not authorize application of wastewater to public use areas.
- (d) If land application sites listed in this permit are also included as land application sites in another permit, the wastewater and sludge applications from all sources shall be included in the application rates in the facility description. Records all sources must be kept for all permits.
- (e) Land application shall occur only during daylight hours unless night time irrigation is necessary and the Water Protection Program has approved a nighttime irrigation plan.
- (f) Land application fields shall be checked daily during land application for runoff.
- (g) Sites utilizing spray irrigation shall monitor for the drifting of spray across property lines. Spray drift is not permissible.
- (h) Setback distances from sensitive features per 10 CSR 20-8.200(6)(B). There shall be no land application within:
 - (1) The 10 year floodplain;
 - (2) 50 feet inside of the property line, public road, or drainage ditch;
 - (3) 100 feet of any classified or unclassified gaining perennial or intermittent stream, any wetland, or any public or privately owned pond or lake;
 - (4) 150 feet of any dwelling, residence, public building, or public use area (excluding roadways);
 - (5) 300 feet of any potable water supply well not located on the property, adequate protections shall be implemented and maintained for any potable water supply well located within the application area;
 - (6) 300 feet from any sinkhole, losing stream, or any other physiographic structure with a conduit to groundwater;

5. Application Rate(s) and Loading

- (a) This permit does not authorize application of materials in concentrations known to cause, or having the potential to cause, phytotoxicity in plants per 10 CSR 20-6.015(4)1. If plant stress is observed, the facility may need to reduce application of wastewaters and/or sludges. If phytotoxicity is observed, the facility shall cease land application activities and evaluate the applied substances to determine the cause of phytotoxicity.
- (b) The application rate shall not exceed any design hydraulic loading rate listed in the facility description.
- (c) Wastewater application on slopes exceeding 10%:
 - (1) Initial application rate on dry soils may briefly exceed one-half (1/2) the design sustained permeability rate;
 - (2) The hourly application rate shall not exceed one-half (1/2) the design sustained permeability;
 - (3) In no case shall exceed one-half (1/2) inch per hour.
- (d) Applications shall not exceed any agronomic rates listed in the facility description to ensure plant use of nutrients and prevent contamination of surface and groundwater. The agronomic rate is the amount of wastewater applied to a field to meet the fertilization needs of the plants.
- (e) Runoff and ponding is prohibited.
- (f) This permit does not authorize land disposal or the application of hazardous waste.
- (g) If hydraulic application rates exceeded or will exceed 24 inches per acre per year, the facility shall calculate nitrogen loading rates and include results in the annual report. The calculation is: $(PAN) \times (0.226) \times (\text{inches per acre irrigated}) = \text{pounds total N per acre}$.
- (h) The facility must maintain a record of all fertilizer products applied to fields; even exempted products, to determine total nutrient loading.
- (i) The fertilizer recommendation shall be based on all of the following:
 - (1) The nutrient recommendation (nitrogen or phosphorus) for each crop. Recommendations can be found in University of Missouri Extension Guide EQ202 Crop/Nutrient Considerations for Biosolids or from publications by other land grant universities in adjoining states,
 - (2) Realistic yield goal for each crop. Yield goals should be based on actual crop yield records from multiple years for each field. Good judgment should be used to counteract unusually high or low yields. If a field's yield history is not available the USDA county wide average or other approved source may be used, and
 - (3) The most recent soil test.
- (j) Application shall be conducted according to one of the following nutrient based management practices. The facility must avoid over-application of both Nitrogen and Phosphorus simultaneously by choosing the more stringent application method of those listed below.
 - (1) Nitrogen:
 - i. Plant Available Nitrogen (PAN) based application. This method can be used when soil test phosphorus (P) levels are 120 pounds or less per acre using Bray P-1 test method, or if the field has been assessed by Missouri Phosphorus Index (P-index) with a low or medium rating. The amount of wastewater and/or sludge to be applied shall be adjusted annually based on the PAN calculation using the current wastewater and/or sludge nutrient analysis and the

E. LAND APPLICATION CONDITIONS (CONTINUED)

following:

- ii. For non-legume crops, the nitrogen fertilizer recommendation shall be adjusted to account for nitrogen credits from a preceding legume crop and residual nitrogen from the previous year's application. Nitrogen removal rates can be found in WQ430.
- iii. For legume crops, the nitrogen removal capacity of the legume crops should be based on the estimated nitrogen content of the harvested crop as defined in WQ430 and a realistic yield goal. The estimated nitrogen content of the crop must be adjusted using nitrogen credits for residual nitrogen fertilizer from the previous year's application.
- iv. $PAN = [Ammonia\ Nitrogen \times volatilization\ factor*] + [Organic\ Nitrogen \times 0.2] + [Nitrate\ Nitrogen]$
*Volatilization factor is 0.7 for surface application and 1 for subsurface application.
- v. The amount of wastewater and/or sludge applied shall not exceed the nitrogen fertilizer recommendation or the estimated nitrogen removal capacity of the planned crop during the year of the application;

(2) Phosphorus:

- i. This method must be used when soil test phosphorus (P) levels are above 120 pounds per acre using Bray P-1 test method, or if the P-index rating is high. The amount of wastewater and/or sludge to be applied shall be adjusted annually based the phosphorus content of the current wastewater and/or sludge nutrient analysis and may be applied according to one of the following methods;
- ii. The annual amount of phosphorus applied shall not exceed the planned crop's phosphorus removal estimate from WQ430, or from publications by other land grant universities in adjoining states; or,
- iii. Multi-year phosphorus applications. Wastewater and/or sludge applications can exceed the annual planned phosphate removal estimate for the crop when a multi-year phosphorus application is utilized. The multi-year application must comply with the following conditions:
- iv. The amount of phosphorus banked shall not exceed four years of the estimated crop removal rate for the planned crop rotation;
- v. The actual application rate shall not exceed the multi-year application rate; and
- vi. No additional applications shall occur until the applied phosphorus has been removed from the field by crop removal or harvest.
- vii. No land application can occur if the P-index rating for a field is "very high".

6. Soil Monitoring

- (a) Composite soil samples shall be collected every five years from each field listed in this permit where land application has occurred in the last 12 months. No land application shall occur on fields listed in this permit if soil sample results are more than five years old.
- (b) Soil sampling shall be in accordance with University of Missouri (MU) Guides G9215, Soil Sampling Pastures or G9217, Soil Sampling Hayfields and Row Crops or other methods approved by the Department. The recommendation of one composite sample per 20 acres in G9215 and G9217 is not required by this permit, however, this is a useful method to identify soil fertility fluctuations in large fields due to past management practices, soil type, and variability of crop yields. There shall be at least one composite sample per 80 acres.
- (c) Testing shall conform to Recommended Chemical Soil Testing Procedures for North Central Region (North Central Regional Research Publication 221 Revised), or Soil Testing in Missouri (MU Extension Guide EC923), or other methods approved by the Department.

7. Record Keeping. The following record keeping shall occur, be maintained for at least five years and be made available to the Department upon request.

- (a) Daily land application log showing, at a minimum: date(s) of application, field identified, acres used, volume applied, weather condition (sunny, overcast, air temperature, etc), soil moisture condition, days since last precipitation event, and application method;
- (b) Monthly visual storage structure inspections (if applicable);
- (c) Equipment inspections and calibrations;
- (d) Land application field inspections, including runoff, saturation, and ponding;
- (e) Record of maintenance and repairs;
- (f) Description of any unusual operating conditions encountered, narrative summary of any problems or deficiencies identified, corrective action taken, or improvements planned;
- (g) The number of days the storage structure discharged during the year, the discharge flow, reason the discharge occurred, and effluent analysis performed including analytical result laboratory pages and any clean-up actions taken.
- (h) Annual samples for each wastewater source shall be obtained and submitted to the department with the application for renewal materials. The samples required shall contain all parameters listed in the table above and any other parameters sampled. The submission must include the date of sampling and have the wastewater identified. Submission of laboratory results sheets will likely meet this requirement.
- (i) To ensure the soil does not exceed the cumulative loading rate, all records shall be maintained from the initial application

E. LAND APPLICATION CONDITIONS (CONTINUED)

date and for at least five years after application activities have ceased.

- (j) Annual summary for each field used for land application showing: number of days application occurred, crop grown and yield, and total amount of wastewater and/or sludge applied (gallons and/or tons per acre).

F. NOTICE OF RIGHT TO APPEAL

If you were adversely affected by this decision, you may be entitled to pursue an appeal before the administrative hearing commission (AHC) pursuant to Sections 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 should be directed to:

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

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0131059
MURPHY FAMILY VENTURES, DOVER PYRAMID

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (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 for less.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)(A)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 (MSOP or operating permit) listed below. A factsheet is not an enforceable part of an operating permit.

PART I. FACILITY INFORMATION

Facility Type: Industrial – CAFO
SIC Code(s): #0213
NAICS Code(s): 112210
Application Date: 07/21/2021
Expiration Date: 02/28/2022
Last Inspection: 09/10/2021

FACILITY DESCRIPTION:

No discharge Class IB Concentrated Animal Feeding Operation

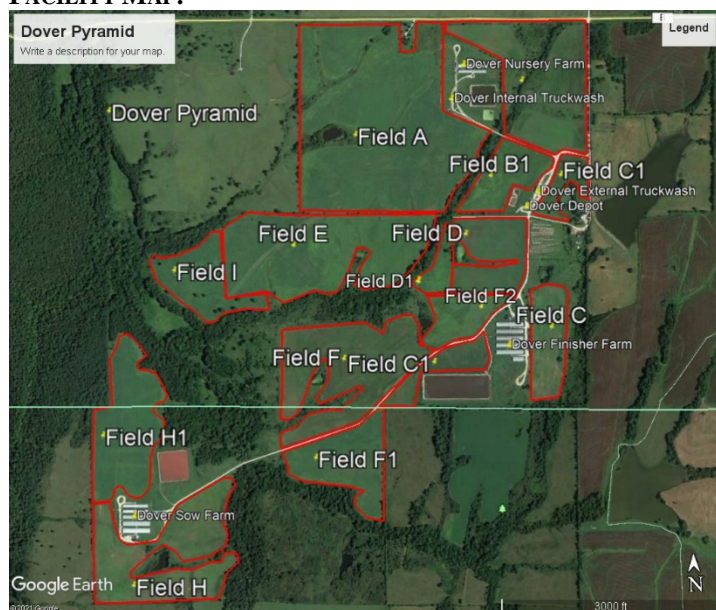
The charter number for the continuing authority for this facility is FL0035321; this number was verified by the permit writer to be associated with the facility and precisely matches the continuing authority reported by the facility.

In accordance with 40 CFR 122.21(f)(6), the Department evaluated/the permittee reported other permits currently held by this facility. This facility does not have any other permits.

PERMITTED FEATURES TABLE:

OUTFALL	AVERAGE FLOW	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#001-#004, #007	## MGD	0.069	Land Application	Animal wastewater
#005, #006	## MGD	0.0015	Land Application	Industrial wastewater

FACILITY MAP:



FACILITY PERFORMANCE HISTORY & COMMENTS:

The facility was last inspected on September 10th, 2021 and was found to be in compliance.

CONTINUING AUTHORITY:

Pursuant to 10 CSR 20-6.010(2)(A) and (E), the Department has received the appropriate continuing authority authorized signature from the facility. The Missouri Secretary of State continuing authority charter number for this facility is FL0035321; this number was verified by the permit writer to be associated with the facility and precisely matches the continuing authority reported by the facility. The charter number expires DATE and must be renewed prior to this permit's next renewal.

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

- ✓ Pursuant to 10 CSR 20-6.010(2)(D), the facility demonstrated the closest collection system was greater than 2000 feet from the property line per 10 CSR 20-6.010(2)9C)1.

PART II. RECEIVING WATERBODY INFORMATION

RECEIVING WATERBODY TABLE:

OUTFALL	WATERBODY NAME	CLAS S	WBI D	DESIGNATED USES	DISTANCE TO SEGMENT	12-DIGIT HUC
Outfall #001-#007	Tributary to Clear Creek	n/a	n/a	GEN		10290105-0101
	100K extent remaining stream	C	3960	GEN, HHP, IRR, LWW, SCR, WBC-B, WWH (ALP)		

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

WBID = Waterbody Identification: Missouri Use Designation Dataset per 10 CSR 20-7.031(1)(Q) and (S) as 100K Extant-Remaining Streams or newer; data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use.shp.zip; New C streams described on the dataset per 10 CSR 20-7.031(2)(A)3. as 100K Extent Remaining Streams.

10 CSR 20-7.031(1)(C)1.: **ALP** = Aquatic Life Protection (formerly AQL); current uses are defined to ensure the protection and propagation of fish shellfish and wildlife, 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 ALP effluent limitations in 10 CSR 20-7.031 Table A1-B3 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 supporting swimming uses and has public access;

WBC-B = whole body contact recreation not included in WBC-A;

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 and drinking of water;

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, includes aquifers per 10 CSR 20-7.031(5)

IND = industrial water supply

10 CSR 20-7.031(1)(C)8. to 11.: Wetlands (10 CSR 20-7.031 Tables A1-B3 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

20 CSR 20-7.031(4): GEN = general criteria; acute toxicity criteria applicable to all waters even those lacking designated uses

n/a = not applicable

WATERS OF THE STATE DESIGNATIONS:

Waters of the state are divided into seven categories per 10 CSR 20-7.015(1)(B)1 through 7. The applicable water of the state category is listed below. Missouri's technology-based effluent regulations are found in [10 CSR 20-7.015] and are implemented in 10 CSR 20-7.015(2) through (8). When implementing technology regulations, considerations are made for the facility type, discharge type, and category of waters of the state. Effluent limitations may not be applicable to certain waters of the state, facility type, or discharge type. In these cases, effluent limitations may be based on a best professional judgment evaluation. The best professional judgment evaluation will take site specific conditions into consideration; including facility type, the receiving water body classification, and type of discharge. Stormwater discharges and land application sites are not directly subject to limitations found in 10 CSR 20-7.015, but may be subject to limitations determined by the best professional judgment evaluation. Effluent limitation derivations are discussed in PART IV: EFFLUENTS LIMITS DETERMINATIONS.

✓ All other waters; identified at 10 CSR 20-7.015(B)7 and 10 CSR 20-7.015(8)

EXISTING WATER QUALITY & IMPAIRMENTS:

The receiving waterbody(s) segment(s), upstream, and downstream confluence water quality was reviewed. No relevant water quality data was available. The USGS <https://waterdata.usgs.gov/nwis/sw> or the Department's quality data database was reviewed.

https://apps5.mo.gov/mocwis_public/wqa/waterbodySearch.do and <https://apps5.mo.gov/wqa/> The Department's quality data database was reviewed. https://apps5.mo.gov/mocwis_public/wqa/waterbodySearch.do and <https://apps5.mo.gov/wqa/> Impaired waterbodies which may be impacted by discharges from this facility were determined. Impairments include waterbodies on the 305(b) or 303(d) list and those waterbodies or watersheds under a TMDL. <https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/tmdls> Section 303(d) of the federal Clean Water Act requires each state identify waters not meeting water quality standards and for which adequate water pollution controls have not been required.

<https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/impaired-waters> Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of impaired waters not addressed by normal water pollution control programs. A TMDL is a calculation of the maximum amount of a given pollutant a water body can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the §303(d) list, then a watershed management plan or TMDL for that watershed may be developed. The TMDL shall include the WLA calculation.

✓ The permit writer has noted no upstream or downstream impairments near this facility.

WATERBODY MONITORING REQUIREMENTS:

Previous permits for the Murphy Family Ventures, LLC Dover Pyramid have required in-stream monitoring. This monitoring was used to help determine if the operation of the CAFO and land application of manure had any impacts on water quality. Technical staff from the Permits and Water Quality Monitoring Sections has reviewed the results of the past water quality monitoring data and generally conclude there is no indication that a reasonable potential exists for the Murphy Family Ventures, LLC Dover Pyramid to violate water quality standards when it is managed and operated in accordance with permit requirements. As a result the stream outfalls #010 and #011 and associated monitoring requirements were removed with this permit renewal.

✓ No waterbody monitoring requirements are recommended at this time.

PART III. RATIONALE AND DERIVATION OF 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.

ANTIBACKSLIDING:

Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(l)] require a reissued permit to be as stringent as the previous permit with some exceptions. Backsliding (a less stringent permit limitation) is only allowed under certain conditions.

- ✓ Limitations in this operating permit for the reissuance conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
 - ✓ The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
 - The previous permit special conditions contained a specific set of prohibitions related to general criteria (GC) found in 10 CSR 20-7.031(4); however, there was no determination as to whether the discharges have reasonable potential to cause or contribute to excursion of those general water quality criteria in the previous permit. This permit assesses each general criteria as listed in the previous permit's special conditions. Federal regulations 40 CFR 122.44(d)(1)(iii) requires instances where reasonable potential (RP) to cause or contribute to an exceedance of a water quality standard exists, a numeric limitation must be included in the permit. Rather than conducting the appropriate RP determination, the previous permit simply placed the prohibitions in the permit. These conditions were removed from the permit. Appropriate reasonable potential determinations were conducted for each general criterion listed in 10 CSR 20-7.031(4)(A) through (I) and effluent limitations were placed in the permit for those general criteria where it was determined the discharge had reasonable potential to cause or contribute to excursions of the general criteria. Specific effluent limitations were not included for those general criteria where it was determined the discharges will not cause or contribute to excursions of general criteria. Removal of the prohibitions does not reduce the protections of the permit or allow for impairment of the receiving stream. The permit maintains sufficient effluent limitations, monitoring requirements and best management practices to protect water quality while maintaining permit conditions applicable to permittee disclosures and in accordance with 10 CSR 20-7.031(4) where no water contaminant by itself or in combination with other substances shall prevent the water of the state from meeting the following conditions:
- (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.
 - For all outfalls, there is no RP for unsightly or harmful bottom deposits preventing full maintenance of beneficial the permit does not allow manure, litter, or process wastewater to be discharged from the facility.
 - Solid waste regulations found at 10 CSR 80-3.010(7)(B) require operation of the landfill in such a manner as to prevent flow onto the active portion of the sanitary landfill during peak discharge from at least a 25 year storm. In addition, 10 CSR 80-3.010(7)(C) requires water which has contacted solid waste at the working face to be treated as leachate and sent to the leachate disposal system.
- (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 oil in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because the permit does not allow manure, litter, or process wastewater to be discharged from the facility.
 - For all outfalls, there is no RP for scum and floating debris in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates scum and floating debris will be present in sufficient amounts to impair beneficial uses.
 - Solid waste regulations found at 10 CSR 80-3.010(7)(B) require operation of the landfill in such a manner as to prevent flow onto the active portion of the sanitary landfill during peak discharge from at least a 25 year storm. In addition, 10 CSR 80-3.010(7)(C) requires water which has contacted solid waste at the working face to be treated as leachate and sent to the leachate disposal system. These regulations mean no RP for solid waste to contact effluent which is discharged to the receiving stream.
- (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 unsightly color or turbidity in sufficient amounts preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates unsightly color or turbidity will be present in sufficient amounts to impair beneficial uses.
 - For all outfalls, there is no RP for offensive odor in sufficient amounts preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates offensive odor will be present in sufficient amounts to impair beneficial uses.
 - Solid waste regulations found at 10 CSR 80-3.010(7)(B) require operation of the landfill in such a manner as to prevent flow onto the active portion of the sanitary landfill during peak discharge from at least a 25 year storm. In addition, 10 CSR 80-3.010(7)(C) requires water which has contacted solid waste at the working face to be

- treated as leachate and sent to the leachate disposal system. These regulations mean no RP for solid waste to contact effluent which is discharged to the receiving stream.
- (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 toxicity to human, animal or aquatic life because the permit does not allow manure, litter, or process wastewater to be discharged from the facility
- (E) Waters shall maintain a level of water quality at their confluences to downstream waters that provides for the attainment and maintenance of the water quality standards of those downstream waters, including waters of another state.
- This criteria was not assessed for antibacksliding as this is a new requirement, approved by the EPA on July 30, 2019.
- (F) There shall be no significant human health hazard from incidental contact with the water.
- This criterion is very similar to (D) above. See Part IV, Effluent Limits Derivation below.
- (G) There shall be no acute toxicity to livestock or wildlife watering.
- This criterion is very similar to (D) above. See Part IV, Effluent Limits Derivation below.
- (H) 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 physical changes impairing the natural biological community because nothing disclosed by the permittee indicates this is occurring.
 - It has been established any chemical changes are covered by the specific numeric effluent limitations established in the permit.
 - For all outfalls, there is no RP for hydrologic changes impairing the natural biological community because nothing disclosed by the permittee indicates this is occurring.
- (I) 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 which has reasonable potential to cause or contribute to the materials listed above being discharged through any outfall.
 - There is no reasonable potential for the wastes listed above to be found in the receiving stream at any of the outfalls at this solid waste facility. 10 CSR 80-3.010(16)(A)-(C) require litter and solid wastes be controlled on the site for aesthetic purposes, preventing it from entering the stream.
 - Solid waste regulations found at 10 CSR 80-3.010(7)(B) require operation of the sanitary landfill in such a manner as to effectively manage stormwater during peak discharge from at least a 25 year storm. In addition, 10 CSR 80-3.010(7)(C) requires water which has come in contact with solid waste be minimized by daily operational practices. Water which passes through waste shall be managed per an approved leachate management plan.

ANTIDEGRADATION REVIEW:

Process water discharges with new, altered, or expanding flows, the Department is to document, by means of antidegradation review, if the use of a water body's available assimilative capacity is justified. In accordance with Missouri's water quality regulations for antidegradation [10 CSR 20-7.031(3)], degradation may be justified by documenting the socio-economic importance of a discharge after determining the necessity of the discharge. Facilities must submit the antidegradation review request to the Department prior to establishing, altering, or expanding discharges. See <http://dnr.mo.gov/env/wpp/permits/antideg-implementation.htm> Per [10 CSR 20-7.015(4)(A)], new discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream, or connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

- ✓ Not applicable; the facility has not submitted information proposing expanded or altered process water discharge; no further degradation proposed therefore no further review necessary.

BEST MANAGEMENT PRACTICES:

Minimum site-wide best management practices are established in this permit to ensure all permittees are managing their sites equally to protect waters of the state from certain activities which could cause negative effects in receiving water bodies. While not all sites require a SWPPP because the SIC codes are specifically exempted in 40 CFR 122.26(b)(14), these best management practices are not specifically included for stormwater purposes. These practices are minimum requirements for all industrial sites to protect waters of the state. If the minimum best management practices are not followed, the facility may violate general criteria [10 CSR 20-7.031(4)]. Statutes are applicable to all permitted facilities in the state, therefore pollutants cannot be released unless in accordance with RSMo 644.011 and 644.016 (17) RSMo.

CLOSURE:

To properly decontaminate and close a wastewater basin, the facility must draft a complete closure plan, and include the Closure Request Form #2512 <https://dnr.mo.gov/document-search/facility-closure-request-form-mo-780-2512> The publication, Wastewater

Treatment Plant Closure - PUB2568 found at <https://dnr.mo.gov/print/document-search/pub2568> may be helpful to develop the closure plan. The regional office will then approve the closure plan, and provide authorization to begin the work. The regional office contact information can be found here: <https://dnr.mo.gov/about-us/division-environmental-quality/regional-office>

COST ANALYSIS FOR COMPLIANCE (CAFCOM):

Pursuant to Section 644.145, RSMo, when incorporating a new requirement for discharges from publicly owned facilities, or when enforcing provisions of this chapter or the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., pertaining to any portion of a publicly owned facility, the Department of Natural Resources shall make a “finding of affordability” on the costs to be incurred and the impact of any rate changes on ratepayers upon which to base such permits and decisions, to the extent allowable under this chapter and the Federal Water Pollution Control Act. This process is completed through a cost analysis for compliance. Permits not including new requirements may be deemed affordable.

- ✓ The Department is not required to complete a cost analysis for compliance because the facility is not publicly owned.

CHANGES IN DISCHARGES OF TOXIC POLLUTANT:

This special condition reiterates the federal rules found in 40 CFR 122.44(f) for technology treatments and 122.42(a)(1) for all other toxic substances. In these rules, the facility is required to report changes in amounts of toxic substances discharged. Toxic substances are defined in 40 CFR 122.2 as “...any pollutant listed as toxic under section 307(a)(1)” or, in the case of “sludge use or disposal practices,” any pollutant identified in regulations implementing section 405(d) of the CWA.” Section 307 of the clean water act then refers to those parameters listed in 40 CFR 401.15 and any other toxic parameter the Department determines is applicable for reporting under these rules in the permit. The facility should also consider any other toxic pollutant in the discharge as reportable under this condition and must report all increases to the Department as soon as discovered in the effluent. The Department may open the permit to implement any required effluent limits pursuant to CWA §402(k) where sufficient data was not supplied within the application but was supplied at a later date by either the permittee or other resource determined to be representative of the discharge, such as sampling by Department personnel.

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.

ELECTRONIC DISCHARGE MONITORING REPORT (EDMR) SUBMISSION SYSTEM:

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

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

Per 40 CFR 127.15 and 127.24, permitted facilities may request a temporary waiver for up to 5 years or a permanent waiver from electronic reporting from the Department. To obtain an electronic reporting waiver, a facility must first submit an eDMR Waiver Request form available on the Department’s web page. A request must be made for each operating permit. An approved waiver is not transferable. The Department must review and notify the facility within 120 calendar days of receipt if the waiver request has been approved or rejected [40 CFR 124.27(a)]. During the Department review period as well as after a waiver is granted, the facility must continue submitting a hard-copy of any reports required by their permit. The Department will enter data submitted in hard-copy from those facilities allowed to do so, and electronically submit the data to the EPA on behalf of the facility.

- ✓ This facility has not been granted a waiver, nor would this facility qualify for a waiver.

EMERGENCY DISCHARGE:

For non-discharging permits, some permits may allow a small amount of wastewater discharge under very specific circumstances.

- ✓ Not applicable; this permit does not contain conditions allowing emergency discharges.

FEDERAL EFFLUENT LIMITATION GUIDELINE:

Effluent Limitation Guidelines, or ELGs, are found at 40 CFR 400-499. <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-N> These are limitations established by the EPA based on the SIC code and the type of work a facility is conducting. Most ELGs are for process wastewater and some address stormwater. Effluent guidelines are not always established for every pollutant present in a point source discharge. In many instances, EPA promulgates effluent guidelines for an indicator pollutant. Industrial facilities complying with the effluent guidelines for the indicator pollutant will also control other pollutants (e.g. pollutants with a similar chemical structure). For example, EPA may choose to regulate only one of several metals present in the effluent from an industrial category, and compliance with the effluent guidelines will ensure similar metals present in the discharge are adequately controlled. All are technology based limitations which must be met by the applicable facility at all times. Should Reasonable Potential be established for any particular parameter, and water-quality derived effluent limits are more protective of the receiving water's quality, the WQS will be used as the limiting factor in accordance with 40 CFR 122.44(d) and 10 CSR 20-7.015(9)(A).

GENERAL CRITERIA CONSIDERATIONS:

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants determined to cause, have reasonable potential to cause, or to contribute to, an excursion above any water quality standard, including narrative water quality criteria. In order to comply with this regulation, the permit writer has completed a reasonable potential determination on whether discharges have reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). In instances where reasonable potential exists, the permit includes limitations within the permit to address the reasonable potential. In discharges where reasonable potential does not exist, the permit may include monitoring to later determine the discharge's potential to impact the narrative criteria. Additionally, §644.076.1, RSMo as well as Section D – Administrative Requirements of Standard Conditions Part I of this permit state it shall be unlawful for any person to cause or allow any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule, or regulation promulgated by the commission. See Part IV for specific determinations.

GROUNDWATER MONITORING:

Groundwater is a water of the state according to 10 CSR 20-2.010(82), and is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

- ✓ This facility is not required to monitor groundwater for the water protection program.

LAND APPLICATION:

Land application of manure, litter and process wastewater is performed by facilities to maintain storage volume to operate as no-discharge. Requirements for these types of operations are found in 10 CSR 20-6.300 and 40 CFR part 1223 and 412; authority to regulate these activities is from RSMo 644.026.

- ✓ Applicable, the facility has developed a NMP in accordance with 10 CSR20-6.300(3)(B)2 complies with 10 CSR 20-6.300(5). These requirements incorporated into this permit pursuant to 10 CSR 20-6.300 and 40 CFR 122 and 412 are minimum operational controls for no-discharge land application systems intended to prevent discharges due to over application; protect soils, vegetation, surface water, groundwater, and public health.

LAND DISTURBANCE:

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

- ✓ Not applicable; this permit does not provide coverage for land disturbance activities. The facility may obtain a separate land disturbance permit (MORA) online at <https://dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm>; MORA permits do not cover disturbance of contaminated soils, however, site specific permits such as this one can be modified to include appropriate controls for land disturbance of contaminated soils by adding site-specific BMP requirements and additional outfalls.

MAJOR WATER USER:

Any surface or groundwater user with a water source and the equipment necessary to withdraw or divert 100,000 gallons (or 70 gallons per minute) or more per day combined from all sources from any stream, river, lake, well, spring, or other water source is considered a major water user in Missouri. All major water users are required by law to register water use annually (Missouri Revised Statutes Chapter 256.400 Geology, Water Resources and Geodetic Survey Section). <https://dnr.mo.gov/pubs/pub2337.htm>

- ✓ Not applicable; this permittee cannot withdraw water from the state in excess of 70 gpm/0.1 MGD.

MODIFICATION REQUESTS:

Facilities have the option to request a permit modification from the Department at any time under RSMo 644.051.9. Requests must be submitted to the Water Protection Program with the appropriate forms and fees paid per 10 CSR 20-6.011. It is recommended facilities contact the permit writer early so the correct forms and fees are submitted, and the modification request can be completed in a timely fashion. Minor modifications, found in 40 CFR 122.63, are processed without the need for a public comment period.

Major modifications, those requests not explicitly fitting under 40 CFR 122.63, do require a public notice period. Modifications to permits should be completed when: a new pollutant is found in the discharge; operational or functional changes occur which affect the technology, function, or outcome of treatment; the facility desires alternate numeric benchmarks; or other changes are needed to the permit.

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

NUTRIENT MONITORING:

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

- ✓ This is no-discharge permit therefore not subject to provisions found in 10 CSR 20-7.015 per 10 CSR 20-7.015(1)(C).

OIL/WATER SEPARATORS:

Oil water separator (OWS) tank systems are frequently found at industrial sites where process water and stormwater may contain oils and greases, oily wastewaters, or other immiscible liquids requiring separation. Food industry discharges typically require pretreatment prior to discharge to municipally owned treatment works. Per 10 CSR 26-2.010(2)(B), all oil water separator tanks must be operated according to manufacturer's specifications and authorized in NPDES permits per 10 CSR 26-2.010(2) or may be regulated as a petroleum tank.

- ✓ Not applicable; the permittee has not disclosed the use of any oil water separators they wish to include under the NPDES permit at this facility and therefore oil water separator tanks are not authorized by this permit.

OPERATOR CERTIFICATION REQUIREMENTS:

Operators or supervisors of CAFO waste management systems shall be certified in accordance with 10 CSR 20-14.010.

- ✓ Applicable, this facility currently requires a CAFO supervisor with an A Certification Level or a CAFO operator with a B Certification Level.

PERMIT SHIELD:

The permit shield provision of the Clean Water Act (Section 402(k)) and Missouri Clean Water Law (644.051.16 RSMo) provides that when a permit holder is in compliance with its NPDES permit or MSOP, it is effectively in compliance with certain sections of the Clean Water Act, and equivalent sections of the Missouri Clean Water Law. In general, the permit shield is a legal defense against certain enforcement actions, but is only available when the permittee is in compliance with its permit and satisfies other specific conditions, including having completely disclosed all discharges and all facility processes and activities to the Department at time of application. It is the permittee's responsibility to ensure that all potential pollutants, waste streams, discharges, and activities, as well as wastewater land application, storage, and treatment areas, are all fully disclosed to the Department at the time of application or during the draft permit review process. Subsequent requests for authorization to discharge additional pollutants, expanded or newly disclosed flows, or for authorization for previously unpermitted and undisclosed activities or discharges, will likely require an official permit modification, including another public participation process.

PRETREATMENT:

This permit does not regulate pretreatment requirements for facilities discharging to an accepting permitted wastewater treatment facility. If applicable, the receiving entity (the publicly owned treatment works - POTW) is to ensure compliance with any effluent limitation guidelines for pretreatment listed in 40 CFR Subchapter N per 10 CSR 20-6.100. Pretreatment regulations per RSMo 644.016 are limitations on the introduction of pollutants or water contaminants into publicly owned treatment works or facilities.

- ✓ Not applicable, this facility does not discharge wastewater to a POTW.

REASONABLE POTENTIAL (RP):

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants which are (or may be) discharged at a level causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times; however, acute toxicity criteria may be exceeded by permit in zones of initial dilution, and chronic toxicity criteria may be exceeded by permit in mixing zones. If the permit writer determines any given pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for the pollutant per 40 CFR Part 122.44(d)(1)(iii) and the most stringent limits per 10 CSR 20-7.031(9)(A). Permit writers may use mathematical reasonable potential analysis (RPA) using the Technical Support Document for Water Quality Based Toxics Control (TSD) methods (EPA/505/2-90-001) as found in Section 3.3.2, or may also use reasonable potential determinations (RPD) as provided in Sections 3.1.2, 3.1.3, and 3.2 of the TSD.

✓ Not applicable; a mathematical RPA was not conducted for this facility because no discharge is allowed.

REGIONAL OFFICES (ROS):

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

RENEWAL REQUIREMENTS:

The renewal special condition permit requirement is designed to guide the facility to prepare and include all relevant and applicable information in accordance with 10 CSR 20-6.010(7)(A)-(C), and if applicable, federal regulations. The special condition may not include all requirements and requests for additional information may be made at the time of permit renewal under 644.051.13(5) RSMo and 40 CFR 122.21(h). Prior to submittal, the facility must review the entire submittal to confirm all required information and data is provided; it is the facility's responsibility to discern if additional information is required. Failure to fully disclose applicable information with the application or application addendums may result in a permit revocation per 10 CSR 20-6.010(8)(A) and may result in the forfeiture of permit shield protection authorized in 644.051.16 RSMo. Forms are located at:

<https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/wastewater>

SAMPLING FREQUENCY AND TYPE JUSTIFICATION:

Sampling is required if an emergency discharge occurs; this is the same as the previous permit.

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, effluent limits, 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. SOC's are allowed under 40 CFR 122.47 providing certain conditions are met. 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 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 in developing SOC's, and to attain a greater level of consistency, the Department issued a policy on development of SOC's on October 25, 2012. The policy provides guidance to permit writers on standard time frames for schedules for common activities, and guidance on factors to modify the length of the schedule.

✓ Not applicable; this permit does not contain a SOC.

SPILLS, OVERFLOWS, AND OTHER UNAUTHORIZED DISCHARGE REPORTING:

Per 260.505 RSMo, 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.

<https://revisor.mo.gov/main/OneSection.aspx?section=260.500&bid=13989&hl>

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

SLUDGE – INDUSTRIAL:

Industrial sludge is solid, semi-solid, or liquid residue generated during the treatment of industrial process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and a material derived from industrial sludge.

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

STANDARD CONDITIONS:

The standard conditions Part I attached to this permit incorporate all sections of 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions should be reviewed by the permittee to ascertain compliance with this permit, state regulations, state statutes, federal regulations, and the Clean Water Act. Standard Conditions Part III, if attached to this permit, incorporate all requirements dealing with domestic sludges.

STORMWATER PERMITTING: LIMITATIONS AND BENCHMARKS:

Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater discharges. The *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater-only outfalls will generally only contain a maximum daily limit (MDL), benchmark, or monitoring requirement as dictated by site specific conditions, the BMPs in place, past performance of the facility, and the receiving water's current quality.

Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute Water Quality Standards (WQSs) are based on one hour of exposure, and must be protected at all times. Therefore, industrial stormwater facilities with toxic contaminants present in the stormwater may have the potential to cause a violation of acute WQSs if toxic contaminants occur in sufficient amounts. In this instance, the permit writer may apply daily maximum limitations.

Conversely, it is unlikely for rainfall to cause a discharge for four continuous days from a facility; if this does occur however, the receiving stream will also likely sustain a significant amount of flow providing dilution. Most chronic WQSs are based on a four-day exposure with some exceptions. Under this scenario, most industrial stormwater facilities have limited potential to cause a violation of chronic water quality standards in the receiving stream.

A standard mass-balance equation cannot be calculated for stormwater because stormwater flow and flow in the receiving stream cannot be determined for conditions on any given day or storm event. The amount of stormwater discharged from the facility will vary based on current and previous rainfall, soil saturation, humidity, detention time, BMPs, surface permeability, etc. Flow in the receiving stream will vary based on climatic conditions, size of watershed, area of surfaces with reduced permeability (houses, parking lots, and the like) in the watershed, hydrogeology, topography, etc. Decreased permeability may increase the stream flow dramatically over a short period of time (flash).

Numeric benchmark values are based on site specific requirements taking in to account a number of factors but cannot be applied to any process water discharges. First, the technology in place at the site to control pollutant discharges in stormwater is evaluated. The permit writer also evaluates other similar permits for similar activities. A review of the guidance forming the basis of Environmental Protection Agency's (EPA's) *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* (MSGP) may also occur. Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard may also be used. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States. If a facility has not disclosed BMPs applicable to the pollutants for the site, the permittee may not be eligible for benchmarks.

40 CFR 122.44(b)(1) requires the permit implement the most stringent limitations for each discharge, including industrially exposed stormwater; and 40 CFR 122.44(d)(1)(i) and (iii) requires the permit to include water-quality based effluent limitations where reasonable potential has been found. However, because of the non-continuous nature of stormwater discharges, staff are unable to perform statistical Reasonable Potential Analysis (RPA) under most stormwater discharge scenarios. Reasonable potential determinations (RPDs; see REASONABLE POTENTIAL above) using best professional judgment are performed.

Benchmarks require the facility to monitor, and if necessary, replace and update stormwater control measures. Benchmark concentrations are not effluent limitations. A benchmark exceedance, therefore, is not a permit violation; however, failure to take corrective action is a violation of the permit. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective actions may be necessary to comply with the conditions of the permit.

BMP inspections typically occur more frequently than sampling. Sampling frequencies are based on the facility's ability to comply with the benchmarks and the requirements of the permit. Inspections should occur after large rain events and any other time an issue is noted; sampling after a benchmark exceedance may need to occur to show the corrective action taken was meaningful.

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer, if there is no RP for water quality excursions.

✓ Not applicable; this facility's SIC code does not require stormwater monitoring per 40 CFR 122.26(b)(14).

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

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

- ✓ Application fields are identified in 10 CSR 20-6.200 but when the facility follows all permit conditions, a SWPPP is not required. The NMP is a requirement utilized in CAFO permits in lieu of a SWPPP. The NMP identifies setbacks, action plans, and conservation practices instead of specific BMPs typically found in the SWPPP.

SUFFICIENTLY SENSITIVE ANALYTICAL METHODS:

Please review Standard Conditions Part 1, section A, number 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 and/or 40 CFR 136 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is "sufficiently sensitive" when; 1) the method quantifies the pollutant below the level of the applicable water quality criterion or; 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015 and or 40 CFR 136. These methods are also required for parameters listed as monitoring only, as the data collected may be used to determine if numeric limitations need to be established. A permittee is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive. 40 CFR 136 lists the approved methods accepted by the Department. Tables A1-B3 at 10 CSR 20-7.031 shows water quality standards.

UNDERGROUND INJECTION CONTROL (UIC):

The UIC program for all classes of wells in the State of Missouri is administered by the Missouri Department of Natural Resources and approved by EPA pursuant to §§1422 and 1425 of the Safe Drinking Water Act (SDWA) and 40 CFR 147 Subpart AA. Injection wells are classified based on the liquids which are being injected. Class I wells are hazardous waste wells which are banned by 577.155 RSMo; Class II wells are established for oil and natural gas production; Class III wells are used to inject fluids to extract minerals; Class IV wells are also banned by Missouri in 577.155 RSMo; Class V wells are shallow injection wells; some examples are heat pump wells and groundwater remediation wells. Domestic wastewater being disposed of sub-surface is also considered a Class V well. In accordance with 40 CFR 144.82, construction, operation, maintenance, conversion, plugging, or closure of injection wells shall not cause movement of fluids containing any contaminant into Underground Sources of Drinking Water (USDW) if the presence of any contaminant may cause a violation of any drinking water standards or groundwater standards under 10 CSR 20-7.031, or other health based standards, or may otherwise adversely affect human health. If the director finds the injection activity may endanger USDWs, the Department may require closure of the injection wells, or other actions listed in 40 CFR 144.12(c), (d), or (e). In accordance with 40 CFR 144.26, the facility shall submit a Class V Well Inventory Form for each active or new underground injection well drilled, or when the status of a well changes, to the Missouri Department of Natural Resources, Geological Survey Program, P.O. Box 250, Rolla, Missouri 65402. The Class V Well Inventory Form can be requested from the Geological Survey Program or can be found at the following web address: <https://dnr.mo.gov/document-search/class-v-well-inventory-form-mo-780-1774> Single family residential septic systems and non-residential septic systems used solely for sanitary waste and having the capacity to serve fewer than 20 persons a day are excluded from the UIC requirements (40 CFR 144.81(9)). The Department implements additional requirements for these types of operations pursuant to 10 CSR 20-6.015(4)(A)1 which instructs the Department to develop permit conditions containing limitations, monitoring, reporting, and other requirements to protect soils, crops, surface waters, groundwater, public health, and the environment.

- ✓ Not applicable; the permittee has not submitted materials indicating the facility will be performing UI at this site.

VARIANCE:

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 permit is not drafted under premise of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the WLA is the amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs) are reviewed. If one limit does not provide adequate protection for the receiving water, then the other must be used per 10 CSR 20-7.015(9)(A).

- ✓ Not applicable; wasteload allocations were not calculated as this is a non-discharging permit.

WASTELOAD ALLOCATION (WLA) MODELING:

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

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

WATER QUALITY STANDARD REVISION:

In accordance with section 644.058, RSMo, the Department is required to utilize an evaluation of the environmental and economic impacts of modifications to water quality standards of twenty-five percent or more when making individual site-specific permit decisions.

- ✓ This operating permit does not contain requirements for a permit limit based on a water quality standard which has changed twenty-five percent or more since the previous operating permit.

PART IV. EFFLUENT LIMITS DETERMINATIONS

EFFLUENT LIMITATIONS TABLE – Outfalls #001-#006– Emergency Discharge

Discharge from these outfalls is only authorized when a wet weather event causes an overflow of manure, litter, or process wastewater AND the lagoons have been properly designed, constructed, operated and maintained, in accordance with Special Condition 1(e).

PHYSICAL				
Flow	MGD	*	once/event ‡	event total
Duration	Hours	*	once/event ‡	event total
CONVENTIONAL				
Biological Oxygen Demand, 5 Day	mg/L	*	once/event ‡	grab
Dissolved Oxygen (Minimum ◇)	mg/L	*	once/event ‡	grab
pH †	SU	*	once/event ‡	grab
Total Suspended Solids	mg/L	*	once/event ‡	grab
NUTRIENTS				
Ammonia as N	mg/L	*	once/event ‡	grab
MONITORING REPORTS SHALL BE SUBMITTED BY THE 28 TH DAY OF THE MONTH FOLLOWING DISCHARGE CESSATION.				

- * Monitoring and reporting requirement only.
- ◇ The facility shall report the minimum value obtained if more than one sample was taken.
- † The facility shall report the range (minimum to maximum values) if more than one sample is obtained.
- ‡ Once per event means the facility must take a sample at least once per discharge event. If there was no discharge, a report is not necessary; if a discharge occurred, the facility must report all results of sampling into the eDMR system by the 28th day of the month following the completion of the discharge.

DERIVATION AND DISCUSSION OF LIMITS:

Flow

Monitoring requirement only. In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to ensure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD), monitoring once per discharge continued from previous permit.

Duration

Monitoring requirement only to determine the potential negative physical and chemical changes with general criteria at 10 CSR 20-7.031(4) and the Clean Water Act's (CWA) goal of 100% fishable and swimmable rivers and streams.

Biochemical Oxygen Demand - 5 Day (BOD₅)

Monitoring requirement only. Conventional pollutant for discharges of animal waste.

Dissolved Oxygen

Monitoring requirement only; monitoring for dissolved oxygen is included to determine whether reasonable potential exists to exceed water quality standards. [10 CSR 20-7.031 Table A1]

pH

Monitoring requirement only. pH is a fundamental water quality indicator. Additionally, metals leachability and ammonia availability in wastewater is dependent on pH. Limitations in this permit will protect against aquatic organism toxicity, downstream water quality issues, human health hazard contact, and negative physical changes in accordance with the general criteria at 10 CSR 20-7.031(4) and the Clean Water Act's (CWA) goal of 100% fishable and swimmable rivers and streams.

Total Suspended Solids

Monitoring requirement only. There is no numeric water quality standard for TSS however, high suspended solids in animal waste discharges can negatively impact aquatic life habitat.

Ammonia as N

Monitoring requirement only. Nitrogen is expected to be present in this facilities discharge therefore once per discharge monitoring is required.

PART V. ADMINISTRATIVE REQUIREMENTS

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

PERMIT SYNCHRONIZATION:

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

✓ This permit will maintain synchronization by expiring the end of the 2nd quarter, 2022.

PUBLIC NOTICE:

The Department shall give public notice a draft permit has been prepared and its issuance is pending.

<http://dnr.mo.gov/env/wpp/permits/pn/index.html> Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in or with 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 started February 10, 2022 and ended March 14, 2022. No comments were received.

DATE OF FACT SHEET: (12/27/2021)

COMPLETED BY:

KAITLIN KEMPKER, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
(573) 751-1398
Kaitlin.kempker@dnr.mo.gov



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

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

Part I – General Conditions

Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
2. **Monitoring Requirements.**
 - a. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.
 - b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.
3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
4. **Test Procedures.** The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is “sufficiently sensitive” when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.
5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee’s sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

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

Section B – Reporting Requirements

1. **Planned Changes.**
 - a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42;
 - iii. The alteration or addition results in a significant change in the permittee’s sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
 - iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.
2. **Non-compliance Reporting.**
 - a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



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- b. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - ii. Any upset which exceeds any effluent limitation in the permit.
 - iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.
 - c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.
3. **Anticipated Noncompliance.** The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.
 4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.
 5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
 6. **Other Information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
 7. **Discharge Monitoring Reports.**
 - a. Monitoring results shall be reported at the intervals specified in the permit.
 - b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
 - c. Monitoring results shall be reported to the Department no later than the 28th day of the month following the end of the reporting period.
- b. Notice.
 - i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
 - ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
 - c. Prohibition of bypass.
 - i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 3. The permittee submitted notices as required under paragraph 2. b. of this section.
 - ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.
3. **Upset Requirements.**
 - a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
 - b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated; and
 - iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
 - iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
 - c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

Section C – Bypass/Upset Requirements

1. **Definitions.**
 - a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
 - b. *Severe Property Damage*: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 - c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
2. **Bypass Requirements.**
 - a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.

Section D – Administrative Requirements

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



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- imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
- d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.
2. **Duty to Reapply.**
- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
- c. A permittee with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
5. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
6. **Permit Actions.**
- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
- i. Violations of any terms or conditions of this permit or the law;
- ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
- iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- iv. Any reason set forth in the Law or Regulations.
- b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. **Permit Transfer.**
- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
- b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
- c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.
12. **Closure of Treatment Facilities.**
 - a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
 - b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.
13. **Signatory Requirement.**
 - a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
 - b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
 - c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.
14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

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MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

**FORM W - CONCENTRATED ANIMAL FEEDING OPERATION
(CAFO) OPERATING PERMIT APPLICATION**

FOR OFFICE USE ONLY

JETPAY CONFIRMATION / CHECK NUMBER:

DATE RECEIVED

FEE SUBMITTED

Complete all applicable sections. Instructions for completing the form are located at the end of the form. Sign, date and return the form and all requested documents along with a check for the appropriate permit fee to the Missouri Department of Natural Resources. Make a copy of this completed form and keep it with your nutrient management plan.

PART 1 - PERMIT OWNERSHIP AND CONTACT INFORMATION

1.1 OPERATION NAME Murphy Family Ventures, LLC Dover Pyramid	CURRENT PERMIT NUMBER MO- 0131059	COUNTY Vernon/Barton
PHYSICAL ADDRESS Hwy B at S. 2425 Rd.	LEGAL DESCRIPTION Sec.: 34 Twn.: 34N Rng.: 30w	TELEPHONE NUMBER WITH AREA CODE 417-667-7337
CITY Sheldon	STATE Missouri	ZIP CODE 64784
1.2 OWNER (PROVIDE LEGAL NAME) DM Farms of Rose Hill, LLC	EMAIL ADDRESS NA	
MAILING ADDRESS 1801 W. Austin Suite F, PO Box 566		TELEPHONE NUMBER WITH AREA CODE 417-667-7337
CITY Nevada	STATE Missouri	ZIP CODE 64772
1.3 CONTINUING AUTHORITY (IF DIFFERENT THAN THE OWNER) "Same as above"		
MAILING ADDRESS		TELEPHONE NUMBER WITH AREA CODE
CITY	STATE	ZIP CODE

PART 2 - PERMIT TYPE AND PERMIT ACTION

2.1 PERMIT TYPE

- ☒ NPDES Site Specific Permit
Request review of draft permit prior to public notice. ☒ Yes ☐ No
- ☐ NPDES General Permit (MOG01)
- ☐ State No-Discharge General Permit (MOGS1)

2.2 PERMIT ACTION*

☐ New Permit

Permit fees may be paid online by credit card or eCheck through a system called JetPay. Use the URL provided to make an online payment.

NPDES Site Specific Permit - <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/591/>

NPDES General Permit (MOG01) - <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/599/>

State No-Discharge General Permit (MOGS1) - <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/742/>

☒ Renewal

☐ Modification

Permit fees may be paid online by credit card or eCheck through a system called JetPay. Use the URL provided to access JetPay and make an online payment. Modification fee: <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/596/>

☐ Ownership Transfer

PREVIOUS OWNERS NAME

ADDRESS

CITY STATE ZIP CODE

SIGNATURE

DATE

*See instructions for additional requirements and documents for the request permit action.

Permit fees may be paid online by credit card or eCheck through a system called JetPay. Use the URL provided to access JetPay and make an online payment. Modification fee: <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/596/>

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PART 3 – DESIGN CAPACITY FOR MANURE STORAGE AND ANIMALS OF EACH CAFO FEATURE**3.1 STORAGE STRUCTURE TYPES, AMOUNT OF STORAGE, AND AMOUNT OF MANURE GENERATED PER YEAR.**

List All Manure Storage Structures at each CAFO Feature		Dry Manure Handling System		Wet Manure Handling System			
Permitted Feature	Storage Structure Type(s)	Design Dry Process Waste (tons/yr.)	Days of Storage	Total Storage Capacity (gal)	Design Wastewater per Year (gal./yr.)	Days of Storage	Design Flow MGD
001	See Attachment 3						
002							
003							
004							
005							

3.2 LIST EACH TYPE OF ANIMAL IN CONFINEMENT AND THE NUMBER OF EACH ANIMAL TYPE.

Permitted Feature	Animal Category #1	Animal Numbers	Animal Category #2	Animal Numbers	Animal Category #3	Animal Numbers
001	See Attachment 3					
002						
003						
004						
005						

PART 4 – OPERATIONAL INFORMATION**4.1 OPERATIONAL INFORMATION (SEE INSTRUCTIONS)**

SIC Code(s) 0213

CAFO Class Size 1B

☐ Yes ☒ No**4.2 Is this an export-only operation?**

Completing PARTS 5 - 11 will meet the requirements of a Nutrient Management Plan (NMP) for an export only operation.

PART 5 – MANURE STORAGE5.1 Do all manure storage structures have adequate storage, and operated and maintained as no discharge? ☒ Yes ☐ No**PART 6 – ANIMAL MORTALITY****6.1 PERMANENT METHOD OF DISPOSING OF ROUTINE ANIMAL MORTALITIES.**☐ Composting ☒ Rendering ☐ Send to a Landfill ☐ Incineration ☐ Other (Describe)

6.2 DESCRIBE METHOD OF MORTALITY HANDLING AND STORAGE THROUGH ALL PHASES TO FINAL DISPOSAL. (EXAMPLE: MORTALITIES ARE COMPOSTED WITHIN 24 HOURS OF DEATH AND FINISHED COMPOST PRODUCT IS STORED UNDER ROOF UNTIL LAND APPLIED). ALSO DESCRIBE THE TYPE OF COMPOST STRUCTURE USED, IF APPLICABLE.

See Section 3 of Nutrient Management Plan and Permit Requirements document.

PART 7 – DIVERSION OF CLEAN WATER7.1 Is clean stormwater diverted from the production area? ☒ Yes ☐ No

7.2 IF YES, DESCRIBE CONTROLS AND MEASURES USED TO DIVERT STORMWATER.

See Section 4 of Nutrient Management Plan and Permit Requirements document.

7.3 IF NO, DESCRIBE HOW CONTAMINATED STORMWATER IS CONTAINED AND INCLUDE THE STORAGE CAPACITY OF THE CONTAINMENT IF NOT PREVIOUSLY PROVIDED.

PART 8 – PREVENT DIRECT CONTACT OF ANIMALS WITH SURFACE WATERS8.1 Do the animals have access to waters of the state within the production area? ☐ Yes ☒ No

8.2 LIST MEASURES USED TO PREVENT CONFINED ANIMAL FROM HAVING DIRECT CONTACT WITH WATERS OF THE STATE.

See Section 4 of Nutrient Management Plan and Permit Requirements document.

PART 9 – CHEMICAL HANDLING9.1 Are chemicals and other contaminants handled, managed, stored, and disposed of in accordance with 10 CSR 20-6.300(5)(E)? ☒ Yes ☐ No**PART 10 – MANURE ANALYSIS TESTING**

10.1 LIST EACH TYPE OF MANURE SOURCE TO BE TESTED ANNUALLY (i.e., MANURE, LITTER, COMPOST, WASTE WATER.)

Swine Effluent Manure

10.2 DESCRIBE PROCEDURES FOR ENSURING EACH MANURE SOURCE IS TESTED ANNUALLY.

See Section 7 of Nutrient Management Plan and Permits Requirements document and attached NMTS.

PART 11 – RECORD KEEPING11.1 Are records of all inspections, manure transfers, discharges and land application maintained? ☒ Yes ☐ No

