

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION



## MISSOURI STATE OPERATING PERMIT

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

Permit No. MO-0122572

Owner Name: Opal Foods, LLC  
Owner Address: 1100 Blair Avenue; Neosho, MO 64850

Continuing Authority: Same as above  
Address: Same as above

Facility Name: Opal Foods, LLC Anderson  
Facility Address: 2950 Hwy. F, Anderson, MO 64831

Legal Description: See Page 2  
Latitude/Longitude: See Page 2

Receiving Stream: See Page 2  
First Classified Stream and ID: See Page 2  
USGS Basin & Sub-watershed No.: See Page 2

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

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

### FACILITY DESCRIPTION

Permitted Features #001 and #002. No discharge of process waste concentrated animal feeding operation, SIC #0252. 10,680 Animal Units. No discharge domestic wastewater treatment system, SIC Code #4952

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

January 1, 2017

Effective Date

  
Harry D. Bozoian, Director, Department of Natural Resources

June 30, 2020

Expiration Date

  
John Madras, Director, Water Protection Program

**FACILITY DESCRIPTION (continued)**

This is a Class IA laying hen operation consisting of 10 confinement buildings with 875,700 laying hens and 8 covered concrete pits. The facility no longer utilizes a wet handling system for manure. Manure is collected in pits under the building and is scraped to one of the covered concrete pits. Manure is either land applied or transported to storage sheds at another of Opal Foods permitted operations. Mortalities and taken to a landfill. Wastewater is discharged to the City of Neosho.

Outfall #001 - Ten poultry buildings and eight covered concrete pits.

Legal Description: N ½, NW ¼, Sec 3, T22N, R33W, McDonald County

UTM Coordinates X = 367013, Y = 4059550

Receiving Stream: Tributary to Patterson Creek

First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960)

USGS Basin & sub-watershed No: 11070208-0403

Design Number of Animals: 875,700 laying hens

Design Process Waste (tons/year): 22,374

Design Storage (days): 365

Outfall #002 - Domestic Wastewater: SIC Code #4952

No-discharge domestic wastewater treatment systems serving employee restrooms, cafeteria, and showers consisting of 2 separate septic tanks and subsurface absorption fields.

Legal Description: NW ¼, NW ¼, Sec 3, T22N, R33W, McDonald County.

UTM Coordinates X = 366995, Y = 4059722

Receiving Stream: Tributary to Patterson Creek

First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960)

USGS Basin & sub-watershed No: 11070208-0403

Design Flow is 200,750 gallons/year.

Outfall # 003 – Deleted – Production Site Stormwater

Legal Description: NE ¼, NW ¼, Sec 3, T22N, R33W, McDonald County.

UTM Coordinates X = 367258, Y = 4059487

Receiving Stream: Tributary to Patterson Creek (P)

First Classified stream and ID: Patterson Creek (P) 03268

USGS Basin & sub-watershed No: 11070208-070004

Storm water runoff from east side of production site at detention pond (location #1 in O&M manual)

Outfall # 004– Deleted – Production Site Stormwater

Legal Description: NW ¼, NW ¼, Sec 3, T22N, R33W, McDonald County,

UTM Coordinates X=366719, Y=4059477

Receiving Stream: Tributary to Patterson Creek (P)

First Classified stream and ID: Patterson Creek (P) 03268

USGS Basin & sub-watershed No: 11070208-070004

Storm water runoff from west side of production site (location #5 in O&M manual)

Outfall # 005 – Deleted - Stream Monitoring

Outfall # 006– Deleted – Production Site Stormwater

Legal Description: NW ¼, NW ¼, Sec 3, T22N, R33W, McDonald County

UTM Coordinates X=366980, Y=4059648

Receiving Stream: Tributary to Patterson Creek (P)

First Classified stream and ID: Patterson Creek (P) 03268

USGS Basin & sub-watershed No: 11070208-070004

Storm Water runoff from north side of production site

Outfall # 007 -Deleted- Stream Monitoring/Upstream

Outfall # 008 – Deleted - Stream Monitoring

Outfall # 009 – Deleted - Stream Monitoring

Outfall # 010 – Deleted Stream Monitoring/Downstream

Outfall # 011 – Deleted - Stream Monitoring

Outfall # 012 – Deleted - Stream Monitoring

Outfall # 013 – Deleted - Stream Monitoring

Outfall #S1– Deleted – Stream Monitoring

Outfall #S2 – Deleted – Stream Monitoring

**A. STANDARD CONDITIONS**

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

**B. GENERAL CONDITIONS**

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

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

2. Reporting of Non-Detects:
- a. An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
  - b. The permittee shall not report a sample result as “Non-Detect” without also reporting the detection limit of the test. Reporting as “Non-Detect” without also including the detection limit will be considered failure to report, which is a violation of this permit.
  - c. The permittee shall report the “Non-Detect” result using the less than sign and the minimum detection limit (e.g. <10).
  - d. Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for that parameter.
  - e. See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
  - f. When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the “<MDL” shall be reported as indicated in item (C).
3. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

4. Definitions

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

5. Construction Permit Requirements

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

6. Water Quality Standards

- a. To the extent required by law, discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- b. General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

## **GENERAL CONDITIONS (continued)**

- (1) 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;
- (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
- (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
- (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
- (5) There shall be no significant human health hazard from incidental contact with the water;
- (6) There shall be no acute toxicity to livestock or wildlife watering;
- (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (8) 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 RSMo.

### **7. Reopener Clause**

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

- a. Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
  - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
  - (2) controls any pollutant not limited in the permit.
- b. Incorporate new or modified State of Missouri Statutes or Regulations.
- c. Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
- d. Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

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

## **C. SPECIAL CONDITIONS**

### **1. Effluent Limitations**

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

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

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

- a. There shall be no discharge of manure, litter, or process wastewater into waters of the state from production area point sources except as provided in subsection e. below.
- b. A chronic weather event is a series of wet weather events and conditions that can delay planting, harvesting, and prevent land application and dewatering practices at wastewater storage structures. When wastewater storage structures are in danger of an overflow due to a chronic weather event, CAFO owners 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 may include, but are not limited to; following the Department's current guidance (PUB2422) entitled "Wet Weather Management Practices for CAFOs." 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 should be addressed include, but are not limited to, stockpiling of raw materials, manure, or litter or other animal feeding related items that have the potential to contribute pollutants to waters of the state. As necessary, the NMP shall identify controls, measures or BMPs to manage stormwater runoff and meet applicable water quality standards. This paragraph applies only to activities on land that is under the control of the CAFO owner or operator, whether it is owned, rented, or leased.

**SPECIAL CONDITIONS (continued)**

- d. Stockpiling of uncovered dry process waste within the production area without runoff collection is not allowed.

3. **CAFO Land Application Areas**

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

- a. There shall be no discharge of manure, litter, process wastewater, or mortality by-products to surface waters of the state or that crosses property boundaries from a CAFO as a result of the land application of manure, litter, process wastewater, or mortality-by-products to land application areas, except where it is an agricultural storm water discharge. When manure, litter, process wastewater, or mortality by-products has been land applied in accordance with the CAFOs Nutrient Management Plan (NMP), and the *Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard* (NMTS), a precipitation related discharge of manure, litter, process wastewater, or mortality-by-products from land application is considered to be an agricultural storm water discharge.
- b. The permittee is responsible for all land application areas. All land application areas must be included in the CAFO's nutrient management plan before any land application of manure, litter or process wastewater can occur. When manure litter or process wastewater generated by the permitted CAFO is sold, given away, or applied to agricultural lands that do not meet the land application area definition, the permittee shall comply with the requirement of Special Condition #6.
- c. Temporary stockpiling of dry process waste within the land application areas shall be in accordance with 10 CSR 20-8.300(10)B. No location shall be used for stockpiling for more than two weeks unless the stockpile is covered. Runoff from a stockpile shall not cause a violation of water quality standards.
- d. Land application shall only occur during daylight hours unless written authorization is obtained from the department.

4. **Nutrient Management Technical Standard**

The permittee shall follow Attachment A - *Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard* (NMTS), except where otherwise stipulated in this permit. The NMTS, dated March 4, 2009, is hereby incorporated as though fully set forth herein.

5. **Nutrient Management Plan**

- a. In accordance with 10 CSR 20-6.300(3)(G), the permittee shall implement a Nutrient Management Plan (NMP) that at a minimum addresses the following.
  - (1) Ensures adequate storage of manure, litter and process wastewater, 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 as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the state.
  - (7) Identifies protocols for appropriate testing of manure, litter, process wastewater, 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.

6. **Transfer of Manure, Litter, and Process Wastewater**

In cases where manure, litter, or process wastewater generated by the permitted CAFO is sold, given away, or applied on lands that do not meet the land application area definition, the permittee shall comply with the following conditions:

- a. Maintain records showing the date and amount of manure, litter, and/or process wastewater that leaves the permitted operation.
- b. Record the name and address of the recipient. (The recipient is the broker or end user, not merely the truck driver.)
- c. Provide the recipient(s) with representative information on the nutrient content of the manure, litter, and/or process wastewater.

## **SPECIAL CONDITIONS (continued)**

- 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.

### **7. Mortality Management**

- a. Mortalities must not be disposed of in any liquid manure or process wastewater system that is not specifically designed to treat animal mortalities. Animals shall be disposed of in a manner to prevent contamination of waters of the state or creation of a public health hazard. Class I operations may not use burial as their primary mortality management method to dispose of routine mortalities.
- b. There shall be no-discharge from dead animal collection areas or holding areas (dumpsters, holding tanks, stockpiles within livestock production buildings, refrigeration units, etc.).
- c. Operations shall first receive approval from the Department before burying significant numbers of unexpected mortalities and shall conduct the burial in accordance with the Missouri Department of Agriculture requirements. Rendering, composting, incineration, or landfilling, in accordance with Chapter 269.020 RSMo., shall be considered acceptable options and do not require prior approval.

### **8. Inspections**

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

- a. Daily inspections must be conducted of water lines including wastewater, drinking water, and cooling water lines that can be visually observed within the production area. The inspection of the drinking water and cooling water lines shall be limited to the lines that possess the ability to leak or drain to wastewater storage structures or may come in contact with any process waste.
- b. Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the process wastewater storage.
- c. Weekly inspections of the collection or holding areas for dead animals. Equipment and devices used for the transfer of dead animal for delivery and disposal off-site are not considered a collection or holding area, therefore, are not required to be part of the daily inspection requirement.

Any deficiencies found as a result of inspections shall be documented and corrected as soon as practicable.

### **9. Record Keeping**

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:

- 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 #8, 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 = flow width in feet x flow depth in feet x flow velocity in feet per second. Estimates of stream channel width and depth may be used and flow velocity can be measured by timing how many feet a floating object moves within a one-second interval. Small flows may also be estimated based on gallons per minute (GPM) measurement using a container and stop watch; 450 gpm = 1.0 CFS. Other similar means of estimating may 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.

## SPECIAL CONDITIONS (continued)

### 10. Reporting Requirements

- a. Any wastewater discharge into waters of the state or a release that crosses property boundaries shall be reported to the Department as soon as practicable but no later than 24 hours after the 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. This includes leaks from sewer lines; recycle lines, flushing systems, lagoons, irrigation systems etc.
- c. 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.
- d. 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 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 expected 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 #8d.
  - (10) The actual operation numbers compared to the permitted design parameters described in Special Condition #11.
  - (11) All monitoring results from an emergency or unauthorized discharge as required in General Condition #1.
- e. 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 on compact disc (CDs) and shall be submitted to the Southwest Regional Office and the Water Protection Program, Industrial Permits Unit.

### 11. Design Parameters

The facility's design process waste in the Facility Description is an estimated parameter that is used to help predict nutrient generation and storage periods. The design process waste is based on the maximum annual generation and includes storm water flows during the one-in-ten year return frequency for annual or 365 day rainfall minus evaporation. The design process waste is based on the time period when the flows are generated at the production site and not when process wastes are land applied. Permittee may exceed the design process waste 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 process waste may be stored and carried over into the following year for land application, as necessary.

### 12. Operating Capacity

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

**SPECIAL CONDITIONS (continued)**

13. Sample Collection, Preservation and Testing Methods

Testing shall be in accordance with the most current version of *Standard Methods for the Examination of Waters and Wastewaters* or other approved methods listed in 10 CSR 20-7.015(9)(A).

14. Closure of Waste Storage Structures

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

- a. Lagoons and waste storage structures shall be closed by removal and land application of wastewater and sludge.
- b. The removed wastewater and sludge shall be land applied at agricultural rates for fertilizer not to exceed the maximum nutrient utilization of the land application site and vegetation grown and shall be applied at controlled rates so that there will be no discharge to waters of the state; and
- c. After removal and proper land application of wastewater and sludge, the earthen basins may be demolished by removing the berms, grading, and revegetation of the site so as to provide erosion control, or the basin may be left in place for future use as a farm pond or similar uses when water quality monitoring shows such uses are attainable.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0112840**  
**OPAL FOODS, LLC ANDERSON**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

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

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

This Factsheet is for Industrial Land Application

**Part I – Facility Information**

Facility Type: No-discharge Concentrated Animal Feeding Operation/land application– SIC #0252

**Facility Description:**

This is a Class IA laying hen operation consisting of 10 confinement buildings with 8750,700 laying hens and 8 covered concrete pits. The facility no longer utilizes a wet handling system for manure. Manure is collected in pits under the building and is scraped to one of the covered concrete pits. Manure is either land applied by a contract hauler or transported to storage sheds at another of Opal Foods permitted operations. Mortalities and taken to a landfill.

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

✓ No.

Application Date: 06/08/16

Expiration Date: 05/19/16

**PERMITTED FEATURE(S) TABLE:**

PERMITTED FEATURE	TREATMENT LEVEL	EFFLUENT TYPE
#001	Land Application	Animal Manure
#002	Septic System	Domestic Wastewater

**Facility Performance History:**

This facility was last inspected on March 31, 2015 and was found to be in compliance.

**Water Quality Monitoring:**

Previous permits dating back to 1997 for the Opal Foods, LLC Anderson have required stormwater, lake, and in-stream monitoring various sites. This monitoring was required by 10 CSR 20-6.300 and 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 Opal Foods, LLC Anderson to violate water quality standards when it is managed and operated in accordance with permit requirements. As a result, the April 30, 2012 revision of 10 CSR 20-6.300 removed stormwater and stream monitoring requirements. As a result of this change the stormwater and stream permitted features #003, #004, #006, #S1, and #S2 and associated monitoring requirements were removed with this permit renewal.

**Nutrient Management:**

The 2008 EPA CAFO regulation requires portions of the operations NMP be incorporated into the permit as terms of the NMP. The operation does have land application areas that have received manure application in the past. The operation does not intend to apply manure or litter to these fields therefore, no terms of the NMP are incorporated into this permit renewal. If the operation does wish to apply manure or litter to these fields, a permit modification would be required. In addition, any revisions to the operations' NMP must be submitted to the department for review.

**Part II – Operator Certification Requirements**

✓ This facility is required to have a certified operator.

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

Operator's Name: Everett Johnson  
Certification Number: 14376  
Certification Level: CAFO A

The listing of the operator above only signifies that staff drafting this operating permit have reviewed appropriate Department records and determined that the name listed on the operating permit application has the correct and applicable Certification Level.

**Part III – Receiving Stream Information**

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

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	DISTANCE TO CLASSIFIED SEGMENT	12-DIGIT HUC**
Tributary to Patterson Creek	N/A	N/A	General Criteria		11070208-0403
8-20-13 MUDD V1.0	C	3960	AQL, IRR, LWV, SCR, WBCB, HHP		

n/a not applicable

WBID Waterbody ID: Missouri Use Designation Dataset 8-20-13 MUDD V1.0 data can be found as an ArcGIS shapefile on MSDIS at [http://msdis.missouri.edu/pub/Inland\\_Water\\_Resources/MO\\_2014\\_WQS\\_Stream\\_Classifications\\_and\\_Use\\_shp.zip](http://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip)

\* As per 10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1<sup>st</sup> classified receiving stream's beneficial water uses to be maintained are in the receiving stream table in accordance with [10 CSR 20-7.031(1)(C)].

Uses which may be found in the receiving streams table, above:  
10 CSR 20-7.031(1)(C)1.:

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

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

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

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

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

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

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

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

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

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

**DWS** = Drinking Water Supply;

**IND** = Industrial water supply

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

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

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

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

### **303(d) List:**

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

- ✓ Applicable. Indian Creek is listed on the 1998 Missouri 303(d) List for E. coli.
- ✓ This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of Indian Creek.

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

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation.

- ✓ Applicable. Indian Creek is associated with the Elk River Basin 2004 EPA Approved TMDL for total nitrogen and phosphorous.
- ✓ This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of Indian Creek.

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

### **ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

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

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

### **ANTI-BACKSLIDING:**

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

- ✓ Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
  - ✓ The Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b). The requirements for stormwater and in-stream monitoring were removed from state regulations in 2012 and therefore not included with this permit renewal. Stormwater runoff and in-stream monitoring conducted by the facility from 1997 to 2012 was reviewed and shows no indication that a reasonable potential exists for the Opal Foods, LLC Anderson to violate water quality standards when it is managed and operated in accordance with permit requirements.

**ANTIDegradation:**

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

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

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

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

**BIOSOLIDS & SEWAGE SLUDGE:**

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

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

- ✓ Not applicable; this condition is not applicable to the permittee for this facility.

**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.

**SCHEDULE OF COMPLIANCE (SOC):**

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

A SOC is not allowed:

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

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

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

**SPILL REPORTING:**

Per 10 CSR 24-3.010, any emergency involving a hazardous substance must be reported to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the Noncompliance Reporting requirement found in Standard Conditions Part I.

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

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

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

Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

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

**VARIANCE:**

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

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

**WATER QUALITY STANDARDS:**

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

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

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

✓ Not Applicable; This facility does not anticipate bypassing.

**Part V – Permit Limits Determination**

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

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

**EMERGENCY DISCHARGE TABLE:**

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Flow	MGD	*			NO	*
Biochemical Oxygen Demand <sub>5</sub>	mg/L	*			NO	*
Ammonia as N	mg/L	*			NO	*
pH	SU	*			NO	≥ 6
Dissolved Oxygen	mg/L	*			NO	*
Duration	hours	*			NO	*
Temperature	°C	removed			YES	*
Monitoring Frequency	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.					

- \* - Monitoring requirement only
- \*\* - # of colonies/100mL; the Monthly Average for E. coli is a geometric mean.
- \*\*\* - Parameter not established in previous state operating permit.

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

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Flow	once/day while discharging	Test results are due on the 28 <sup>th</sup> day of the month after the cessation of the discharge
Biochemical Oxygen Demand <sub>5</sub>	once/day while discharging	
Ammonia as N	once/day while discharging	
pH	once/day while discharging	
Dissolved Oxygen	once/day while discharging	
Duration	once/day while discharging	

**Part VI – Administrative Requirements**

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

**PERMIT SYNCHRONIZATION:**

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

**PUBLIC NOTICE:**

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

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

✓ The Public Notice period for this operating permit was from October 7, 2016 to November 7, 2016 were responses received.

**DATE OF FACT SHEET:** NOVEMBER 18, 2016

**COMPLETED BY:**

**GREG CALDWELL, ENVIRONMENTAL SCIENTIST**  
**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**WATER PROTECTION PROGRAM**  
**OPERATING PERMITS SECTION – INDUSTRIAL PERMITS UNIT**  
**(573) 526-1426**  
**greg.caldwell@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.



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

- 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 28<sup>th</sup> 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



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

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

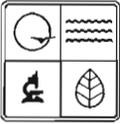


STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION  
REVISED  
AUGUST 1, 2014

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.

RECEIVED

JAN 19 2016



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM

Water Protection Program

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

FOR OFFICE USE ONLY	
CHECK NUMBER:	
DATE RECEIVED 1-19-16	FEE SUBMITTED [Signature]

Complete all applicable sections for type of permit being applied for. 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 \$150 payable 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/CONTACT INFORMATION**

1.1 OPERATION NAME Opal Foods, LLC - Anderson		CURRENT PERMIT NUMBER MO- 0122572	COUNTY McDonald
PHYSICAL ADDRESS 2950 F Highway			TELEPHONE NUMBER WITH AREA CODE
CITY Anderson	STATE MO	ZIP CODE 64831	
1.2 OWNER (PROVIDE LEGAL NAME) Opal Foods, LLC		EMAIL ADDRESS info@opal-foods.com	
MAILING ADDRESS 1100 Blair Avenue			TELEPHONE NUMBER WITH AREA CODE (417) 455-5000
CITY Neosho	STATE MO	ZIP CODE 64850	
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, ACTION, AND NUTRIENT MANAGEMENT PLAN OR NMP**

<p>2.1 PERMIT TYPE</p> <p><input checked="" type="checkbox"/> NPDES Permit NMP is required to be submitted with application. (Must also complete Land Application Information page)</p> <p><input type="checkbox"/> State No-Discharge Permit NMP is not required to be submitted. The date soil tests were taken that was used in development of the NMP. (Month/Year)</p>	<p>2.2 Permit Action</p> <p><input type="checkbox"/> New Permit <input checked="" type="checkbox"/> Renewal</p> <p><input type="checkbox"/> Modification (including Ownership Transfer)</p> <p>Previous Owner _____ Name _____ Address _____ City, State, Zip Code _____ Previous Owner's Signature _____ Date _____</p>
---	--

**PART 3 – DESIGN CAPACITY FOR MANURE STORAGE AND ANIMALS OF EACH CAFO FEATURE**

(All information to complete this section is in your current operating or construction permit. Attach additional sheets if necessary)

3.1 STORAGE STRUCTURE TYPES, AMOUNT OF STORAGE, AND AMOUNT OF MANURE GENERATED PER YEAR.

CAFO Feature	List All Manure Storage Structures at each CAFO Feature Storage Structure Type(s)	Dry Manure Handling System		Wet Manure Handling System			
		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	(F) - 10 Buildings - See Attached Table in NMP	22,374	103	N/A	N/A	N/A	N/A
002							
003							
004							
005							

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

CAFO Feature	Animal Category #1	Animal Numbers	Animal Category #2	Animal Numbers	Animal Category #3	Animal Numbers
001	(10) Layer Chickens	875,700				
002						
003						
004						
005						

**PART 4 – OPERATIONAL INFORMATION**

4.1 OPERATIONAL INFORMATION (SEE INSTRUCTIONS) SIC Code(s) 0252	CAFO Class Size IA
4.2 Is this an "Export Only" operation?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4.3 Are spreading agreements current?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable

PARTS 5 through 11 meet the NMP requirements for an export only operation.

**PART 5- MANURE STORAGE**

State regulations require CAFOs to ensure adequate storage of manure, litter, or process wastewater, including the proper operation and maintenance of each storage facility.

5.1 Does each storage structure have adequate storage, properly operated and maintained so as not to discharge?  Yes  No

**PART 6 - ANIMAL MORTALITY**

State regulations require proper management of animal mortalities be in place at all CAFOs. There should be no discharge from dead animal collection, holding, or disposal areas at the CAFO's production areas. In addition, the Missouri Department of Agriculture requires the collection or disposal of dead animals in accordance with the Dead Animal Disposal Law under Chapter 269 RSMo.

6.1 PERMANENT METHOD OF ANIMAL MORTALITY HANDLING OR DISPOSAL; CHOOSE APPLICABLE METHOD(S)

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.

Stored onsite in dumpster until picked up and taken to landfill. Pick up occurs 3 times a week. No discharge from stored mortalities.

**PART 7 - DIVERSION OF CLEAN WATER**

State regulations require CAFOs to divert clean stormwater, as appropriate, around the production area.

7.1 Is clean stormwater diverted from the production area?  Yes  No

7.2 If yes, describe controls and measures used to divert stormwater.

All areas containing animals or waste are covered by roof or completed enclosed. Grading is such that rainwater is diverted away from the buildings.

7.3 IF NO, INCLUDE DESIGN CALCULATIONS (IF NOT INCLUDED IN THE ORIGINAL DESIGN) FOR DETERMINING THE TOTAL STORAGE CAPACITY NEEDED TO CONTAIN ALL CLEAN STORMWATER RUNOFF THAT HAS NOT BEEN DIVERTED FROM THE PRODUCTION AREA. NOTE: THE DEPARTMENT HIGHLY DISCOURAGES THIS PRACTICE.

**PART 8 - PREVENT DIRECT CONTACT OF ANIMALS WITH SURFACE WATERS**

State regulations require that CAFOs prevent the direct contact of confined animals with waters of the state.

8.1 Do the animals have access to waters of the state within the production area?  Yes  No

8.2 LIST MEASURES USED TO PREVENT ANIMALS FROM HAVING DIRECT CONTACT WITH WATERS OF THE STATE WITHIN THE PRODUCTION AREA.

Animals are confined to buildings at all times.

**PART 9 - CHEMICAL HANDLING**

State regulations require chemicals and other contaminants handled on-site not be disposed of in any manure, litter, process wastewater, storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants

9.1 CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE MEASURES TAKEN TO PREVENT CHEMICALS (INCLUDING PESTICIDES, COMMERCIAL FERTILIZERS, HAZARDOUS AND TOXIC CHEMICALS AND PETROLEUM BY-PRODUCTS) FROM CONTAMINATING MANURE STORAGE STRUCTURES, PROCESS WASTEWATER OR STORM WATER STORAGE AND TREATMENT SYSTEMS:

- Chemicals are stored in proper containers. (Describe)  
See maintenance plan.
- Chemicals that are no longer used or expired are properly disposed of. (Describe)  
See maintenance plan.
- Chemical storage and handling areas are protected from precipitation and runoff, and any spillage is contained within these areas. (Describe)  
See maintenance plan.
- Emergency procedures and equipment are in place to contain and clean up chemical spills. (Describe)  
See maintenance plan.
- Equipment wash areas are designed and constructed to prevent contamination of surface waters and wastewater and storm water storage and treatment systems. (Describe)  
See maintenance plan.
- Chemicals are handled and used according to the label. (Describe)  
See maintenance plan.
- No chemicals are stored or handled in the production area.

**PART 10 - MANURE ANALYSIS TESTING**

State regulations require that each unique source of manure be tested annually for nutrient content.

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

All

10.2 DESCRIBE THE PROCEDURES TO ENSURE EACH UNIQUE SOURCE IS TESTED ANNUALLY.

Manure / Litter / Compost is tested prior to being land applied. Wastewater is sent to the Neosho WWTP by hauling to Hathaway Farms.

**PART 11 - RECORD KEEPING**

State regulations require specific records to be maintained and kept for five years.

11.1 Are records of all inspections, manure transfers, discharges and land application maintained?  Yes  No

**PART 12 - SIGNATURE**

NAME <b>VERNON FREELAND</b>	TITLE <b>PRODUCTION MANAGER</b>
SIGNATURE <i>Vernon Freelend</i>	DATE <b>1-11-16</b>

# LAND APPLICATION INFORMATION (NPDES Permits only)

Operation Name:

Class Size:

Permit #:

County:

Field Name	Legal Description	Spreadable Acres	P Loss Risk <sup>2</sup>	N or P Based Application	Crop #1		Crop #2		Crop #3 <sup>1</sup>		Crop #4 <sup>1</sup>		Crop #5 <sup>1</sup>	
					Crop	Yield Goal <sup>3</sup>	Crop	Yield Goal <sup>3</sup>	Crop	Yield Goal <sup>3</sup>	Crop	Yield Goal <sup>3</sup>	Crop	Yield Goal <sup>3</sup>
Sec.														
Twp.														
Rng.														
Sec.														
Twp.														
Rng.														
Sec.														
Twp.														
Rng.														
Sec.														
Twp.														
Rng.														
Sec.														
Twp.														
Rng.														
Sec.														
Twp.														
Rng.														
Sec.														
Twp.														
Rng.														
Sec.														
Twp.														
Rng.														
Sec.														
Twp.														
Rng.														

**SEE NUTRIENT MANAGEMENT PLAN**

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

<sup>2</sup> Soil Test P Rating or P Index Rating may be used.

<sup>3</sup> Express yield in Bu=Bushels or T=Tons per acre.

RECEIVED  
JAN 19 2016  
Water Protection Program

NUTRIENT MANAGEMENT PLAN  
for  
Opal Foods - Anderson

January 2016

Prepared by  
ALLGEIER, MARTIN & ASSOCIATES, INC.  
Consulting Engineers  
Joplin, Missouri

Background:

The Opal Foods - Anderson Farm facility, previously MOARK – Anderson Farm, is located in McDonald County near Anderson, Missouri. Opal Foods, LLC, is the owner and operator of the farm consisting of ten (10) layer houses with the capacity to house approximately 875,700 laying hens.

The facility operates under the Missouri Operating Permit Number MO-0122572 (See Appendix A). As stated in the permit, a Nutrient Management Plan (NMP) must be submitted by November 20, 2011. The implemented NMP at minimum must address the following as stated in Missouri 10 CSR 20-6 (5):

- Ensures adequate storage of manure, litter and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities.
- Ensures proper management of mortalities.
- Ensures clean water is diverted from the production area.
- Prevents direct contact of confined animals with waters of the state.
- Ensures that chemicals and other contaminants handled on the 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.
- Identifies appropriate site specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the state.
- Identifies protocols for appropriate testing of manure, litter, or process wastewater in accordance with site specific nutrient management practices.

- Establishes protocols to land apply manure, litter, or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of nutrients in the manure, litter, or process wastewater.
- Identifies specific records that will be maintained.

Production:

The farm consists of ten (10) layer houses with total capacity for 875,700. Based on recent records, average daily manure production for a layer at Opal Foods is approximately 0.14 LBS/Day of manure at approximately 45 LBS/CF. Consequently, for a bird population of 875,700 birds, daily manure production is estimated to be 122,598 LBS/Day or 2,724 CF/Day (994,406 CF/Year). Mortalities are collected approximately three times per week and properly disposed of at the landfill. No chemicals come in direct contact with the manure. A list of chemicals stored at the sites can be found in the facilities operation and maintenance plan.

Operations:

The layers are confined in cages at all times. At all locations, the birds receive feed from on-site bins. Water is delivered to each cage by PVC pipes, where a low-pressure system is available to deliver water to the birds. Excess water leaking from the water system is adsorbed by the manure stored below. The fans used to ventilate the houses promote evaporation of the moisture in the manure. All structures are constructed watertight to prevent water from entering or leaving the structures and no manure is stored outside of houses where exposed to rainfall. This is important to help insure clean water does not come into contact with the production facilities, which would allow an opportunity for the water to become contaminated.

Ventilation for the birds occurs when the exhaust fans turn on and pull fresh air in through inlet baffles. Feathers and materials exhausted by the ventilation system will be contained on-site by either being caught between houses or caught in the baffle/screen located just beyond the ventilation exhaust location.

Mortalities are handled, and must continue to be handled in a manner that prevents them from comingling with liquid manure, storm water, and any other treatment system not specifically designed to treat mortalities.

The processing plant wastewater is collected in a pit, which was previously a part of the wet waste handling system for the houses. The pit has a capacity of approximately 30,000 gallons, and is pumped three times per week by a contract hauler. If weather prevents the contract hauler from collecting the waste in a timely manner, the farm has the ability to haul this wastewater to the Neosho facility and discharge it to the City of Neosho's sanitary sewer system.

Manure Collection:

The manure from each cage of birds falls into the shallow pit below the cages. This is the area the wet system previously collected the waste within. Periodically, scrapers are utilized to move the waste from the shallow pit in the building to a larger pit outside of the building. These pits outside of the building were previously used as the wet waste handling pits, but are now covered and utilized for the dry manure system. From the pits, the manure is directly loaded onto trucks to be transported to the field via a contract hauler operation. The contract hauler has an agreement with the facility to take the manure and land apply it at agronomic rates.

If the contractor hauler is not available, the facility also has the option to move it to another approved manure storage location, such as the storage buildings available at the Neosho facility. The manure will be stored at these approved locations until it is ready to be given to a local farming operation to be applied at agronomic rates or it is ready to be spread on the land owned and permitted through Opal Foods. At the time this nutrient management plan was developed, Opal Foods had not utilized their permitted land for spreading, nor did they have an intention of utilizing this land in the near future.

Transport/Utilization:

As previously described, trucks loaded at the confinement houses shall transport the manure to land application sites either at the farm or one of the approved manure storage buildings. Care shall be taken during the hauling procedure to insure waste is contained during loading, transport and the final transfer from the truck.

Storage of the manure should be managed in a manner that insures adequate storage is always available. Currently, the following storage facilities are available for the Opal Foods Anderson facility.

<u>Storage Location</u>	<u>Approximate Storage Volume</u>
Layer Building 1	21,413 ft <sup>3</sup>
Layer Building 2	21,413 ft <sup>3</sup>
Layer Building 3	21,413 ft <sup>3</sup>
Layer Building 4	21,413 ft <sup>3</sup>
Layer Building 5	19,023 ft <sup>3</sup>
Layer Building 6	23,474 ft <sup>3</sup>
Layer Building 7	19,835 ft <sup>3</sup>
Layer Building 8	21,413 ft <sup>3</sup>
Layer Building 9	21,413 ft <sup>3</sup>
Pit #1 (Serves Layer Building 1)	8,526 ft <sup>3</sup>
Pit #2 (Serves Layer Building 2)	8,490 ft <sup>3</sup>
Pit #3 (serves Layer Building 3)	8,293 ft <sup>3</sup>
Pit #4 (serves Layer Buildings 4 & 5)	19,820 ft <sup>3</sup>
Pit #5 (serves Layer Buildings 6 & 7)	16,597 ft <sup>3</sup>
Pit #6 (serves Layer Building 8)	8,739 ft <sup>3</sup>
Pit #7 (serves Layer Building 9)	8,625 ft <sup>3</sup>
Pit #8 (serves Layer Building 10)	11,118 ft <sup>3</sup>
TOTAL EXISTING MANURE STORAGE	281,018 ft <sup>3</sup>

Manure production is anticipated as previously outlined, and as shown below.

TOTAL DAILY MANURE PRODUCTION 2,724 ft<sup>3</sup>/day

Based on the preceding, the existing storage is adequate, and provides approximately 103 days of storage. The actual number of day's storage, however, is likely to be slightly higher. The calculations presented do not account for compaction of manure. The figures presented in the calculation are conservative estimates based on typical practices, but if required, the facilities could hold additional manure. The calculation also assumes the storage is proportional to the number of birds contributing to the storage location. In this case, with specific waste pits assigned to specific houses, there may be slight variations in the population associated with a specific pit that may slightly lengthen or decrease the number of days of storage available for a specific layer house.

Manure stored at an approved location, shall either be sold to individuals requesting the manure or shall be land applied at agronomic rates at the sites owned by Opal Foods and permitted by MDNR. If the manure is transferred to a land owner, the land owner will be given a current Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard, and representative information on the nutrient content of the manure, litter, and/or process wastewater as stated in the Opal Foods Permit.

For proper utilization of the nutrients contained in manure, it must be tested for nutrient content and applied according to soil test recommendations for the crops to be grown. Phosphorus levels in the soils will likely increase with several years of litter application, if using a nitrogen based approach. When phosphorus levels test high on standard soil tests, litter should only be applied to meet crop removal needs for phosphorus, as no further buildup is recommended. If phosphorus tests "very high" or "excess", no manure or commercial phosphate fertilizer should be applied. Current soil tests for the land application owned and permitted at the Opal Foods site are shown in Appendix B.

Any manure land applied shall not be spread on slopes steeper than 20%; within 50 feet of any public road, intermittent flowing streams, property lines, or inhabited dwelling; within 100 feet of lakes, permanent flowing streams, privately owned impoundments not used as a water

supply; or within 300 feet of any sinkholes, losing streams, caves, abandoned wells, water supply wells, or impoundments. Litter will not be applied on flooded, saturated, ice covered or frozen soil. It may be applied when soils are in daily freeze/ thaw cycles in the spring. Manure shall not be applied if precipitation, likely to create runoff, is forecasted to occur within 24 hours of the planned application.

Any Manure stored or land applied shall also strictly adhere to the setback distance presented in the "Missouri CAFO Nutrient Management Standard." These setbacks are as follows:

<b>Setback Feature</b>	<b>Application Conditions</b>	<b>Setback Distance (feet)</b>
Public or Private Drinking Water Well or other wells including un-plugged abandoned wells	All application methods	300
Public or private drinking water impoundment	All application methods	300
Public or private drinking water intake structure	All application methods	300
Classified waters of the state not used as a water supply as defined in 10 CSR 20-7.031(1)F	No or insufficient vegetated buffer	35 100
Other public or privately owned lakes or impoundments not used as a water supply including impoundments with no outlet	Permanently vegetated buffer	35
	Up-gradient, no or insufficient vegetated buffer	100
	Down-gradient, no or insufficient vegetated buffer	35
Other perennial streams, other intermittent streams, canals, drainage ditches and wetlands	Permanently vegetated buffer	35
	Up-gradient, no or insufficient vegetated buffer	100
	Down-gradient, no or insufficient vegetated buffer	35
Tile line inlet (if left un-plugged during manure application)	Up-gradient, permanently vegetated buffer	35
	Up-gradient, no or insufficient vegetated buffer	100
	Down-gradient	0
Losing Stream	All application methods	300
Cave Entrance	All application methods	300
Spring	All application methods	300
Active Sink Hole	All application methods	300
Non-owned occupied residence	Spray Irrigation Only	150
Public use area including non-owned businesses	Spray Irrigation Only	150
Public Road	All application methods	50
Property boundary	All application methods	50

Note: A "vegetated buffer" is defined as a permanent strip of dense perennial vegetation established parallel to the contour of and perpendicular to the dominant slope of the field for the purposes of effectively slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrient or pollutants from leaving the field and reaching surface waters.

## Operation and Maintenance of Nutrient Management

The owner of the CAFO is responsible for safe operation and maintenance of this nutrient management system. Concerns that should be mitigated by adherence to this plan include health of the birds as well as safety of the environment. The CAFO is responsible for safe management and application of the litter produced by their operation, even though some or all of it may be sold and applied on land not under the CAFO's direct control. It is essential that records be kept of all litter applied and litter sold. Records will include storage source of manure transferred, name of person sold to, date of transfer, application field number, volume of manure transferred and tons or gallons/acre, acres, and type of cover or forage crop. Adequate testing of soil and manure nutrient content shall be performed. These records must be kept at the facility.

Storm Water

The owner shall take all measures necessary to divert fresh storm water, as appropriate, for all of the production facilities. Measures to insure this is accomplished shall primarily include grading to allow water to flow away from all confinement building, processing facilities, and waste holding structures, and maintenance of such drainage provisions.

The owner shall also take measures to insure all birds and any chemicals used at the facility are restricted from direct contact with waters of the state.

APPENDIX A

Operating Permit

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**  
MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

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

Permit Number: MO-0122572

Owner: Opal Foods, LLC  
Owner Address: 1100 Blair Avenue; Neosho, MO 64850

Continuing Authority: Same as above  
Continuing Authority Address: Same as above

Facility Name: Opal Foods, - Anderson  
Facility Address: 2950 F Hwy, Anderson, MO 64831

Legal Description: NW¼, NW¼, Sec.3, T22N, R33W, McDonald County  
Latitude/Longitude: See Operation Description

Receiving Stream: Tributary to North Fork Patterson Creek  
First Classified Stream and ID: Patterson Creek (P)(03268)  
USGS Basin & Sub-watershed No.: 11070208-070004

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

Water quality standards do not have to be exceeded to determine the unauthorized discharge of processed waste as defined in special condition 2(b). Operation of this site shall not cause a violation of water quality standards. Land application fields include all company owned land where land application occurs and all non-company owned land where spreading agreements allow land application. These provisions apply to all the company's regulated activities.

**OPERATION DESCRIPTION**

Outfalls #001 - #013 – Concentrated Animal Feeding Operation - SIC #0252

No Discharge of Process Waste, Class IA

Eight concrete storage pits/land application/egg wash water/domestic sewage/storm water runoff.

Design number of animals is 875,700 layer hens. (29,190 animal units)

Design flow is 8,723,500 gallons/year. (0.0239 MGD)

Domestic Waste Design Flow is 200,750 gallons/year. Population Equivalent is 10.

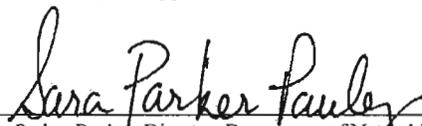
This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

May 20, 2011

Effective Date

April 22, 2014

Modification Date

  
Sara Parker Pauley, Director, Department of Natural Resources

May 19, 2016

Expiration Date

  
John Madros, Director, Water Protection Program

FACILITY DESCRIPTION (continued)

Total Number of Acres of Land Application area in the Nutrient Management Plan:

<u>Percent Slope</u>	<u>Land Owned by Permittee</u>
0-10%	360
10-20%	
<hr/>	
TOTAL	360

Outfall #001 - System Type: Ten (10) poultry buildings/eight (8) concrete pits: Manure storage locations and quantities – Buildings #1,2,3,4,8 and 9 have 21,413 cu. ft. each; building #5 has 19,023 cu. ft.; building #6 has 23,474 cu. ft.; building #7 has 19,835 cu. ft.; pit #1 has 8,526 cu. ft.; pit #2 has 8,490 cu. ft.; pit #3 has 8,293 cu. ft.; pit #4 has 19,820 cu. ft.; pit #5 has 16,597 cu. ft.; pit #6 has 8,739 cu. ft.; pit #7 has 8,625 cu. ft.; pit #8 has 11,118 cu. ft.

- Pit #1 serves building #1
- Pit #2 serves building #2
- Pit #3 serves building #3
- Pit #4 serves buildings #4 and #5
- Pit #5 serves buildings #6 and #7
- Pit #6 serves building #8
- Pit #7 serves building #9
- Pit #8 serves building #10

Legal Description: NW ¼, NW ¼, Sec 3, T22N, R33W, McDonald County

UTM Coordinates X= 367013, Y= 4059550

Receiving Stream: Tributary to Patterson Creek (P)

First Classified Stream and ID: Patterson Creek (P) 03268

USGS Basin & sub-watershed No: 11070208-070004

Design Number of Animals: 875,700 Laying Hens (29,190 Animal Units)

Design Process Waste: 23,350 gallons/day

Design Storage Pit: Pit #1 and building 29,939 cu. ft. or 127 days; Pit #2 and building 29,903 cu. ft. or 127 days; Pit #3 and building 29,706 cu. ft. or 126 days; Pit #4 and buildings 60,256 cu. ft. or 127 days; Pit #5 and buildings 59,906 cu. ft. or 88 days; Pit #6 and building 30,152 cu. ft. or 128 days; Pit #7 and building 30,038 cu. ft. or 127 days; Pit #8 and building 34,592 cu. ft. or 101 days.

Upper Operating Level: one foot below overflow level.

Outfall #002 - Domestic Wastewater: SIC Code #4952

No-discharge domestic wastewater treatment systems serving employee restrooms, cafeteria, and showers consisting of 2 separate septic tanks and subsurface absorption fields serving a total of 37 employees.

Design population equivalent is 10.

Design Flow is 200,750 gallons/year.

Legal Description: NW ¼, NW ¼, Sec 3, T22N, R33W, McDonald County.

UTM Coordinates X= 367013, Y= 4059550

Receiving Stream: Tributary to Patterson Creek (P)

First Classified Stream and ID: Patterson Creek (P) 03268

USGS Basin & sub-watershed No: 11070208-070004

FACILITY DESCRIPTION (continued)

Outfall # 003 - Production Site Stormwater

Legal Description: NE ¼, NW ¼, Sec 3, T22N, R33W, McDonald County.

UTM Coordinates X= 367258 Y= 4059487

Receiving Stream: Tributary to Patterson Creek (P)

First Classified stream and ID: Patterson Creek (P) 03268

USGS Basin & sub-watershed No: 11070208-070004

Storm water runoff from east side of production site at detention pond (location #1 in O&M manual)

Outfall # 004 - Production Site Stormwater

Legal Description: NW ¼, NW ¼, Sec 3, T22N, R33W, McDonald County,

UTM Coordinates X=366719, Y=4059477

Receiving Stream: Tributary to Patterson Creek (P)

First Classified stream and ID: Patterson Creek (P) 03268

USGS Basin & sub-watershed No: 11070208-070004

Storm water runoff from west side of production site (location #5 in O&M manual)

Outfall # 005 – Deleted - Stream Monitoring

Outfall # 006 - Production Site Stormwater

Legal Description: NW ¼, NW ¼, Sec 3, T22N, R33W, McDonald County

UTM Coordinates X=366980, Y=4059648

Receiving Stream: Tributary to Patterson Creek (P)

First Classified stream and ID: Patterson Creek (P) 03268

USGS Basin & sub-watershed No: 11070208-070004

Storm Water runoff from north side of production site

Outfall # 007 -Deleted- Stream Monitoring/Upstream

Outfall # 008 – Deleted - Stream Monitoring

Outfall # 009 – Deleted - Stream Monitoring

Outfall # 010 – Deleted Stream Monitoring/Downstream

Outfall # 011 – Deleted - Stream Monitoring

Outfall # 012 – Deleted - Stream Monitoring

Outfall # 013 – Deleted - Stream Monitoring

Outfall #S1 – Stream Monitoring (previous outfall 007) South Fork Beeman Hollow at ?? (Class C)

Legal Description: SE ¼, NE ¼, Sec 27, T23N, R33W, McDonald County

UTM Coordinates X=368266, Y=4062378

Receiving stream: South Fork Beeman Hollow (U)

First classified stream and ID: Beeman Branch (P) 03270

USGS Basin & Subwatershed No. 11070208-080002

Outfall #S2 – Stream Monitoring (previous outfall 010) Tributary to Patterson Creek(P)

Legal Description: SW 1/4, SW ¼, Sec 5, T22N, R33W, McDonald County

UTM Coordinates X=363538, Y=4058513

Receiving stream: Tributary to Patterson Creek (U)

First classified stream and ID: Patterson Creek (P) 03268

USGS Basin & Subwatershed No. 11070208-070004

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

PAGE NUMBER 4 of 14

PERMIT NUMBER MO-0122572

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	MONITORING REQUIREMENTS		
		REQUIREMENTS	MEASUREMENT FREQUENCY	SAMPLE TYPE
<b>Outfalls # 001 - Unauthorized Discharge Monitoring</b>				
Flow	MGD	Comply with Water Quality Standards.	once/day during discharge	24 hr. estimate
Dissolved Oxygen	mg/L		once/day during discharge	grab
Ammonia Nitrogen as N	mg/L		once/day during discharge	grab
BOD	mg/L		once/day during discharge	grab
pH – Units	SU		once/day during discharge	grab
Temperature	°C		once/day during discharge	grab

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

PAGE NUMBER 5 of 14

PERMIT NUMBER MO-0122572

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	MONITORING REQUIREMENTS			
		DISCHARGE MAXIMUM	REQUIREMENTS	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls # 003,004,006 - Production Sites - Storm Water Runoff Limits from Production Sites					
Flow	MGD		No discharge of process waste.	4/Year	24 hr. estimate
pH – Units	SU			4/Year	grab
Ammonia Nitrogen as N	mg/L	2.5		4/Year	grab
Nitrate/nitrite as N	mg/L			4/Year	grab
Total Phosphorus as P	mg/L			4/Year	grab
Total Suspended Solids	mg/L			4/year	grab
Temperature	°C			4/Year	grab

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

PAGE NUMBER 6 of 14

PERMIT NUMBE MO-0122572

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	MONITORING REQUIREMENTS		
		REQUIREMENTS	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall Upstream # S1</u>				
<u>Outfall Downstream #S2</u> Stream Monitoring				
Flow	MGD	Samples shall be only collected from flowing water. Samples from riffles are preferred. Do not collect a sample from pools that do not have water flowing into or out of the pool.	4/year	24 hr. estimate
pH – Units	SU		4/year	grab
Ammonia Nitrogen as N	mg/L		4/year	grab
Nitrate + Nitrite as N	mg/L		4/year	grab
Total Phosphorus as P	mg/L		4/year	grab
Temperature	°C		4/year	grab
Dissolved Oxygen	mg/L		4/year	grab

## **B. GENERAL CONDITIONS**

### 1. Standard Conditions

In addition to other conditions stated herein, this permit is subject to the attached Part I STANDARD CONDITIONS dated October 1, 1980, and hereby incorporated as though fully set forth herein.

### 2. Definitions

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

### 3. Permit Exemptions

- (a) All wastewater systems and major system modifications shall be constructed in accordance with a construction permit. As allowed in state regulations under 10 CSR 20-6.300 (2)(B), certain minor modifications and piping changes are exempted from the requirement for a construction permit. Minor modifications would include small sections of buried pipelines, normal repair or replacement of existing wastewater lines, installation of manholes, wet wells, and any other minor change that does not significantly impact the normal operation of the waste management system.
- (b) In accordance with 10 CSR 20-6.300(2)(B)4, permits are not required for storage buildings for dry litter, compost, or similar materials, if the storage structure is roofed and has impermeable floors.

### 4. Effluent Limitations

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

#### (a) CAFO Production Area

- (1) Requirements applicable to all CAFO production area(s):

The Production Area is that part of an operation which includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. Also included is any area used in the storage or treatment of animal mortalities or material containing mortality products.

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 b. below.

A chronic weather event is a series of wet weather 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 may include, but are not limited to, following the department’s current guidance on “Wet Weather Management Practices for CAFOs”. These practices shall be designed by the department to specifically help minimize or eliminate water quality impacts from CAFOs during extreme wet weather periods. The Missouri Climate Center will determine, within a reasonable timeframe, when a chronic weather event is occurring for any given county in Missouri. The Climate Center’s determination will be based upon an evaluation of the 1 in 10 year return rainfall frequency over a 10-day, 180-day and 365-day operating period.

**B. GENERAL CONDITIONS (continued)**

Manure, litter or wastewater management activities occurring outside of the discrete point sources structures, barns or areas but upon land controlled by the permittee shall be identified in the permittee's Nutrient Management Plan (NMP). Activities that should be addressed include, but are not limited to, winter feeding areas, 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.

(b) CAFO Land Application Areas

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

There shall be no discharge of manure, litter, or process wastewater to waters of the state from a CAFO as a result of the land application of manure, litter or process wastewater to land application areas under the direct control of the CAFO, except where it is an agricultural storm water discharge. When manure, litter, or process wastewater has been land applied in accordance with this permit, a precipitation related discharge of manure, litter or process wastewater from land areas under the control of the CAFO is considered to be an agricultural storm water discharge.

5. Nutrient Management Plan

In accordance with 10 CSR 20-6.300(3)(G), the permittee shall implement a Nutrient Management Plan that at a minimum addresses the following.

- (a) Ensures adequate storage of manure, litter and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities.
- (b) Ensures proper management of mortalities.
- (c) Ensures that clean water is diverted from the production area.
- (d) Prevents direct contact of confined animals with waters of the state.
- (e) 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.
- (f) Identifies appropriate site specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the state.
- (g) Identifies protocols for appropriate testing of manure, litter, process wastewater, and soil.
- (h) 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.
- (i) Identifies specific records that will be maintained.

6. Nutrient Management Technical Standard

The permittee shall follow Attachment A - "Missouri Concentrated Animal Feeding Operation Nutrient Management Technical Standard" (NMTS), on CAFO land application areas as identified in the Nutrient Management Plan. The NMTS, dated March 4, 2009, is hereby incorporated as though fully set forth herein.

**B. GENERAL CONDITIONS (continued)**

7. Transfer of Manure, Litter, and Process Wastewater to Other Persons

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

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

8. Mortality Management

There shall be no-discharge from dead animal collection areas or holding areas. Animals shall be disposed of in a manner to prevent contamination of waters of the state or creation of a public health hazard. Management of mortalities will be as described in the nutrient management plan.

9. Water Quality Standards

Any discharges to waters of the state, including those discharges allowed for within this permit, shall not cause a violation of the state water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.

General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters 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;
- (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
- (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;
- (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
- (e) There shall be no significant human health hazard from incidental contact with the water;
- (f) There shall be no acute toxicity to livestock or wildlife watering;
- (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (h) Waters shall be free from scrap 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.

**B. GENERAL CONDITIONS (continued)**

10. Reopener Clause

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

- (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
  - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit;  
or
  - (2) controls any pollutant not limited in the permit.
- (b) Incorporate new or modified State of Missouri Statutes or Regulations.
- (c) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
- (d) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

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

**C. SPECIAL CONDITIONS**

1. Nutrient Management Plan

The permittee shall submit an updated nutrient management plan (NMP) that complies with the requirements listed in this permit within six months of the effective date of this permit. The NMP shall include operation and maintenance procedures for waste handling systems as necessary to maintain compliance with the terms and conditions of this permit. As operational changes are made to site's waste handling systems, the permittee shall amend applicable portions of the NMP within three months of said changes. Upon receipt of the plan, the department will conduct a review and, if needed, will submit a comment letter regarding any deficiencies within the nutrient management plan. All comments shall be responded to within 30 days of receipt of a letter. The updated NMP shall be followed beginning on the effective date of the permit.

2. Inspections

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

- (a) Daily inspections must be conducted of water lines including wastewater, drinking water, and cooling water lines that can be visually observed within the production area. The inspection of the drinking water and cooling water lines shall be limited to the lines that possess the ability to leak or drain to wastewater storage structures or may come in contact with any process waste.
- (b) Daily inspections of the collection or holding areas for dead animals.
- (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. Quarterly inspections, prior to use, of equipment used for land application of manure or process wastewater.
- (e) Inspections during land application shall include monitoring of the perimeter of the application fields to insure that applied wastewater does not run off the fields where applied.

Any deficiencies found as a result of inspections shall be documented and corrected as soon as practicable.

3. Record Keeping

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

- (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 visual inspections required in Special Condition #2, shall be logged/recorded once per week.
- (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 discharge. Note: Monitor the discharge at the point immediately prior to the receiving stream or at the property boundary, whichever occurs first. 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 Attachment B, "Nutrient Management Technical Standard" 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.

**C. SPECIAL CONDITIONS (continued)**

4. Reporting Requirements

- (a) Any wastewater discharge into waters of the state shall be reported to the Department as soon as practicable but no later than 24 hours after the start of the discharge.
- (b) 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 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 expected 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 actual operation numbers compared to the permitted design parameters described in Special Condition #6.
  - (10) All monitoring results from Section A. Effluent Limitations and Monitoring Requirements.
- (c) The reports shall include a cover sheet with an original signature of a company representative. The reports may be printed or alternatively, may be saved as pdf files or locked spreadsheets and burned onto two compact discs (CDs). The CDs may be sent via mail with the cover sheet to the Southwest Regional and the Jefferson City offices.

**C. SPECIAL CONDITIONS (continued)**

5. Design Parameters

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.

6. Land Application Site Locations

The permittee is responsible for all land application area(s) that are owned, rented, leased, or otherwise directly controlled by the permittee. All land application area(s), that fall under the definition of "land application area" as defined in 10 CSR 20-6.300, must be included in the facility's nutrient management plan. The addition of land application area(s) into the facility's nutrient management plan (except for those already in a nutrient management plan) must follow permit modification procedures prior to land application unless otherwise approved by the department.

7. Land Application Limitations on CAFO land application areas

- (a) Process wastes should be land applied as close as practicable to when plants will utilize nutrients. Fall application for the spring crop season may be used where appropriate, but should not be the primary application period. Land application of process wastes shall be utilized as a nutrient resource.
- (b) Avoid surface application when there is a local, applicable weather forecast or observation by permittee of an imminent or impending storm event that is likely to produce runoff.
- (c) Land application equipment shall be operated in such a manner that wastes do not reach an adjoining property line, public use area or into waters of the state. There shall be no visual spray drifts across public roads or property boundaries or into waters of the state. If the employee detects wind blown mist within 100 feet of an adjoining property line or public use area or waters of the state the application equipment shall be either moved farther away or shut down.
- (d) The NMP shall include, when following the NMTS, site specific conservation practices, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the state.
- (e) Implementation procedures for these limitations shall be detailed in the Nutrient Management Plan.
- (f) Domestic sludge shall be removed as needed and land applied in accordance with 40 CFR 503 sludge standards for septage and University of Missouri Water Quality Guide publication #WQ422.

**C. SPECIAL CONDITIONS (continued)**

8. Design Operating Capacity

This permit authorizes operation of the CAFO waste management system as described in the “FACILITY DESCRIPTION” along with the permit application and associated engineering plans. The Facility Description describes a design animal unit operating capacity (i.e., number of animals) for this facility. For purposes of this permit, the animal unit operating level at any given time shall be based on averaging the weekly facility wide inventory on a rolling 12 month average (i.e., the animal unit operating level will be determined using a “rolling 12 month average” of the “weekly facility-wide average inventory”). The rolling 12 month average should not exceed, the listed facility-wide design animal unit capacity in the Facility Description. The CAFO may change animal numbers and weights as necessary; however, such changes must not adversely impact the storage and handling capacities of the waste management system.

9. Sample Collection, Preservation and Testing Methods

Testing shall be in accordance with the most current version of *Standard Methods for the Examination of Waters and Wastewaters* or other approved methods listed in 10 CSR 20-7.015(9)(A).

**Missouri Department of Natural Resources  
Concentrated Animal Feeding Operation  
NPDES Site Specific Permit Factsheet**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Permits in Missouri are issued by the Missouri Department of Natural Resources (department), as the administrative agent for the Missouri Clean Water Commission, 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). NPDES operating permits are issued for a period of five (5) years unless otherwise specified.

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

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

This Factsheet is for a Permit Renewal ; Permit Modification ; and/or permit with widespread public interest .

**Facility Information**

NPDES Permit No.:	MO-0122572
Owner:	Opal Foods, LLC
Owner Address:	1100 Blair Avenue, Neosho, MO 64850
Facility Name:	Opal Foods,- Anderson
Facility Address:	2950 F Hwy., Anderson, MO 64831
MDNR Region:	Southwest Regional Office
Facility County:	McDonald
Facility Type:	Class IA-Concentrated Animal Feeding Operation (CAFO)
Facility SIC Code:	0252

**Facility Description:**

The farm consists of 10 poultry buildings and 8 concrete manure pits designated Outfall 001. Outfall 001 may contain approximately 875,700 layer hens. Outfalls 003, 004, and 006 are stormwater runoff from the east, west, and north sides of the production site. Outfalls #S1 (previous outfall 007) and #S2 (previous outfall 010) are stream monitoring locations.

### Effected Outfalls and other Modifications

Note: All outfalls are detailed in the operating permit starting on page 2.

This permit does not include an increase in animal numbers or animal capacity at this site.

The department is modifying, a Missouri State Operating Permit to transfer ownership from Moark to Opal Foods, LLC for the Anderson Farm located in McDonald County. This facility is a Missouri Class IA Concentrated Animal Feeding Operation (CAFO) which, due to its classification and size has been required by the department to retain a site-specific operating permit.

### **Water Quality Monitoring -**

The MOARK Anderson Farm permit has, in the previous permit, required varying amounts of water quality monitoring. The monitoring requirements in the previous permit at this site have included sampling locations for stormwater, and in-stream monitoring with a sampling frequency of quarterly, and monthly respectfully. The purpose behind the department's monitoring requirements was to help aid in ascertaining any water quality related impacts from the CAFO's operation and land application of manure. Technical staff in the Permits Section have reviewed the results of the past monitoring and generally conclude that further extensive monitoring is unnecessary as there is no indication from past water quality data that a reasonable potential exists for the MOARK Anderson Farm CAFO to violate water quality standards when it is managed and operated in accordance with permit requirements.

With this in mind, the department has reduced some of the complexity of the monitoring requirements within the MOARK Anderson Farm permit. Stormwater monitoring will be addressed by requiring sampling of the stormwater monitoring sites four times per year.

In-stream monitoring requirements have been retained and will include two monitoring points (upstream and downstream) on the primary receiving stream for this site and will be sampled four times per year.

### **Inspections, Record Keeping, and Reporting Requirements -**

On February 28, 2009, the department finalized changes to department's CAFO regulation at 10 CSR 20-6.300. In response to the new regulations, the department made several additions and changes to the inspections, record keeping, and reporting requirements to address the new state requirements.

Prior permits have included submittal of a quarterly report and an annual report in paper format. The annual report contained essentially the same information that was found in the quarterly report. Department staff rarely has the time or the need to regularly review the quarterly reports and the sheer volumes of documents and paper generated by the submittal of these reports fill up file room space in both the regional and central offices. The department plans to reduce the reporting requirement down to an annual report only and will provide MOARK Anderson Farm an option of submitting the annual reports electronically on a CD-ROM. This permit requires that all records required by the permit be made available, upon request, for department review and if deemed necessary can be reviewed by the department during inspections.

### **Nutrient Management -**

Proper management and utilization of farm generated manure nutrients at a CAFO is key to its ability to operate in a safe and protective manner. State regulations pertaining to nutrient management at CAFOs have significantly changed since the last permit cycle. In particular, the requirements pertaining to development of application rates, including soil test phosphorus limitations, have become more prescriptive. The following are additions and/or changes that have been proposed for this permit which are direct result from recent updates in the state regulation.

This permit has been updated to reflect new nutrient management requirements. Most notably, new permit conditions have been included that require the CAFO to develop and implement a site-specific Nutrient Management Plan (NMP) that complies with nine specific criteria. The proposed permit stipulates a 6 month compliance schedule, which will begin on the date of issuance, for the development and submittal of this NMP. One of the key reasons the department is allowing the six month compliance date is that the CAFO must have the final permit requirements in order to fully develop a site specific NMP for this site. The permit also now requires MOARK to complete a phosphorus risk assessment on the land application fields that they own or control. This assessment will identify fields that have a high susceptibility to phosphorus loss and will place application rate restrictions on high risk fields. This protocol provides for a more predictable and systematic approach to phosphorus management as compared to the phosphorus assessments and limitations used in previous permits.

The permit now incorporates by reference the department's "Nutrient Management Technical Standards" (NMTS). This standard was developed to provide a framework for the protocol(s) and method(s) that CAFOs should utilize when determining the form, source, amount, timing, and method of application on individual land application fields. The NMTS represents the department's best professional judgment regarding how to satisfy and/or implement the specific NMP criteria G, H and I within 10 CSR 20-6.300(5)(A). The framework seeks to achieve realistic production goals while ensuring appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater while also minimizing movement of nitrogen, phosphorus, and other potential water contaminants into surface and/or ground water.

**Land Application Areas -**

The permit requires the permittee be responsible for all land application area(s) that are owned, rented, leased, or otherwise directly controlled by the permittee. All lands that fall under the definition of "land application area" as defined in 10 CSR 20-6.300, must be included in the facility's nutrient management plan.

When the permittee proposes to include additional land application area into the facility's nutrient management plan (except when such land is already in a nutrient management plan), the permittee must follow permit modification procedures prior to land application unless otherwise approved by the department.

When the permittee conducts land application activities to agricultural lands that are not owned, rented, leased or directly controlled, or when the permittee sells or gives away CAFO-generated manure, the permit requires the CAFO maintain certain records documenting the name of recipient, the date and amount of manure, litter, and process wastewater that leaves the permitted operation. It also requires the permittee provide the recipient with representative information on the nutrient content of the manure, litter, and/or process wastewater along with a copy of the Department's Nutrient Management Technical Standard.

**Receiving Stream Information**

Please mark the correct designated waters of the state categories of the receiving stream.

- |   |   |
|---|---|
| Missouri or Mississippi River [10 CSR 20-7.015(2)]: | Yes <input type="checkbox"/> ; No <input checked="" type="checkbox"/> |
| Lake or Reservoir [10 CSR 20-7.015(3)]:             | Yes <input type="checkbox"/> ; No <input checked="" type="checkbox"/> |
| Losing [10 CSR 20-7.015(4)]:                        | Yes <input type="checkbox"/> ; No <input checked="" type="checkbox"/> |
| Metropolitan No-Discharge [10 CSR 20-7.015(5)]:     | Yes <input type="checkbox"/> ; No <input checked="" type="checkbox"/> |
| Special Stream [10 CSR 20-7.015(6)]:                | Yes <input type="checkbox"/> ; No <input checked="" type="checkbox"/> |
| Subsurface Water [10 CSR 20-7.015(7)]:              | Yes <input type="checkbox"/> ; No <input checked="" type="checkbox"/> |
| All Other Waters [10 CSR 20-7.015(8)]:              | Yes <input checked="" type="checkbox"/> ; No <input type="checkbox"/> |

10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1<sup>st</sup> classified receiving stream's beneficial water uses are to be maintained in accordance with 10 CSR 20-7.031(3)

**Receiving Stream Monitoring Requirements:**

Over five years of water quality stream data has been collected by Moark Anderson Farm in order to analyze stream impacts from their facility. In analyzing data from both the monitoring required previously by this permit along with USGS monitoring locations, the department has found no obvious problems or differences in watersheds that house large CAFOs compared to those that do not. Water quality data generally show that the effects on water quality from agricultural non-point source activities, like unconfined livestock and commercial fertilizer use, appears to be similar to that of CAFOs that are reasonably well managed. With that said, the department has included two stream monitoring locations (upstream and downstream) within the primary receiving stream be retained in this permit with a frequency of four times per year.

## **RATIONALE AND DERIVATION OF EFFLUENT LIMITATIONS & PERMIT CONDITIONS**

### **PERMIT APPLICABILITY:**

National Pollutant Discharge Elimination System (NPDES) permits are required for operations defined in 10 CSR 20-6.300 as a Concentrated Animal Feeding Operation (CAFO). Site-specific permits are required for CAFO operations that fall within the class IA category. Operations that fall under this category confine 7,000 or more animal units. The department, however, can require site specific permits to other class I operations if it is determined that the quality of the waters of the state would be better protected with one.

### **PERMIT COVERAGE**

This site specific permit will cover all production areas, which include the confinement, storage, and handling areas, as well as the land application activities at sites that are under the ownership or control of the permitted CAFO owner/operator. This permit applies only to requirements of, and regulations promulgated under, the Missouri Clean Water Law and Federal Clean Water Act and does not apply to other environmental laws and regulations. This permit does not recognize, supersede nor remove liability from compliance with county and other local ordinances.

### **WHAT CONSTITUTES A DISCHARGE FROM A CAFO:**

A discharge of process waste is the discharge of pollutants into surface or subsurface waters of the state from the animal confinement or storage and handling areas of a CAFO including in some circumstances the land application area(s) under the ownership or control of the CAFO operator.

Discharges prohibited by this permit include, but are not limited to, the following:

- Discharge from manure storage structures (lagoons, basins, pits, etc.), unless discharge was due to storm events exceeding the chronic or catastrophic storm events for the design storage period.\*
- Discharge of contaminated runoff from non-vegetated feedlots, stockpiled manure, and other feedstock storage;
- Discharges associated with improper land application of manure and/or wastewater activities under the control of the CAFO operator;
- Discharges of manure and/or wastewater due to pipe breakage or equipment failure.

\*Discharge is allowed due to overflow through the emergency spillway of the lagoon or other uncovered storage structure when the overflow is caused by storm events that exceed the defined design storm event. Only that portion of storm water flow, which exceeds the design storm event may be discharged.

Stormwater discharges from land application areas that have received manure as fertilizer are authorized under this permit. Stormwater that comes from land application sites is exempt from effluent limits. The reason stormwater discharges are not subject to discharge limits is because the federal definition of a point source contains a specific exclusion for agricultural storm water. This exclusion was further clarified when the U.S. Environmental Protection Agency (USEPA) promulgated the revised CAFO Regulations on February 12, 2003. The clarification stated that if the process waste is applied at agronomic rates, the storm water runoff from land application sites is not subject to effluent limitations. This determination by the USEPA was later upheld by the Second Circuit Court's ruling in *Waterkeeper Alliance, Inc. et. al. v. U.S. Environmental Protection Agency*, 399 F.3d 486 (2<sup>nd</sup> Cir. 2005). Since the State of Missouri has not enacted any laws that would differ from the EPA's determination or the subsequent court ruling, the stormwater runoff from land application sites is exempt from effluent limitations and is considered a non-point source not subject to permit requirements.

### **PROPOSED DISCHARGE LIMITATIONS, MONITORING, AND TREATMENT**

#### **REQUIREMENTS**

Please see Section A & B of this draft Permit attached to this fact sheet

**RATIONALE FOR PROPOSED DISCHARGE LIMITATIONS, MONITORING AND TREATMENT REQUIREMENTS:**

Effluent parameters and limitations contained in this Missouri State Operating Permits are obtained from Technology Based Effluent Limits (TBEL), Missouri's Effluent Regulations [10 CSR 20-7.015], Missouri's Water Quality Standards [10 CSR 20-7.031], previous Missouri State Operating Permits, and from Permit Applications. When CAFOs actively operate and maintain properly designed manure and wastewater storage structures they will prevent most, if not all overflows and discharges. Because of this, the department has established Best Management Practices (BMPs) to insure proper operation and maintenance of the production area and to prevent unauthorized discharges. Because of the uncertainty that is involved in determining if runoff or overflow of process waste has led to a discharge, as well as the substantial variation of the volume and nature of the pollutants of the discharge, numeric effluent limitation guidelines to control discharges are considered infeasible. Conversely, effluent limitations in the form of BMPs are particularly suited for the regulation of CAFOs. Controlling discharges to surface water is largely associated with controlling runoff and controlling overflows from manure storage structures. Runoff from CAFOs can be highly intermittent and is usually characterized by very high flows, due to precipitation, occurring over relatively short time intervals.

Along with BMPs, proper nutrient management planning and mandated recordkeeping requirements in dealing with the CAFOs manure storage structures and land application is required under this permit. These requirements will ensure that CAFOs apply manure, litter, and other process wastewaters at rates, and in a manner consistent with appropriate agricultural utilization of nutrients. Limits on the rate at which manure or litter can be applied and certain other constraints on application practices, such as setbacks, and application methods are widely demonstrated as achievable and are being imposed through this permit.

**ANTIDegradation ISSUES:**

As there shall be no-discharge of process wastewater during dry weather conditions the terms and conditions proposed in this draft permit will maintain and protect the designated uses of the various receiving stream(s) as well as the level of water quality necessary to protect said water uses. With proper implementation of Best Management Practices (BMPs) and the NMTS at both the CAFO production area(s) and land application site(s) as well as other minimum standards, protection of water quality will be provided for a particular water body where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation plans are adopted by each State to minimize adverse effects on water.

**ANTI-BACKSLIDING:**

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

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

- Backsliding proposed in this Factsheet for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 § CFR 122.44.

**COMPLIANCE AND ENFORCEMENT:**

Action taken by the department to resolve violations of the Missouri Clean Water Law, its implementing regulations, and/or any terms and condition of an operating permit.

Applicable ;

Not Applicable ; The permittee/facility is not under enforcement action and is considered to be in compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and condition of an operating permit.

The Public Notice period for this operating permit was 3-15-2011 to 4-15-2011

**Date of Factsheet:** 01-10-2011



APPENDIX B

Land Application Site Soil Tests

# Aerial Map



Maps provided by:



©AgriData, Inc. 2011  
www.AgriDataInc.com

**3-22N-33W**  
**McDonald County**  
**Missouri**

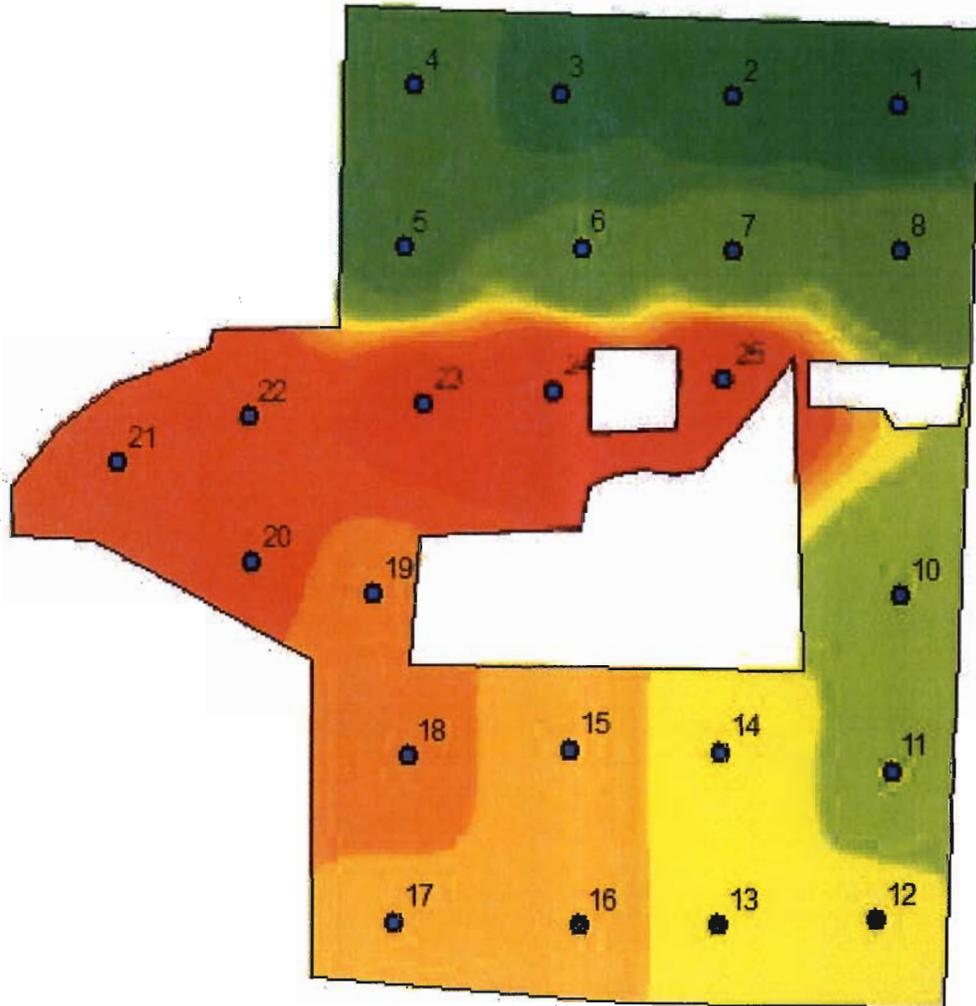
map center: 36.672370, -94.491903  
scale: 10350



8/12/2011

# Anderson - Farm

## Soil Test Sample Number



-94.4966  
36.6678



**Customer:** Moark Spreading  
**Address:** 1100 Blair Ave  
 Neosho, Mo 64850  
**Boundary Area:** 230.79 (ac)  
**Min:** 1.000000  
**Avg:** 13.038429  
**Max:** 25.000000  
**Std. Dev:** 6.795715  
**Sample Depth:** 0 (in) - 6 (in)  
**Start Date:** 8/30/2011 3:18:35 PM  
**End Date:** 8/30/2011 3:18:35 PM

val	ac
1.000000 - 3.280000	25.64
3.280000 - 5.800000	23.49
5.800000 - 8.920000	21.69
8.920000 - 11.800000	25.90
11.800000 - 14.440000	32.43
14.440000 - 17.080000	32.68
17.080000 - 19.600000	21.09
19.600000 - 22.240000	32.06

22.240000 - 25.000000  
 Sample Number  
 Field Boundary





