Permit No. CP0002561

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

CONSTRUCTION PERMIT

The Missouri Department of Natural Resources hereby issues a permit to:

Jared & Erica Benoit
Benoit Poultry Processing
Earthen Basin
14844 Audrain 924
Centralia, MO 65240

for the construction of (described facilities):

See attached.

Permit Conditions:

See attached.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (department).

As the department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

A representative of the department may inspect the work covered by this permit during construction. Issuance of a permit to operate by the department will be contingent on the work substantially adhering to the approved plans and specifications.

This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

January 26, 2026
Effective Date

January 26, 2028
Expiration Date

Heather Peters, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Construction of a septic tank and an earthen basin for storage and treatment of poultry processing process wastewater prior to land application. The design flow of the facility is 454 gpd.

This project will also include general site work appropriate to the scope and purpose of the project and all necessary appurtenances to make a complete and usable wastewater treatment facility.

II. COST ANALYSIS FOR COMPLIANCE

Pursuant to Section 644.145, RSMo, when issuing permits under this chapter that incorporate a new requirement for discharges from publicly owned combined or separate sanitary or storm sewer systems or publicly owned treatment works, or when enforcing provisions of this chapter or the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., pertaining to any portion of a publicly owned combined or separate sanitary or storm sewer system or [publicly owned] treatment works, the Department of Natural Resources shall make a "finding of affordability" on the costs to be incurred and the impact of any rate changes on ratepayers upon which to base such permits and decisions, to the extent allowable under this chapter and the Federal Water Pollution Control Act. This process is completed through a cost analysis for compliance. Permits that do not include new requirements may be deemed affordable.

The department is not required to complete a cost analysis for compliance because the facility is not a combined or separate sanitary sewer system for a publically-owned treatment works.

III. CONSTRUCTION PERMIT CONDITIONS

The permittee is authorized to construct subject to the following conditions:

1. This construction permit does not authorize discharge.

2. All construction shall be consistent with plans and specifications signed and sealed by Jeff Browning, P.E. with Allied Engineering Services and as described in this permit.

3. The department must be contacted in writing prior to making any changes to the plans and specifications that would directly or indirectly have an impact on the capacity, flow, system layout, or reliability of the proposed wastewater treatment facilities or any design parameter that is addressed by 10 CSR 20-8, in accordance with 10 CSR 20-8.110(11).

4. State and federal law does not permit bypassing of raw wastewater, therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the department's Northeast Regional Office per 10 CSR 20-7.015(9)(G).

5. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of 1 acre or more to obtain a Missouri state operating permit to discharge stormwater. The permit requires best management practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits will only be obtained by means of the department's ePermitting system available online at https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem. See https://dnr.mo.gov/data-e-services/water/electronic-permitting-epermitting for more information.

6. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.

10 CSR 20-8.140 Wastewater Treatment Facilities

- Flood protection shall apply to new construction and to existing facilities undergoing major modification. The wastewater facility structures, electrical equipment, and mechanical equipment shall be protected from physical damage by not less than the one hundred- (100-) year flood elevation. 10 CSR 20-8.140(2)(B)

- Unless another distance is determined by the Missouri Geological Survey or by the department's Public Drinking Water Branch, the minimum distance between wastewater treatment facilities and all potable water sources shall be at least three hundred feet (300'). 10 CSR 20-8.140(2)(C)1.

- No treatment unit with a capacity of twenty-two thousand five hundred gallons per day (22,500 gpd) or less shall be located closer than the minimum distance of 200' to a neighboring residence and 50' to property line for lagoons; 200' to a neighboring residence for open recirculating media filters following primary treatment; and 50' to a neighboring residence for all other discharging facilities. See 10 CSR 20-2.010(68) for the definition of a residence. 10 CSR 20-8.140(2)(C)2

- Facilities shall be readily accessible by authorized personnel from a public right–of-way at all times. 10 CSR 20-8.140(2)(D)

- Adequate provisions shall be made to effectively protect facility personnel and visitors from hazards. The following shall be provided to fulfill the particular needs of each wastewater treatment facility:
    - Fencing. Enclose the facility site with a fence designed to discourage the entrance of unauthorized persons and animals; 10 CSR 20-8.140 (8) (A)

10 CSR 20-8.150 Preliminary Treatment.

- All wastewater treatment facilities must have a screening device, comminutor, or septic tank for the purpose of removing debris and nuisance materials from the influent wastewater. 10 CSR 20-8.150(2)

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10 CSR 20-8.180 Biological Treatment.

- A septic tank must have a minimum capacity of at least one thousand (1,000) gallons. 10 CSR 20-8.180(2)(A)

- The septic tank shall be baffled. 10 CSR 20-8.180(2)(B)

10 CSR 20-8.200 Wastewater Treatment Lagoons and Wastewater Irrigation Alternatives.

- Lagoon design for BOD_5 loadings shall not exceed thirty-four pounds per day per acre (34 lbs/day/acre) at the three-foot (3') operating depth in the primary cells. 10 CSR 20-8.200(4)(A)1.

- Treatment prior to surface irrigation shall provide performance equivalent to that obtained from a primary wastewater lagoon cell designed and constructed in accordance with 10 CSR 20-8.200(4), except that the lagoon depth may be increased to include wastewater storage in addition to the primary volume. 10 CSR 20-8.200(4)(B).

- Lagoon berms shall be constructed of relatively impervious material and compacted to at least ninety-five percent (95%) maximum dry density test method to form a stable structure. 10 CSR 20-8.200(5)(A)1.

- The minimum berm width shall be eight feet (8') to permit access of maintenance vehicles. 10 CSR 20-8.200(5)(A)2.

- Minimum freeboard shall be two feet (2'). 10 CSR 20-8.200(5)(A)3.

- An emergency spillway shall be provided that—
    - Prevents the overtopping and cutting of berms; 10 CSR 20-8.200(5)(A)4.A.
    - Is compacted and vegetated or otherwise constructed to prevent erosion; 10 CSR 20-8.200(5)(A)4.B. and
    - Has the ability for a representative sample to be collected, if discharging. 10 CSR 20-8.200(5)(A)4.C.

- The soil of the lagoon bottom shall be compacted with the moisture content between two percent (2%) below and four percent (4%) above the optimum water content and compacted to at least ninety-five percent (95%) maximum dry density test method. 10 CSR 20-8.200(5)(B)

- The lagoon shall be sealed to ensure that seepage loss is as low as possible and has a design permeability not exceeding 1.0 x 10-7 cm/sec. 10 CSR 20-8.200(5)(C)1.

- The minimum thickness of the compacted clay liner must be twelve inches (12"). For permeability coefficients greater than 1.0×10^{-7} cm/sec or for heads over five feet (5') such as an aerated lagoon system, the following formula shall be used to determine minimum seal thickness, Equation 200-1 per 10 CSR 20-8.200(5)(C)2.:

Equation 200-1

$$t = \frac{H \times K}{5.4 \times 10^{-7\ cm/sec}}$$

where:
K = the permeability coefficient of the soil in question;
H = the head of water in the lagoon; and
t = the thickness of the soil seal.

- Seep collars shall be provided on drainpipes where they pass through the lagoon seal. 10 CSR 20-8.200(5)(C)4.

- Unlined corrugated metal pipe shall not be used for influent lines due to corrosion problems. 10 CSR 20-8.200(5)(D)1.

- The influent line(s) shall be located along the bottom of the lagoon so that the top of the pipe is just below the average elevation of the lagoon seal; however, there shall be an adequate seal below the pipe. 10 CSR 20-8.200(5)(D)3.

- The wetted application area of a surface irrigation system must be located
    - Outside of flood-prone areas having a flood frequency greater than once every ten (10) years; 10 CSR 20-8.200(7)(B)1.
    - At least one hundred fifty feet (150') from existing dwellings or public use areas, excluding roads or highways; 10 CSR 20-8.200(7)(B)2.A.
    - At least fifty feet (50') inside the property line; 10 CSR 20-8.200(7)(B)2.B.
    - At least three hundred feet (300') from any sinkhole, losing stream, or other structure or physiographic feature that may provide direct connection between the ground water table and the surface; 10 CSR 20-8.200(7)(B)2.C.
    - At least three hundred feet (300') from any existing potable water supply well not located on the property. Adequate protection shall be provided for wells located on the application site; 10 CSR 20-8.200(7)(B)2.D.
    - One hundred feet (100') to wetlands, ponds, gaining streams (classified or unclassified; perennial or intermittent); 10 CSR 20-8.200(7)(B)2.E. and

- The wetted application area of a surface irrigation system must be Fenced, or if not fenced, provide in the construction permit application or the facility plan, the—
    - Method of disinfection being utilized; 10 CSR 20-8.200(7)(B)3.A.
    - Suitable barriers in place, 10 CSR 20-8.200(7)(B)3.B. or
    - Details on how public access is limited and not expected to be present. 10 CSR 20-8.200(7)(B)3.C.

- At a minimum, treatment prior to irrigation shall provide performance equivalent to that obtained from a primary wastewater lagoon cell and include 105 days wastewater storage in addition to the primary volume. 10 CSR 20-8.200(7)(C)

7. Upon completion of construction:

    A. Jared & Erica Benoit will become the continuing authority for operation and maintenance of these facilities;

B. Submit an electronic copy of the as builts if the project was not constructed in accordance with previously submitted plans and specifications; and

C. Submit the Statement of Work Completed form to the department in accordance with 10 CSR 20-6.010(5)(N) (https://dnr.mo.gov/document-search/wastewater-construction-statement-work-completed-mo-780-2155) and request the general operating permit MO-G220152 be issued.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

Construction of a septic tank and an earthen basin for storage and treatment of poultry processing process wastewater prior to land application. The septic tank and earthen basin system will receive flow from a poultry processing facility processing 420 birds per processing day.

2. FACILITY DESCRIPTION

The new wastewater treatment system Benoit Poultry Processing will be located at 14844 Audrain Road 924, Centralia, in Audrain County, Missouri. The facility has a design average flow of 454 gpd.

3. COMPLIANCE PARAMETERS

The proposed project is required to meet the applicable requirements of Missouri State Operating Permit, General Permit MO-G22 with an expiration date of June 30, 2027, and follow the submitted land application management plan (LAMP) which meets Industrial Nutrient Management Technical Standard (INMTS) – Edition 1.0, October 2025. The facility will be required follow subdivisions B and D of the Missouri State Operating Permit, General Permit MO-G22 which includes monitoring in accordance with Tables B-1, D-1, and D-2.

4. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

Construction will cover the following items:

- Components are designed for a design flow of 454 gpd and a peak design flow of 2,087 gpd.

- Septic Tank – A septic tank provides passive primary treatment as the settleable solids in raw wastewater settle onto the bottom of the tank. Raw wastewater will flow by gravity to the 1,500 gallon two-compartment septic tank. When the water level reaches a certain height, the wastewater flows into the second compartment. The septic tanks provide approximately 3.3 days of detention at the design average flow. The septic tank effluent will gravity flow to a single-cell earthen storage basin. Settled solids in the septic tank shall be removed by a contract hauler.

- Single Cell Earthen Storage Basin – The earthen basin will be constructed and sealed with a clay liner. The basin will have 3:1 side slopes, a depth from the top of the berm to the lagoon floor of 12 ft, with one foot for sludge depth, and two feet of freeboard plus one foot above emergency spillway. The operating depth is nine feet. The basin will be non-aerated, have a surface area of 0.13 acres, and a volume of 161,090 gallons. This provides approximately 354 days of retention at the proposed design flow and more than 105 days of retention at the proposed design average flow including the 1 in 10-year rainfall minus evaporation for the proposed storage period. The berm width will be 10 ft. The lagoon site will be fenced.

5. OPERATING PERMIT

After completion of construction project submit: the statement of work completed, and as-builts if the project was not constructed in accordance with previously submitted plans and specifications. Request the Missouri State Operating Permit, General Permit MO-G220152, be issued as application form P, and the $150 fee has been submitted.

V. NOTICE OF RIGHT TO APPEAL

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Section 621.250 RSMo. To appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Any appeal should be directed to:

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

Andrew Sell
Engineering Section
andrew.sell@dnr.mo.gov

Chia-Wei Young, P.E.
Engineering Section
chia-wei.young@dnr.mo.gov

APPENDICES

- **Setback Map**

Land Application Setbacks - LWE25162 - Benoit Poultry Processing - Audrain County

**Limitations to Consider- Do not use area for the application of treated wastewater if one or more of the following limitations is present

- bedrock that is within 24" of ground surface
- Class W or mitigated wetland
- ponded water or wetness
- frequently floods
- Outstanding State or National Resource Water
- biocriteria reference location

***The streams displayed on the map do not include smaller stream segments and/or intermittent streams.

No land applying within:

50 ft: - property lines
- public roads
- drainage ditches

100 ft: - ponds or lakes
- streams or intermittent streams
- tributaries

150 ft: - occupied residences
- public buildings
- public use areas

300 ft: - wells
- sinkholes
- losing streams
- upstream of surface drinking water intakes

500 ft: - Outstanding State Resource Water
- Outstanding National Resource Water

1000 ft: - upstream of streams, lakes, or reservoirs identified as critical habitat for endangered species
- upstream of biocriteria reference locations

**If an established vegetated buffer or the wastewater is disinfected, the setbacks established above may be decreased if the applicant demonstrates the risk is mitigated.

Although the data in this data set have been compiled by the Missouri Department of Natural Resources, no warranty, expressed or implied, is made by the Department as to the accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility is assumed by the Department in the use of these data or related materials.

MISSOURI DEPARTMENT OF NATURAL RESOURCES

- **Site Map**


SCALE: 1" = 250'
Property Line (50')
Pond (100')
11.8 AC
10.4 AC
Road (50')
Property Line (50')
Pond (100')
Pond (100')
3.9 AC
2.2 AC
Pond (100')
Lagoon
Septic Tank
Processing Building
Road (50')
(20') WIDE
BENOIT POULTRY PROCESSING
14844 AUDRAIN ROAD 924
CENTRALIA, MO 65240
FIELD MAP
W/SETBACKS
ALLIED ENGINEERING SERVICES, LLC
P.O. BOX 22
HILEC, MO 63377
PHONE: (573) 324-6860