

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

Bryant C. Disharoon
Old Homeplate Restaurant Wastewater Treatment Plant
5 Club Court
Union, MO 63037

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.

August 3, 2018
Effective Date


Edward B. Galbraith, Director, Division of Environmental Quality

August 2, 2020
Expiration Date


Chris Wieberg, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Modification to an existing wastewater treatment facility by the addition of an ultraviolet (UV) disinfection system consisting of one (1) reactor within a single channel to make the facility complete and usable to treat the wastewater from a population equivalent of 15 with a design daily discharge of 1,500 GPD. This facility discharges into the Tributary to Cedar Creek (C stream) in Franklin County, Missouri.

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 in accordance with the plans and specifications submitted by Phillips Engineering LLC on June 21, 2018.
3. The Department must be contacted in writing prior to making any changes to the approved 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(8).

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 Kansas City Regional Office per 10 CSR 20-7.015(9)(E)2.
5. The wastewater treatment facility shall be located at least fifty feet (50') from any dwelling or establishment.
6. The wastewater treatment facility shall be located above the twenty-five (25)-year flood level.
7. Wastewater treatment facility shall not be located within one hundred feet (100'), and preferably three hundred feet (300') of any water well or water supply structure.
8. 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 dnr.mo.gov/env/wpp/epermit/help.htm. See dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm for more information.
9. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the Department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of jurisdictional waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Water Protection Program at 573-751-1300 for more information. See dnr.mo.gov/env/wpp/401/ for more information.
10. Upon completion of construction:
 - A. The owner, Bryant C. Disharoon, will become the continuing authority for operation, maintenance, and modernization 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 enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(D). When the facility applies for their next operating permit renewal, please include an updated facility description on their application.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

The purpose of this project is to add an UV disinfection system to the existing facility so that it will be able to comply with the bacterial limits in its NPDES discharge permit, MO-0134643.

2. FACILITY DESCRIPTION

The facility is a Microfast 1.5 wastewater treatment plant with sludge disposal by contract hauler.

The Old Homeplate Restaurant WWTF is located at 3449 Old Highway 50, Gerald, in Franklin County, Missouri. The facility has a design average flow of 1,500 gpd and serves a hydraulic population equivalent of approximately 15 people.

3. COMPLIANCE PARAMETERS

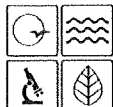
The final effluent limits the project is required to meet are established in Operating Permit MO-0134643 as E. coli of 206 #/ 100 mL monthly average and 1030 #/ 100 mL weekly average.

4. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

An closed channel, gravity flow, low pressure high intensity UV non-contact disinfection system is capable of treating a peak flow of 6,800 gpd while delivering a minimum UV intensity of 30 mJ/cm² with an expected ultraviolet transmissivity of 50% or greater. The enclosed UV system (Aqua Azul PVC-2R-HO) consists of one (1) reactor with two (2) lamps per reactor. The disinfected effluent will flow by gravity to Outfall No. 001. Replacement bulbs can be ordered and delivered over night when the control panel has a warning for low bulb power. A portable generator will provide backup power as need it.

5. OPERATING PERMIT

These construction activities do not require a modification to the facility's operating permit. It is expected that the facility owner will include a new facility description in their next operating permit renewal application to reflect the installation of an UV disinfection system.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

**APPLICATION FOR CONSTRUCTION PERMIT -
WASTEWATER FACILITY**

RECEIVED

JUN 21 2018

Water Protection Program

AP 30148
CP0002003

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$1000.00	CHECK NO. 1312
DATE RECEIVED 6-21-18	

APPLICATION OVERVIEW

The Application for Construction Permit – Wastewater Facility form is for construction pertaining to domestic wastewater treatment facilities, agrichemical facilities, and components thereof. This form has been developed in a modular format and consists of Part A and B. **All applicants must complete Part A.** Part B should be completed for applicants who currently land-apply wastewater or propose land application for wastewater treatment. **Please read the accompanying instructions before completing this form. Submittal of an incomplete application may result in the application being returned.**

PART A – BASIC INFORMATION

1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

- 1.1 Is this a Federal/State funded project? ☐ YES ☒ N/A Funding Agency: _____ Project #: _____
- 1.2 Is this an application for an agrichemical? ☐ YES (See instructions.) ☒ N/A
- 1.3 Has the Missouri Department of Natural Resources approved the proposed project's antidegradation review?
☐ YES Date of Approval: N/A
- 1.4 Has the department approved the proposed project's facility plan*?
☐ YES Date of Approval: _____ ☐ NO ☒ N/A (If Not Applicable, complete No. 1.5.)
- 1.5 [Complete only if answered Not Applicable on No. 1.4] Is a copy of the engineering report* for wastewater treatment facilities with a design flow less than 22,500 gpd included with this application?
☒ YES ☐ NO
- 1.6 Is a copy of the appropriate plans* and specifications* included with this application?
☒ YES Denote which form is submitted: ☒ Hard copy ☐ Electronic copy (See instructions.) ☐ NO
- 1.7 Is a summary of design* included with this application? ☐ YES ☒ NO
- 1.8 Is a general operating permit applicable?
☐ YES Submit the appropriate operating permit application to the Regional Office at least 60 days prior to operation.
☒ NO Enclose the appropriate operating permit application and fee submittal. Denote which form: ☐ B ☐ B2
- 1.9 Is the facility currently under enforcement with the department or the Environmental Protection Agency? ☐ YES ☒ NO
- 1.10 Is the appropriate fee included with this application? ☒ YES ☐ NO (See instructions for appropriate fee.)

* Must be affixed with a Missouri registered professional engineer's seal, signature and date.

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT

Old Homeplate Restaurant Wastewater Treatment Plant

2.2 PROJECT DESCRIPTION

Addition of UV disinfection system to existing WWTF effluent.

2.3 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION

Hauled off by contract hauler when needed.

2.4 DESIGN INFORMATION

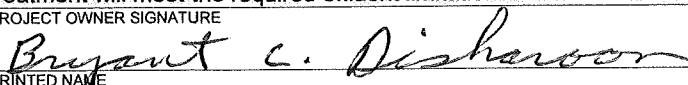
- A. Current population: _____; Design population: 15
- B. Actual Flow: 500 gpd; Design Average Flow: 1,500 gpd;
Actual Peak Daily Flow: _____ gpd; Design Maximum Daily Flow: N/A gpd;
Design Wet Weather Event: N/A

2.5 ADDITIONAL INFORMATION

- A. Is a topographic map attached? ☒ YES ☐ NO
- B. Is a process flow diagram attached? ☐ YES ☒ NO

2.6 ESTIMATED PROJECT CONSTRUCTION COST

\$ 10,000.00

3.0 WASTEWATER TREATMENT FACILITY					
NAME Old Homeplate Resaurant WWTP		TELEPHONE NUMBER WITH AREA CODE (314) 952-6306		EMAIL ADDRESS	
ADDRESS (PHYSICAL) 3449 Old Highway 50		CITY Gerald	STATE MO	ZIP CODE 63037	COUNTY Franklin
Wastewater Treatment Facility: Mo- (Outfall 1 Of 1)					
3.1 Legal Description: ¼, NW ¼, SE ¼, Sec. 31 , T 4 N , R3W (Use additional pages if construction of more than one outfall is proposed.)					
3.2 UTM Coordinates Easting (X): 648313 Northing (Y): 4254153 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)					
3.3 Name of receiving streams: Tributary to Cedar Fork					
4.0 PROJECT OWNER					
NAME Bryant C. Disharoon		TELEPHONE NUMBER WITH AREA CODE (314) 952-6306		EMAIL ADDRESS	
ADDRESS 5 Club Court		CITY Union	STATE MO	ZIP CODE 63037	
5.0 CONTINUING AUTHORITY: Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the wastewater collection system.					
NAME Owner		TELEPHONE NUMBER WITH AREA CODE (636) 931-5818		EMAIL ADDRESS	
ADDRESS		CITY	STATE	ZIP CODE	
5.1 A letter from the continuing authority, if different than the owner, is included with this application. <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A					
5.2 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A MISSOURI PUBLIC SERVICE COMMISSION REGULATED ENTITY.					
A. Is a copy of the certificate of convenience and necessity included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO					
5.3 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A PROPERTY OWNERS ASSOCIATION.					
A. Is a copy of the as-filed restrictions and covenants included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO					
B. Is a copy of the as-filed warranty deed, quitclaim deed or other legal instrument which transfers ownership of the land for the wastewater treatment facility to the association included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO					
C. Is a copy of the as-filed legal instrument (typically the plat) that provides the association with valid easements for all sewers included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO					
D. Is a copy of the Missouri Secretary of State's nonprofit corporation certificate included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO					
6.0 ENGINEER					
ENGINEER NAME / COMPANY NAME Gary V. Phillips / Phillips Engineering LLC		TELEPHONE NUMBER WITH AREA CODE (660) 351-1910		EMAIL ADDRESS gphillips@wcieng.com	
ADDRESS 2300 West Osage Street, Suite 1		CITY Pacific	STATE MO	ZIP CODE 63069	
7.0 PROJECT OWNER: I hereby certify that I am familiar with the information contained in this application and to the best of my knowledge and belief such information is true, complete, and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders, and decisions, subject to any legitimate appeal available to applicant under Missouri Clean Water Law. I also understand the issuance of the construction permit does not guarantee the proposed wastewater treatment will meet the required effluent limitations of the issued Missouri State Operating Permit for this facility.					
PROJECT OWNER SIGNATURE 					
PRINTED NAME Bryant C. Disharoon				DATE 6/18/18	
TITLE OR CORPORATE POSITION Owner		TELEPHONE NUMBER WITH AREA CODE (314) 952-6306		EMAIL ADDRESS wadisharoon@gmail.com	
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176					
END OF PART A.					
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHETHER PART B NEEDS TO BE COMPLETE.					