## **STATE OF MISSOURI**

## **DEPARTMENT OF NATURAL RESOURCES**

## MISSOURI CLEAN WATER COMMISSION



# **CONSTRUCTION PERMIT**

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

Richard Poole Walnut Hill Farms WWTF 1691 Walnut Hill Lane Philadelphia, MO 63463

for the construction of (descri	bed facilities):
See attached.	
Permit Conditions:	
See attached.	
	be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and ermit may be revoked by the Department of Natural Resources (Department).
As the Department does not examine structur include approval of these features.	ral features of design or the efficiency of mechanical equipment, the issuance of this permit does not
	ect the work covered by this permit during construction. Issuance of a permit to operate by the ubstantially adhering to the approved plans and specifications.
This permit applies only to the construction of	of water pollution control components; it does not apply to other environmentally regulated areas.
June 05, 2020	Gelward B. Falla of
Effective Date	Edward B. Galbraith, Director, Division of Environmental Quality
June 04, 2022	Chie Wiebug
Expiration Date	Chris Wieberg, Director, Water Protection Program

#### **CONSTRUCTION PERMIT**

## I. CONSTRUCTION DESCRIPTION

Construction of an earthen basin to hold wastewater to be pumped and hauled to a permitted receiving facility.

A closure plan will need to be submitted to the North East Regional Office for review and approval prior to and closure activites associated with the existing holding cell that is being replaced.

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 Klingner & Associates P.C. 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 North East Regional Office per 10 CSR 20-7.015(9)(G).
- 5. The lagoon shall be located at least 200 feet from any residence and 50 feet to the property line.
- 6. The wastewater treatment facility shall be located above the twenty-five (25)-year flood level.
- 7. 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 per 10 CSR 20-8.140(2)(B). The minimum distance between wastewater treatment facilities and all potable water sources shall be at least three hundred feet (300') per 10 CSR 20-8.140(2)(C)1.
- 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 <a href="mailto:dnr.mo.gov/env/wpp/epermit/help.htm">dnr.mo.gov/env/wpp/epermit/help.htm</a>. See <a href="mailto:dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm">dnr.mo.gov/env/wpp/epermit/help.htm</a>. See <a href="mailto:dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm">dnr.mo.gov/env/wpp/epermit/help.htm</a>. See <a href="mailto:dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm">dnr.mo.gov/env/wpp/epermit/help.htm</a>. See <a href="mailto:dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm">dnr.mo.gov/env/wpp/epermit/help.htm</a>. See <a href="mailto:dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm">dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm</a> for more information.
- 9. In accordance with 10 CSR 20-6.010(12), a full closure plan shall be submitted to the Department's North East Regional Office for review and approval of any permitted wastewater treatment system being replaced. The closure plan must meet the requirements outlined in Standard Conditions Part III of the Missouri State Operating Permit No. MOG822261. Closure shall not commence until the submitted closure plan is approved by the Department. Form J Request for Termination of a State Operating Permit, shall be submitted to the Water Protection Program for termination of any existing Missouri state operating permit, once closure is completed in accordance with the approved closure plan.
- 10. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.
  - 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)

- Enclose the pump and haul facility site with a fence designed to discourage the entrance of unauthorized persons and animals; 10 CSR 20-8.140 (4) (A) 2
- No piping or other connections shall exist in any part of the wastewater treatment facility that might cause the contamination of a potable water supply. 10 CSR 20-8.140 (7) (D) 1.
- The minimum berm width shall be eight feet (8') to permit access of maintenance vehicles. 10 CSR 20-8.200 (4) (A) 2.
- Minimum freeboard shall be two feet (2'). 10 CSR 20-8.200 (4) (A) 3.
- An emergency spillway shall be provided. 10 CSR 20-8.200 (4) (A) 4.
- An emergency spillway must have the ability for a representative sample to be collected if a discharge occurs. 10 CSR 20-8.200 (4) (A) 4. C.
- Unlined corrugated metal pipe shall not be used for influent lines due to corrosion problems. 10 CSR 20-8.200 (4) (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 (4) (D) 3.
- An alarm system shall be activated in case of high water levels. 10 CSR 20-8.140 (4)
   (D)

## 11. Upon completion of construction:

- A. Richard Poole 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 enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(N).

#### IV. REVIEW SUMMARY

### 1. CONSTRUCTION PURPOSE

The proposed construction will provide upgraded capacity for the meat processing plant and replace the existing holding basin that was previously permitted through the health department prior to DNR becoming the regulatory authority. The new holding cell will provide 22% more flow retention capacity compared to the existing structure.

## 2. FACILITY DESCRIPTION

This is a new earthen basin constructed for the purpose of pump and haul. Two lines from the meat processing shop will transfer wastewater to the holding cell.

The holding cell is located at 1691 Walnut Hill Lane, City of Philadelphia, in Marion County, Missouri. The facility has a design average flow of 200 gpd and serves a hydraulic population equivalent of approximately 2 people.

## 3. <u>COMPLIANCE PARAMETERS</u>

The facility is designed to be a holding cell to be maintained by pumping and hauling the wastewater to a treatment facility and is not permitted to discharge effluent.

## 4. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

- Storage Lagoon Lagoon will be constructed and sealed with a minimum 2 foot thick clay liner compacted to at least 95% maximum dry density. The soils will be compacted with a moisture content between 2% and 4% above optimal water content. The basin will have 3:1 side slopes, a depth from the top of the berm to the lagoon floor of 7 ft, with 2 ft for sludge depth, and 2 ft of freeboard plus 0.5 feet above emergency spillway. The operating depth is 5 ft. The basin is non-aerated, has a surface area of 3,549 ft², and a volume of 57,699 gallons at max storage. This provides approximately 368 days of retention at the proposed design flow and 155 days at the 1 in 10-year rainfall minus evaporation of 476 gpd for the proposed storage period. The berm width will be 8 ft. This lagoon site will have woven wire fencing surrounding the entire structure. Lagoon inlet pipe will be connected via two existing gravity flow sewer pipes serving the building.
- Alarm System a 120V, Conery JB65HII Alarm will be mounted on a 8 ft treated wooden 4X4 post. The alarm will have an audio buzzer and activate at an elevation of 605 ft (5ft off the bottom of the lagoon).

### 5. OPERATING PERMIT

The facility will be issued operating permit MOG822261 once the department receives the statement of work complete. Wastewate from meat processing facilities that is pumped and hauled to a permitted treatment facility is covered by the MOG822.

## 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

Aaron Sawyer Engineering Section Aaron.sawyer@dnr.mo.gov

Cindy LePage, P.E. Engineering Section Cindy.lepage@dnr.mo.gov



MISSOURI DEPARTMENT OF NATURAL RESOURCES RECEIVED
WATER PROTECTION PROGRAM
APPLICATION FOR CONSTRUCTION PERMIT 1 2020
WASTEWATER TREATMENT FACILITY
Water Protection Program

FOR	DEPA	RTMENT	USE	ONLY

5 1 0						
APPLICATION OVERVIEW						
The Application for Construction Permit – Wastewater Treatment Facility 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 matconsidered incomplete and returned.)	y be					
1.1 Is this a Federal/State funded project?  YES N/A Funding Agency: Project #:						
1.2 Has the Missouri Department of Natural Resources approved the proposed project's antidegradation review?  ☐ YES Date of Approval: ☐ ☑ N/A						
1.3 Has the department approved the proposed project's facility plan*?  ☐ YES Date of Approval: ☑ NO (If No, complete No. 1.4.)						
<ul> <li>1.4 [Complete only if answered No on No. 1.3.] Is a copy of the facility plan* for wastewater treatment facilities included application?</li> <li>✓ YES ☐ NO ☐ Exempt because</li> </ul>	with this					
1.5 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						
1.6 Is a summary of design* included with this application? ☑ YES ☐ NO						
1.7 Has the appropriate operating permit application (A, B, or B2) been submitted to the department?  ☐ YES Date of submittal: ☐ Enclosed is the appropriate operating permit application and fee submittal. Denote which form: ☐ A ☐ B ☐ B2 ☐ N/A: However, In the event the department believes that my operating permit requires revision to permit limitation such as changing equivalent to secondary limits to secondary limits or adding total residual chlorine limits, please share a draft copy prior to public notice? ☐ YES ☐ NO						
1.8 Is the facility currently under enforcement with the department or the Environmental Protection Agency?	□ NO					
1.9 Is the appropriate fee or JetPay confirmation included with this application? ✓ YES ☐ NO See Section 7.0						
* Must be affixed with a Missouri registered professional engineer's seal, signature and date.						
2.0 PROJECT INFORMATION	·-					
2.1 NAME OF PROJECT  New Lagoon - Walnut Hills Custom Meat Processing  2.2 ESTIMATED PROJECT CONSTRUCTION COS  \$ 25,000	1					
2.3 PROJECT DESCRIPTION						
Installation of a new storage lagoon for waste produced by the owner. Storage lagoon will not be equipped with any disch structure. Lagoon shall be drained by truck as needed.	arge					
2.4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION						
sludge will be stored in the lagoon, and removed by truck as needed.						
2.5 DESIGN INFORMATION						
A. Current population: 2 ; Design population: 2						
3. Actual Flow: 200 gpd; Design Average Flow: 200 gpd; Actual Peak Daily Flow: 200 gpd; Design Wet Weather Event: 10yr						
2.6 ADDITIONAL INFORMATION						
A. Is a topographic map attached? 🗸 YES 🔲 NO						

B. Is a process flow diagram attached? YES NO

3.0 WASTEWATER TREATMENT FACILIT	Υ									
NAME Walnut Hill Custom Meat Processing		TELEPHONE NUMBER WITH AREA CODE 573-439-5945		E-MAIL ADDRESS richp5@hotmail.com						
ADDRESS (PHYSICAL) 1691 Walnut Hill Lane	CITY Philadelp	phia	MO STATE	ZIP CODE 63463	Marion					
Wastewater Treatment Facility: Mo-	(Outfal	I none Of none )								
3.1 Legal Description:										
(Use additional pages if construction of more than one outfall is proposed.)										
3.2 UTM Coordinates Easting (X): 603292 Northing (Y): 4416006  For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)										
3.3 Name of receiving streams: none										
4.0 PROJECT OWNER										
NAME Richard Poole		TELEPHONE NUMBER WITH AI 573-439-5945	REA CODE	richp5@hotmail.	com					
ADDRESS	CITY		STATE	ZIP CODE						
1691 Walnut Hill Lane	Philadelp	ohia	MO	63463						
5.0 CONTINUING AUTHORITY: A continui and/or ensuring compliance with the permit n			ss, entity or p	erson(s) that will b	e operating the facility					
NAME		TELEPHONE NUMBER WITH AF	REA CODE	E-MAIL ADDRESS						
Richard Poole		573-406-4811		richp5@hotmail.	com					
ADDRESS 1691 Walnut Hill Lane	Philadelp	ohia	MO STATE	ZIP CODE 63463						
5.1 A letter from the continuing authority, if d					S NO NA					
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? YES VINO										
A. Is a copy of the certificate of convenience and necessity included with this application?   153 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A PROPERTY OWNERS ASSOCIATION.										
A. Is a copy of the as-filed restrictions and co			tion? □ V	ES 🔽 NO						
B. Is a copy of the as-filed warranty deed, qu					of the land for the					
wastewater treatment facility to the associ					or the land for the					
C. Is a copy of the as-filed legal instrument (included with this application?				with valid easemer	nts for all sewers					
D. Is a copy of the Missouri Secretary of Sta	_	ofit corporation certificate	e included wi	th this application?	YES VO					
6.0 ENGINEER										
ENGINEER NAME / COMPANY NAME		TELEPHONE NUMBER WITH AREA CODE E-MAIL ADDRESS								
Mark C. Bross / Klingner & Associates P.C.		573-221-0020		mcb@klingner.co	om					
ADDRESS 4510 Paris Gravel Road	CITY Hannibal		STATE MO	ZIP CODE 63401						
7.0 APPLICATION FEE										
CHECK NUMBER		JETPAY CONFIRMATION NUMB	ER.							
8.0 PROJECT OWNER: I certify under pena				its were prepared i	under my direction or					
supervision in accordance with a system desi	igned to as	ssure that qualified person	onnel properl	y gather and evalu	ate the information					
submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for										
gathering the information, the information sub aware that there are significant penalties for s	mitted is,	to the best of my knowled	edge and beli	ef, true, accurate,	and complete. I am					
knowing violations.	submitting	iaise information, includ	ing the possi	bility of lifte and in	iphsoninent for					
PROJECT OWNER SIGNATURE										
Tunga San										
PRINTED NAME				DATE	/					
Richard Poole		TELEPHONE NUMBER WITH AR	EA CODE	03/06/2 E-MAIL ADDRESS	1020					
TITLE OR CORPORATE POSITION  Owner		573-439-5945	EA CODE	richp5@hotmail.c	com					
		MENT OF NATURAL RE	SOURCES	No.						
WATER PROTECTION PROGRAM P.O. BOX 176										
		/IO 65102-0176								
		END OF PART A.								
REFER TO THE APPLICATION OV	/FRVIEW		HER PART	B NEEDS TO BE	COMPLETE.					