STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION

CONSTRUCTION PERMIT

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

JR Pesek, Owner
Ozarks International Raceway, LLC
P.O. Box 146
Harrisonville, MO 64701

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.

March 17, 2022
Effective Date

March 16, 2024
Expiration Date

Chris Wieberg, Director, Water Protection Program
CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Construction shall include three separate subsurface drip distribution systems, each with septic tank, ECOPOD FBBR pre-treatment system, and dosing tank.

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 Ethan K. Shackelford with Miller Companies 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 Central Field Operations Regional Office per 10 CSR 20-7.015(9)(G).

5. The completed project shall be field tested to verify actual pumped volume of each dose. The timer controls shall be set to ensure a dosing rate not to exceed the allowable rate of 0.15 gallons per square foot per day.

6. The wastewater treatment facility shall be located at least fifty feet (50’) from any dwelling or establishment.

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 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.

9. A United States Army Corps of Engineers (USACE) Clean Water Act Section 404 Department of the Army permit and a Section 401 Water Quality Certification issued by the Department may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied or notification is provided that no Section 404 permit is required by the USACE. You must contact your local USACE district since they determine what waters are jurisdictional and which permitting requirements may apply. You may call the Department’s Water Protection Program, Operating Permits Section at 573-522-4502 for more information. See https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality for more information.

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

- 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 50 feet to a neighboring residence. 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)

• All outfalls shall be posted with a permanent sign indicating the outfall number (i.e., Outfall #001). 10 CSR 20-8.140 (6) (C)

• All wastewater treatment facilities shall be provided with an alternate source of electric power or pumping capability to allow continuity of operation during power failures. 10 CSR 20-8.140 (7) (A) 1.

• Electrical systems and components in raw wastewater or in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors that are normally present, shall comply with the NFPA 70 National Electric Code (NEC) (2017 Edition), as approved and published August 24, 2016, requirements for Class I, Division 1, Group D locations. 10 CSR 20-8.140 (7) (B)

• An audiovisual alarm or a more advanced alert system, with a self-contained power supply, capable of monitoring the condition of equipment whose failure could result in a violation of the operating permit, shall be provided for all wastewater treatment facilities. 10 CSR 20-8.140 (7) (C)

• 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.

• Where a separate non-potable water supply is to be provided, a break tank will not be necessary, but all system outlets shall be posted with a permanent sign indicating the water is not safe for drinking. 10 CSR 20-8.140 (7) (D) 4.

• A means of flow measurement shall be provided at all wastewater treatment facilities. 10 CSR 20-8.140 (7) (E)

• 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:
  o 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)
    ▪ Subsurface dispersion field should have controlled access to prevent damage to the system. Any applicable access hatches and alarm control panels shall remain locked at all times unless undergoing maintenance or pumping activities.
  o First aid equipment; 10 CSR 20-8.140 (8) (C)
- Posted “No Smoking” signs in hazardous areas; 10 CSR 20-8.140 (8) (D)
- Appropriate personal protective equipment (PPE); 10 CSR 20-8.140 (8) (E)
- Appropriately-placed warning signs for slippery areas, non-potable water fixtures (see subparagraph (7)(D)3.B. of this rule), low head clearance areas, open service manholes, hazardous chemical storage areas, flammable fuel storage areas, high noise areas, etc.; 10 CSR 20-8.140 (8) (I)
- Provisions for local lockout/tagout on stop motor controls and other devices; 10 CSR 20-8.140 (8) (L)
- Provisions for an arc flash hazard analysis and determination of the flash protection boundary distance and type of PPE to reduce exposure to major electrical hazards shall be in accordance with NFPA 70E Standard for Electrical Safety in the Workplace (2018 Edition), as approved and published August 21, 2017. 10 CSR 20-8.140 (8) (M)

- 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)

- 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)

- Subsurface systems shall—
  - Exclude unstabilized fill and soils that have been highly compacted and/or disturbed, such as old road beds, foundations, or similar things; 10 CSR 20-8.200 (7) (A) 1. A.
  - Provide adequate surface drainage where slopes are less than two percent (2%); 10 CSR 20-8.200 (7) (A) 1. B.
  - Provide surface and subsurface water diversion where necessary, such as a curtain or perimeter drain; 10 CSR 20-8.200 (7) (A) 1. C. and
  - Have a ten foot (10’) buffer from the property line. 10 CSR 20-8.200 (7) (A) 1. D.

- The vertical separation between the bottom of the drip lines and/or the trench and a limiting layer, including but not limited to, bedrock; restrictive horizon; or seasonal high water table, shall be no less than:
  - Twenty-four inches (24”); 10 CSR 20-8.200 (7) (A) 2. A. or
  - Twelve inches (12”) for systems dispersing secondary or higher quality effluent; 10 CSR 20-8.200 (7) (A) 2. B. or

- Subsurface systems shall be, at a minimum, preceded by preliminary treatment. 10 CSR 20-8.200 (7) (B)

- Loading rates shall not exceed the values assigned by the site and soil evaluation. 10 CSR 20-8.200 (7) (C)

- The location and size of the drains and buffers must be factored into the total area required for the drip dispersal system. 10 CSR 20-8.200 (9) (A) 1.
• The drip dispersal lines shall be placed at a minimum depth of six inches (6") below the surface. 10 CSR 20-8.200 (9) (B) 1.

• Emitters and drip dispersal lines shall be placed at a minimum on a two foot (2') spacing to achieve even distribution of the wastewater and maximum utilization of the soil. 10 CSR 20-8.200 (9) (B) 2.

11. Upon completion of construction:

A. The Ozarks International Raceway LLC will become the continuing authority for operation and maintenance of these facilities;

B. Submit an electronic copy of the as-built plans 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).

On December 29, 2021, the permittee submitted a Form B - Application for an Operating Permit for Domestic or Municipal Wastewater (≤100,000 gallons per day) and fee to the Engineering Section of the Water Protection Program. Identify on the Statement of Work Completed that the MO-G823 general permit should be issued based on the previously submitted application.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

Ozarks International Raceway is an approximately 3.97-mile vehicle racing facility with 60-car garage; a building for a media center, store, and medical facilities; and a race control building. This is a new facility. Each building will have its own subsurface drip distribution system to handle wastewater.

2. FACILITY DESCRIPTION

This is a new no-discharge system, consisting of three different subsurface drip distribution fields. Each field will include a 1,000-gallon septic tank, a 2,000-gallon pre-treatment tank with a Delta ECOPOD, a 3,000-gallon dosing tank, and a subsurface drip irrigation field.

The Ozarks International Raceway WWTF is located at 29211 MO Highway 135, outside of Gravois Mills, in Morgan County, Missouri. The facility has a total design average flow of 4,150 gpd and serves a hydraulic population equivalent of approximately 41.5 people.
3. **COMPLIANCE PARAMETERS**

The facility will be required to report sludge removed from the system, as required by the operating permit. Average percent solids, the volume (in gallons) of septage removed, the resulting dry tons of septage removed, the dates of septage removal, the person responsible for hauling and disposal, and the final disposal method and location, etc., are the minimum requirements as per Standard Condition Part III. The applicable version of Standard Conditions Part III, as of the drafting of this construction permit, may be found here:  

At this time, the required Form S can be downloaded from:  
dnr.mo.gov/document-search/form-s-section-1-domestic-sludge-reporting-mo-780-2897  
(dnr.mo.gov/sites/dnr/files/vfc/2021/09/main/form-s-section-1-domestic-sludge-reporting-mo-780-2897.pdf) and  
dnr.mo.gov/document-search/form-s-section-4-sludge-hauling-mo-780-2900  

4. **REVIEW of MAJOR TREATMENT DESIGN CRITERIA**

Construction will cover the following items:

- Components are designed for a Population Equivalent of 41.5 based on hydraulic loading to the system. The system will include three separate drip distribution systems:
  - Field 1 - garage area (designed for 1,250 gpd),
  - Field 2 - media center, store, and medical area (designed for 1,700 gpd), and
  - Field 3 - race control area (designed for 1,200 gpd).
  
  The total combined “design average” flow will be 4,150 gpd.

- Flow Measurement – Installation of accurate flow measurement devices will give the treatment facility a means of improved data analysis.
  - Flow will be accomplished via timer-controlled dosing or via using the volume of a pump truck, as needed.

- 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 a 1,000-gallon two-compartment concrete septic tank (one for each field). When the water level reaches a certain height, the wastewater flows into the second compartment by two tee-drop pipes. The septic tank is approximately 8 ft x 5 ft 7 in x 5 ft with a water level depth of 4 ft 2 in in compartment one and 3 ft 10.5 in in compartment two. The septic tanks provide at least 19 hours, 14 hours, and 20 hours of detention at design average flow for fields one, two, and three, respectively. The screened wastewater shall discharge from the second compartment into the ECOPOD tank by gravity. Settled solids in the septic tank shall be removed by a contract hauler.
• Fixed Bed Biofilm Reactor (FBBR) – Installation of one Delta ECOPOD FBBR for each field, capable of treating the design average and peak hour flows. Each FBBR is housed in a 2,000-gallon concrete tank (approximately 12 ft 11.9 in x 6 ft 9 in by 5 ft 5 in, with a 4 ft 2.5 in water depth, for a volume of at least 2,300 gallons. The hydraulic retention time at design flow is at least 46, 34, and 48 hours, respectively. The FBBR tank will include a fixed HDPE media specifically designed to act as a structural support to facilitate biofilm growth. Fields 1 and 3 will include the ECOPOD E150S media, while Field 2 will include the ECOPOD E200S media. The submerged media will be aerated by a 2 horsepower blower through course-bubble air distribution header, providing at least 49 scfm. The effluent from each FBBR will flow by gravity to a dosing tank.

• Dosing tank – Each field will include a 3,000-gallon concrete dosing tank, approximately 12 ft 10 in by 6 ft 10 in by 8 ft 2 in, with a 6 ft 8 in water depth. The hydraulic retention time for each field at design flow is at least 57, 42, and 60 hours, respectively. Each tank includes a 150-mesh disk filter, an audiovisual alarm with self-contained battery backup, and a ½-hp timer-controlled dosing pump capable of 9 gpm against a head of 105 feet TDH.

• Subsurface Soil Dispersal System – The soils at this site are rated for 0.15 gpd/sf. Hydraulic loading rate used in the design was a conservative design loading rate of 0.15 gpd/sf for the entire system. Soil morphology review was conducted during the facility plan review, and on-site soils were determined to be acceptable for this system. The soil investigation was completed by Richard L. Henderson, Certified Soil Scientist, on May 20, 2021.
  o Soils Report. In the soils investigation, there were at least six pits dug over the proposed site. Each soil test pit had surface soils described as silt loam and silt clay loam with an application rating of at least 0.15 gallons per square foot per day.
  o Distribution manifold and return lines are 1.25 in diameter.
  o Drip – The facility has selected the GeoFlow subsurface drip dispersal system with drip distribution lines buried at least eight in deep and with at least 12 in of soil between the drip lines and the limiting layer.
    ▪ Field 1 will dose four zones at 0.15 gpd/sq. ft (six doses each, approximately 11 min 19 sec per dose), which provides 24 dosings per day. Each zone is at least 2,083 sq ft, for a total of at least 8,333 sq ft. One vacuum release valve will be installed per zone. The drip distributing valve will be a Hydrotek valve Model 4404. The total drip field area is 8,564 square feet and contains at least 4,168 linear feet of ½-inch low-density polyethylene tubing fitted with emitters every 2 ft (approximately 521 emitters per zone) and capable of discharging approximately 1,250 gpd.
    ▪ Field 2 will dose six zones at 0.15 gpd/sq. ft (six doses each, approximately 11 min 19 sec per dose), which provides 36 dosings per day. Each zone is at least 1,889 sq ft, for a total of at least 11,333 sq ft. One vacuum release valve will be installed per zone. The drip distributing valve will be a Hydrotek valve Model 4606. The total drip field area is 11,475 square feet and contains at least 5,664 linear feet of...
½-inch low-density polyethylene tubing fitted with emitters every 2 ft (approximately 472 emitters per zone) and capable of discharging approximately 1,700 gpd.

- Field 3 will dose four zones at 0.15 gpd/sq. ft (six doses each, approximately 11 min 19 sec per dose), which provides 24 dosings per day. Each zone is at least 2,000 sq ft, for a total of at least 8,000 sq ft. One vacuum release valve will be installed per zone. The drip distributing valve will be a Hydrotek valve Model 4404. The total drip field area is 8,120 square feet and contains at least 4,000 linear feet of ½-inch low-density polyethylene tubing fitted with emitters every 2 ft (approximately 500 emitters per zone) and capable of discharging approximately 1,200 gpd.

- In case of an emergency, the facility will engage a septic hauler to keep each tank pumped out as needed until the situation is remedied.

5. OPERATING PERMIT

After completion of construction project submit: statement of work completed, as-builds if the project was not constructed in accordance with previously submitted plans and specifications, and ensure that Application Form B, and fee has been submitted. Missouri State Operating Permit, General Permit MO-G823197, will be issued after receipt of the above documents.

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

Scott Adams. P.E.
Engineering Section
scott.adams@dnr.mo.gov
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 may be considered incomplete and returned.)

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 □ N/A

1.3 Has the department approved the proposed project’s facility plan? □ YES □ N/A

1.4 [Complete only if answered No on No. 1.3.] Is a copy of the facility plan* for wastewater treatment facilities included with this application? □ YES □ NO □ Exempt because ______

1.5 Is a copy of the appropriate plans* and specifications* included with this application? □ YES □ N/A

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 □ N/A

□ 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? □ YES □ NO

1.9 Is the appropriate fee or JetPay confirmation included with this application? □ YES □ NO

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

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT

Ozarks International Raceway

2.2 ESTIMATED PROJECT CONSTRUCTION COST

$ 85000

2.3 PROJECT DESCRIPTION

Ozarks International Raceway sewer system will consist of three buildings (garages, media center, and race control) and three separate fields to treat domestic waste water.

2.4 SLUDGE HANDLING USE AND DISPOSAL DESCRIPTION

N/A

2.5 DESIGN INFORMATION

A. Current population: ________ Design population: 500

B. Actual Flow: _____ gpd; Design Average Flow: 4150 gpd; Actual Peak Daily Flow: _____ gpd; Design Maximum Daily Flow: _____ gpd; Design Wet Weather Event: _______

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 FACILITY

NAME
Ozarks International Raceway

ADDRESS (PHYSICAL)
29211 Highway 135
Gravois Mills
MO 65037

Wastewater Treatment Facility: Mo- (Outfall Of )

3.1 Legal Description: ¼, ¼, ¼ Sec, T, R (Use additional pages if construction of more than one outfall is proposed.)

3.2 UTM Coordinates (X): (Easting) (Y): (Northing) (Use Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

3.3 Name of receiving streams: N/A

4.0 PROJECT OWNER

NAME
Ethan K. Shackelford/R. Miller Companies LLC

ADDRESS
PO Box 282
Osage Beach
MO 65065

5.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity or person(s) who will be operating the facility and/or ensuring compliance with the permit requirements.

NAME
Same as Owner

ADDRESS
Same as Owner

5.1 A letter from the continuing authority, if different than the owner, is included with this application.

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 ☑ 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? ☐ YES ☑ 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? ☐ YES ☑ 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? ☐ YES ☑ NO

D. Is a copy of the Missouri Secretary of State’s nonprofit corporation certificate included with this application? ☐ YES ☑ NO

6.0 ENGINEER

ENGINEER NAME / COMPANY NAME
Ethan K. Shackelford/R. Miller Companies LLC

ADDRESS
PO Box 282
Osage Beach
MO 65065

7.0 APPLICATION FEE

☐ CHECK: NUMBER ☐ JETRAY CONFIRMATION NUMBER 20029521

6.9 PROJECT OWNER: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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 submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PROJECT OWNER SIGNATURE

PRINTED NAME
JR Pesek

DATE
12/27/2021

TITLE OR CORPORATE POSITION
Owner

TELEPHONE NUMBER WITH AREA CODE
816-918-3163

E-MAIL ADDRESS
jr@pfcompanies.net

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.
**PART B – LAND APPLICATION ONLY**
(Submit only if the proposed construction project includes land application of wastewater.)

### 8.0 FACILITY INFORMATION

8.1 Type of wastewater to be irrigated:  
☐ Domestic  ☐ State/National Park  ☐ Seasonal business  
☐ Municipal  ☐ Municipal with a pretreatment program or significant industrial users  
☐ Other (explain)  

8.2 Months when the business or enterprise will operate or generate wastewater:  
☐ 12 months per year  ☐ Part of the year (list months):  

8.3 This system is designed for:  
☐ No-discharge.  
☐ Partial irrigation when feasible and discharge rest of time.  
☐ Irrigation during recreational season, April – October, and discharge during November – March.  
☐ Other (explain)  

### 9.0 STORAGE BASINS

9.1 Number of storage basins:  
(Use additional pages if greater than three basins.)  

9.2 Type of basins:  
☐ Steel  ☐ Concrete  ☐ Fiberglass  ☐ Earthen  ☐ Earthen with membrane liner  

9.3 Storage basin dimensions at inside top of berm (feet). Report freeboard as feet from top of berm to emergency spillway or overflow pipe.  

<table>
<thead>
<tr>
<th>Basin #1</th>
<th>Length</th>
<th>Width</th>
<th>Depth</th>
<th>Freeboard</th>
<th>Depth</th>
<th>Safety</th>
<th>% Slope</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basin #2</th>
<th>Length</th>
<th>Width</th>
<th>Depth</th>
<th>Freeboard</th>
<th>Depth</th>
<th>Safety</th>
<th>% Slope</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basin #3</th>
<th>Length</th>
<th>Width</th>
<th>Depth</th>
<th>Freeboard</th>
<th>Depth</th>
<th>Safety</th>
<th>% Slope</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9.4 Storage Basin operating levels (report as feet below emergency overflow level).  

<table>
<thead>
<tr>
<th>Basin #1</th>
<th>Maximum operating water level</th>
<th>Minimum operating water level</th>
<th>ft</th>
<th>ft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basin #2</th>
<th>Maximum operating water level</th>
<th>Minimum operating water level</th>
<th>ft</th>
<th>ft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basin #3</th>
<th>Maximum operating water level</th>
<th>Minimum operating water level</th>
<th>ft</th>
<th>ft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9.5 Design depth of sludge in storage basins.  

<table>
<thead>
<tr>
<th>Basin #1</th>
<th>Design depth</th>
<th>ft</th>
<th>Basin #2:</th>
<th>Design depth</th>
<th>ft</th>
<th>Basin #3:</th>
<th>Design depth</th>
<th>ft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9.6 Existing sludge depth, if the basins are currently in operation.  

<table>
<thead>
<tr>
<th>Basin #1</th>
<th>Existing sludge depth</th>
<th>ft</th>
<th>Basin #2:</th>
<th>Existing sludge depth</th>
<th>ft</th>
<th>Basin #3:</th>
<th>Existing sludge depth</th>
<th>ft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9.7 Total design sludge storage:  

dry tons and  cubic feet  

### 10.0 LAND APPLICATION SYSTEM

10.1 Number of irrigation sites:  

<table>
<thead>
<tr>
<th>Location</th>
<th>Total Acres</th>
<th>Maximum % field slopes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10.2 Type of vegetation:  
☐ Grass hay  ☐ Pasture  ☐ Timber  ☐ Row crops  
☐ Other (describe)  

10.3 Wastewater flow (dry weather) gallons per day:  
Average annual  Seasonal  Off-season  

10.4 Land application rate (design flow including 1-in-10 year storm water flows):  

<table>
<thead>
<tr>
<th>Design:</th>
<th>inches/year</th>
<th>inches/hour</th>
<th>inches/day</th>
<th>inches/week</th>
<th>Actual:</th>
<th>inches/year</th>
<th>inches/hour</th>
<th>inches/day</th>
<th>inches/week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10.5 Total irrigation per year (gallons):  

<table>
<thead>
<tr>
<th>Design:</th>
<th>gallon</th>
<th>Actual:</th>
<th>gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10.6 Actual months used for irrigation (check all that apply):  
☐ Jan  ☐ Feb  ☐ Mar  ☐ Apr  ☐ May  ☐ Jun  ☐ Jul  ☐ Aug  ☐ Sep  ☐ Oct  ☐ Nov  ☐ Dec  

10.7 Land application rate is based on:  
☐ Hydraulic Loading  ☐ Other (describe)  
☐ Nutrient Management Plan (N&P)  If N&P is selected, is the plan included?  ☐ YES  ☐ NO