

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



**CONSTRUCTION PERMIT**

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

Greg Ordway  
Owner  
Cedar Creek Resort WWTF  
3251 Pinetree Drive  
Columbia, MO 65201

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.

February 9, 2021  
Effective Date

  
Edward B. Galbraith, Director, Division of Environmental Quality

February 8, 2023  
Expiration Date

  
Chris Wieberg, Director, Water Protection Program

## **CONSTRUCTION PERMIT**

### **I. CONSTRUCTION DESCRIPTION**

Construction will consist of incorporating two existing 2,000 gallon septic tanks that receive wastewater from 40 existing campsites into a new system providing secondary treatment followed by subsurface dispersal of the wastewater for an additional 40 proposed campsites. The new components will include a new 4,500 gallon septic tank, two bio-microbics high strength FAST 4.5 units, a 6,000 gallon pump transfer tank, two 4,000 gallon drip pump tanks, an insulated filtration unit, followed by two subsurface drip dispersal fields.

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 The Sewage Doctor, LLC 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 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 0.083 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 treatment facility shall be located above the twenty-five (25)-year flood level.
8. 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.
9. 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](http://dnr.mo.gov/env/wpp/epermit/help.htm). See [dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm](http://dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm) for more information.
10. 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/](http://dnr.mo.gov/env/wpp/401/) for more information.
11. 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)
- 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.
- 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.
- Hot water for any direct connections shall not be taken directly from a boiler used for supplying hot water to a digester heating unit or heat exchanger. 10 CSR 20-8.140(7)(D)2.
- Where a potable water supply is to be used for any purpose in a wastewater treatment facility other than direct connections, a break tank, pressure pump, and pressure tank or a reduced pressure backflow preventer consistent with the department's Public Drinking Water Branch shall be provided. 10 CSR 20-8.140(7)(D)3.A.
- For indirect connections, a sign shall be permanently posted at every hose bib, faucet, hydrant, or sill cock located on the water system beyond the break tank or backflow preventer to indicate that the water is not safe for drinking. 10 CSR 20-8.140(7)(D)3.B.
- 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)

### **10 CSR 20-8.130 Pumping Stations**

- 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). 10 CSR 20-8.130(2)(A)
- 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: 10 CSR 20-8.130(2)(C)
  - Gratings over appropriate areas of treatment units where access for maintenance is necessary; 10 CSR 20-8.140(8)(B)
  - First aid equipment; 10 CSR 20-8.140(8)(C)
  - Explosion-proof electrical equipment, non-sparking tools, gas detectors, and similar devices, in work areas where hazardous conditions may exist, such as digester vaults and other locations where potentially explosive atmospheres of flammable gas or vapor with air may accumulate.; 10 CSR 20-8.140(8)(K)
  - 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)
- The distance between wastewater pumping stations and all potable water sources shall be at least fifty feet (50') in accordance with 10 CSR 23-3.010(1)(B). 10 CSR 20-8.130(2)(D).
- Multiple pumps shall be provided except for design average flows of less than fifteen hundred (1,500) gallons per day. 10 CSR 20-8.130 (3) (B) 1.
- Electrical equipment. Electrical equipment shall be provided with the following requirements:
  - 10 CSR 20-8.130 (3) (B) 2. A. Electrical equipment must comply with 10 CSR 20-8.140(7)(B);
  - Utilize corrosive resistant equipment located in the wet well; 10 CSR 20-8.130(3)(B)2.B.
  - Provide a watertight seal and separate strain relief for all flexible cable; 10 CSR 20-8.130(3)(B)2.C.

- o Install a fused disconnect switch located above ground for the main power feed for all pumping stations. 10 CSR 20-8.130(3)(B)2.D.
- o When such equipment is exposed to weather, it shall comply with the requirements of weather proof equipment; enclosure NEMA 4; NEMA 4X where necessary; and NEMA Standard 250-2014, published December 15, 2014. 10 CSR 20-8.130(3)(B)2.E.
- o Install lightning and surge protection systems; 10 CSR 20-8.130(3)(B)F.
- o Install a one hundred ten volt (110 V) power receptacle inside the control panel located outdoors to facilitate maintenance; 10 CSR 20-8.130(3)(B)2.G.
- o Provide Ground Fault Circuit Interruption (GFCI) protection for all outdoor receptacles. 10 CSR 20-8.130(3)(B)2.H.
- Water level controls must be accessible without entering the wet well. 10 CSR 20-8.130(3)(C)
- Valves shall not be located in the wet well unless integral to a pump or its housing. 10 CSR 20-8.130(3)(D)
- Covered wet wells shall have provisions for air displacement to the atmosphere, such as an inverted and screened “j” tube or other means. 10 CSR 20-8.130(3)(E)
- There shall be no physical connection between any potable water supply and a wastewater pumping station, which under any conditions, might cause contamination of the potable water supply. If a potable water supply is brought to the station, 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 20-8.130(3)(G)
- 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. CSR 20-8.140(2)(B). 10 CSR 20-8.130(2)(A)
- Submersible pump stations shall meet the applicable requirements under section (3) of this rule, except as modified in this section. 10 CSR 20-8.130(5)
  - o Pump Removal. Submersible pumps shall be readily removable and replaceable without personnel entering, dewatering, or disconnecting any piping in the wet well. 10 CSR 20-8.130(5)(A)
  - o 10 CSR 20-8.130(5)(B) Valve Chamber and Valves. Valves required under subsection (3)(D) of this rule shall be located in a separate valve chamber.
  - o A minimum access hatch dimensions of twenty-four inches by thirty-six inches (24" x 36") shall be provided. 10 CSR 20-8.130(5)(B)1.
- A portable pump connection on the discharge line with rapid connection capabilities shall be provided. 10 CSR 20-8.130(5)(B)2.

- Alarm systems with an uninterrupted power source shall be provided for pumping stations. 10 CSR 20-8.130(6)
- Where independent substations are used for emergency power, each separate substation and its associated distribution lines shall be capable of starting and operating the pump station at its rated capacity. 10 CSR 20-8.130(7)(B)
- 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:
  - 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)

### **10 CSR 20-8.200 Wastewater Treatment Lagoons and Wastewater Irrigation Alternatives**

#### 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:
  - Twelve inches (12") for systems dispersing secondary or higher quality effluent; 10 CSR 20-8.200(7)(A)2.B.
- 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.

12. Upon completion of construction:

- A. Greg Ordway 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;
- C. Submit the enclosed form Statement of Work Completed to the Department in accordance with 10 CSR 20-6.010(5)(N) and request that the operating permit MOG823176 be issued.

#### **IV. REVIEW SUMMARY**

##### **1. CONSTRUCTION PURPOSE**

The proposed construction will provide treatment capacity for the existing flows being generated by 40 campsites as well as 40 new campsites to be added. The existing flows will no longer be pumped and hauled.

##### **2. FACILITY DESCRIPTION**

The existing infrastructure will be connected with the proposed new construction and all flows directed to two subsurface drip dispersal fields for final treatment.

The Cedar Creek Resort WWTF is located at 3251 Pinetree Drive, Columbia, in Callaway County, Missouri. The facility has a design average flow of 7,200 gpd and serves a hydraulic population equivalent of approximately 240 people.

##### **3. COMPLIANCE PARAMETERS**

The proposed project is required to meet the applicable requirements of MO-G823176 with an expiration date of August 24, 2022. The facility will be required to follow Subsurface Dispersal Operational Requirements and keep records of maintenance activities for at least five years.



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

- Components are designed for a Population Equivalent of 240 based on hydraulic loading to the system.
- Existing Septic Tanks – Two existing 2,000 gallon septic tanks will be incorporated into the final design. The 40 campsites served by the two septic tanks will maintain their connection to these tanks. Effluent from the septic tanks will be directed to one of the 4,000 gallon Bio-Microbics FAST units. The septic tanks provide approximately 0.55 days of detention at design average flow.
- New 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 4,500 gallon precast septic tank. Wastewater enters and exits the tank through two separate tee-drop pipes. The septic tanks provide approximately .625 days of detention at design average flow. A Polylok 525 effluent filter will be installed on the effluent pipe. Effluent will flow to a Bio-Microbics FAST unit.
- Bio-Microbics FAST 4.5 Units – The FAST units provide secondary biological treatment by utilizing an air lift system to circulate wastewater over media which allow for bacteria to attach to the media. Two FAST 4.5 units, each with a rated capacity of 4,500 gpd at a loading rate of 10 lbs. BOD<sub>5</sub> per day will be installed, one following the two existing tanks and the second following the new 4,500 gallon septic tank. Each unit will provide treatment for approximately half of the total design flow. Each FAST unit will be housed in a 6,000 gallon concrete tank. The FAST 4.5 units are approximately 13 ft. in length by 6 ft. 10 in. Units will be equipped with a vent pipe. The effluent pipe will be approximately 34 ¾ in. above the bottom of the unit with a minimum of 19 in. separation from the effluent to the top of the unit. Each unit will be provided a blower capable of providing 90-140 CFM. Air supply lines will be minimum 3 in. diameter galvanized or stainless steel pipe. An audio/visual alarm is provided for each unit. The effluent pipe is 4 in. PVC. Effluent flows from the two units to a 6,000 gallon transfer tank.
- Transfer tank – a 6,000 gallon precast tank will receive flows from both FAST units. A Zoeller HH Flow Mate Effluent Pump (N161) will be installed to transmit flows to the drip field pump tanks. The pump is rated at ½ HP and delivers a flow rate of 60 gpm at 35' TDH and have a Zoeller 10-1038 control panel rated at 20 amps. A Sim/Tech STF-100 pressure filter will be installed on the effluent side of the effluent pump with a ball valve attached after the filter. Float switches will be installed to pump 300 gallons with a drawdown of 4.5 in.
- Drip System Pump Tanks – Two 4,000 gallon precast concrete pump tanks will push the effluent up to the drip fields via duplex Zoeller HH pumps (5034-0010) with 2 HP, providing 30.9 gpm at 158 ft. TDH. The effluent line will be equipped

with a union and ball valve while the return manifold will have a ball valve attached at the second tank. Both tanks are equipped with 24” risers with safety lid and Zoeller 10-1430 panel. A JNM Technologies ACT WFS 2X2 water filtration system will be installed directly after the pump tanks and will be housed in an insulated shed with a heater to prevent freezing during the winter.

- **Subsurface Soil Dispersal System** – The soils at this site are rated for 0.083 gpd/sf. The facility decided to use a conservative design loading rate of 0.083 gpd/sf for the entire system. Soil morphology review was conducted during the construction permit application review and on site soils were determined to be acceptable for this system. The soil investigation was completed by Bryan Mayhan, Certified Soil Scientist with All Missouri Soils, LLC on October 16, 2016.
  - **Soils Report.** In the soils investigation, there were 3 pits dug over the proposed site. In accordance with 10 CSR 20-8.200(7)(A)2 the vertical separation between the restrictive layer will be a minimum of 12 inches. The water table was identified as the restrictive layer at 28 in. below ground surface while the drip lines will be installed at a depth of approximately 10 inches.
  - **Drip** – The facility has selected the NETAFIM subsurface drip dispersal system. The required absorption area is 86,434 ft<sup>2</sup> and contains 43,217 lf of tubing. This will be split into two dispersal fields of approximately 1 acre each. Each field will have 21,608 ft. of drip line with emitters spaced 2 ft. on centers. The NETAFIM emitters are rated to deliver 0.61gph. The system will dose the two field at 0.0833 gpd/sq. ft, with pump timer set to dose 11 minutes on and 10.2 minutes off with for a dose of 50 gallons per zone. There will be 9 laterals per zone with lateral lengths being 400 ft. and 3,600 lf. per zone. At 2 ft. spacing of emitters a total of 1,800 emitters will be used. Vacuum release valves will be installed in valve boxes. Each field will have dosing of zones controlled by a 6-valve box equipped with 6 Netafim PVC 75, 2 in., automatic valves followed by 2 in. PVC check valves.

## **5. OPERATING PERMIT**

After completion of construction project submit: Statement of Work Completed and as-builts if the project was not constructed in accordance with previously submitted plans and specifications. Application Form B, and fee have already been submitted to the Department. Missouri State Operating Permit, General Permit MO-G823176, 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>

Aaron Sawyer  
Engineering Section  
[aaron.sawyer@dnr.mo.gov](mailto:aaron.sawyer@dnr.mo.gov)

Cailie Carlile, P.E., Construction Permit Unit Chief  
Engineering Section  
[cailie.carlile@dnr.mo.gov](mailto:cailie.carlile@dnr.mo.gov)



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM

**APPLICATION FOR CONSTRUCTION PERMIT – WASTEWATER TREATMENT FACILITY**

RECEIVED

Water Protection Program

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$1000.00	CHECK NO. 52760
DATE RECEIVED 9-25-20	[Signature]

**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 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.)
- 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 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?  YES  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 CEDAR CREEK RESORT	2.2 ESTIMATED PROJECT CONSTRUCTION COST \$ 250,000
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2.3 PROJECT DESCRIPTION  
Collect wastewater from 80 RVs, treat aerobically and land apply through subsurface irrigation.

2.4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION  
All tanks will periodically be pumped of sludge which will be hauled to a permitted site.

2.5 DESIGN INFORMATION

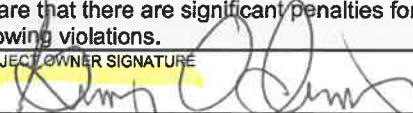
A. Current population: \_\_\_\_\_; Design population: 240

B. Actual Flow: \_\_\_\_\_ gpd; Design Average Flow: 7200 gpd;  
Actual Peak Daily Flow: \_\_\_\_\_ gpd; Design Maximum Daily Flow: 7200 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 Cedar Creek Resort		TELEPHONE NUMBER WITH AREA CODE 573-239-8340		E-MAIL ADDRESS lordway@me.com
ADDRESS (PHYSICAL) 3251 Pinetree Dr.	CITY Columbia	STATE MO	ZIP CODE 65201	COUNTY Callaway
Wastewater Treatment Facility: Mo- (Outfall Of )				
3.1 Legal Description: _____ ¼, _____ ¼, _____ ¼, Sec. 15, T 48N, R 11W (Use additional pages if construction of more than one outfall is proposed.)				
3.2 UTM Coordinates Easting (X): 385649.6 Northing (Y): -92843.9 For 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 Greg Ordway		TELEPHONE NUMBER WITH AREA CODE 573-239-8340		E-MAIL ADDRESS lordway@me.com
ADDRESS 3251 Pinetree Drive	CITY Columbia	STATE MO	ZIP CODE 65201	
<b>5.0 CONTINUING AUTHORITY:</b> A continuing authority is a company, business, entity or person(s) that will be operating the facility and/or ensuring compliance with the permit requirements.				
NAME Same as Owner		TELEPHONE NUMBER WITH AREA CODE		E-MAIL 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 Dennis Sievers / The Sewage Doctor, LLC		TELEPHONE NUMBER WITH AREA CODE 573-808-1875		E-MAIL ADDRESS thesewagedoctor@gmail.com
ADDRESS 1209 Straton Dr	CITY Columbia	STATE MO	ZIP CODE 65203	
7.0 APPLICATION FEE				
<input type="checkbox"/> CHECK NUMBER <input type="checkbox"/> JETPAY CONFIRMATION NUMBER				
<b>8.0 PROJECT OWNER:</b> 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 Greg Ordway			DATE 9/23/20	
TITLE OR CORPORATE POSITION Owner		TELEPHONE NUMBER WITH AREA CODE 573-239-8340		E-MAIL ADDRESS go.kps@icloud.com
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176				
<b>END OF PART A.</b>				
<b>REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHETHER PART B NEEDS TO BE COMPLETE.</b>				