

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

Mike Popa
10002 Pioneer Boulevard # 108
Sante Fe Springs, CA 90670

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 13, 2019
Effective Date


Edward B. Galbraith, Director, Division of Environmental Quality

February 12, 2021
Expiration Date


Chris Wieberg, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Construction of a no-discharge wastewater treatment facility consisting of three – 2000 gallon septic tanks in series – the first one with a Bio-Microbics Sanitee SNT818 effluent filter and the third with two Polylok Model PL-250 effluent filters, two – 2000 gallon pump storage tanks and one – 1000 gallon pump storage tank interconnected with a 2000 gallon duplex pump tank with each one horsepower pump designed for 60 gallons per minute at 42 feet of total dynamic head, approximately 1000 feet of 2 inch PVC force main, one K-Rain 6000 distributing valve, an absorption field consisting of six zones – each zone with 10 – one-inch diameter laterals of 60 feet in length, and all the necessary appurtenances to make the facilities complete and usable to treat the waste from a total population equivalent of 46 with a total average daily flow of 3480 gpd. This is a non-discharging facility to be located in the SE 1/4, of the SE 1/4, of Section 29, T30N, R19W, Webster County, Missouri. Approximate UTM coordinates for the LPP system are X=496260, Y=4126753.

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 sealed on January 7, 2019 and submitted by Tate Engineering Consultants with the exception of the revised Plan Sheets 1 and 2 with a seal date of February 4, 2019.
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 Southwest 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. 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.
7. 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.
8. 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.
9. Upon completion of construction:
 - A. The Project Owner 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 a Form B - Application for an Operating Permit for Domestic or Municipal Wastewater ($\leq 100,000$ gallons per day) and fee to the Engineering Section of the Water Protection Program 60 days prior to operation. Identify that the application is for a General permit for land application of domestic wastewater, MO-G823. The fee for the first time operating permit is \$150.00; this covers the first annual fee.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

A soil absorption wastewater treatment facility is being constructed to serve a new RV Park.

2. FACILITY DESCRIPTION

This construction is to serve a new development consisting of 28 RV camper sites and one office/camp store building. The proposed treatment system will utilize septic tanks, pump tanks and a soil absorption low pressure pipe (LPP) system.

The Rustic Meadows RV Park WWTF is located at 2449 Evergreen Road, Strafford, in Webster County, Missouri. The facility has a design average flow of 3480 gpd and serves an organic population equivalent of approximately 46 people.

3. COMPLIANCE PARAMETERS

The proposed project is required to meet the requirements of MOG823xxx, and all applicable conditions, with an expiration date of August 24, 2022.

Records of maintenance for subsurface systems must be maintained for at least five (5) years. Examples include filter replacement, pumping (removal) of sludge from tanks, etc. These records shall be made available during inspection, or upon request to the department.

Subsurface dispersal systems are considered to be Class V wells if they have the capacity to serve twenty (20) or more people and shall comply with the reporting requirements of 40 CFR 144.26. For each active, new or modified Class V Well, submit a Class V Well Inventory Form to the Missouri Department of Natural Resources, Geological Survey Program, P. O. Box 250, Rolla, Missouri 65402. This form can be requested from the Geological Survey Program or can be found at the following website: <http://dnr.mo.gov/forms/780-1774-f.pdf>.

4. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

The design flow is based on 28 RV sites and one office/camp store building with a design flow of 3480 gpd.

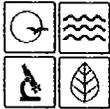
1350 linear feet of six inch PVC SDR 35 pipe, two manholes, three – 2000 gallon septic tanks in series – the first one with a Bio-Microbics Sanitee SNT818 effluent filter and the third with two Polylok Model PL-250 effluent filters, two – 2000 gallon pump storage tanks and one – 1000 gallon pump storage tank interconnected with a 2000 gallon duplex pump tank with each one horsepower (Myers Model ME100, or equal) pump designed for 60 gallons per minute at 42 feet of total dynamic head, approximately 1000 feet of 2 inch PVC Schedule 40 force main, K-Rain 6000 distributing valve, and an absorption field consists of six zones, each zone has 10 laterals of 60 feet in length, laterals are placed 5 feet apart; total length of LPP distribution pipe/trench is 3600 ft. with an effective absorption area of 18,000 square feet. At the design flow of 3480 gpd and design absorption rate of 0.2 gpd/sq. ft. the absorption area provided exceeds the minimum required area. Dosing to be controlled by timers with a design setting of four doses/zone/day at 145 gallons per dose.

All the LPP absorption fields to have distribution pipe of one inch Sch. 40 PVC with 5/32 –inch diameter holes every 5 feet, trenches to be 11 inches deep, and 5 feet apart on center. Detailed soil analysis was performed by Mr. David Fulton, Soil Scientist. The loading rate recommended in the soil report is 0.2 gpd/sq ft/day and this is the loading rate used for the system design. Set back distance from the absorption field to the nearest existing well, which is located on the neighboring property is shown as approximately 300 feet. A Geohydrologic Evaluation was performed by the Missouri Geological Survey, completed September 12, 2018. Based on the characteristics observed, the report notes the geohydrologic conclusions regarding the site as being predominately limestone bedrock covered with surficial materials consisting of very gravelly, silt loam.

5. OPERATING PERMIT

There is currently not an Operating Permit for this site or entity.

After completion of construction project, the applicant is required to submit statement of work completed, as-builts if the project was not constructed in accordance with previously submitted plans and specifications, application Form B and appropriate fee. Missouri State Operating Permit, General Permit MO-G823, will be issued after receipt of the above documents.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM
APPLICATION FOR CONSTRUCTION PERMIT
WASTEWATER FACILITY

RECEIVED
 DEC 20 2018
 Water Protection Program

CP0002050
 AP31433

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
<input type="checkbox"/> FEE RECEIVED \$1000	CHECK NO. 1039
DATE RECEIVED 12-20-18	

JS.

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: _____
- 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

Rustic Woods RV Park

2.2 PROJECT DESCRIPTION

Waste treatment for 29 RV site RV Park
 6" diameter gravity pvc sewer lines with clean outs 100' spacing maximum
 3-2000 gallon concrete septic tanks
 3-2000 gallon concrete pump tanks & 1-1000 gallon pump tank
 3600 lineal feet of 1" dia. low pressure absorption field--6 zones @ 600 lineal feet each zone

2.3 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION

N/A

2.4 DESIGN INFORMATION

- A. Current population: _____; Design population: _____
- B. Actual Flow: 3480 _____ gpd; Design Average Flow: _____ gpd;
 Actual Peak Daily Flow: _____ gpd; Design Maximum Daily Flow: _____ gpd;
 Design Wet Weather Event: _____

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

\$ N/A

3.0 WASTEWATER TREATMENT FACILITY				
NAME Rustic Woods RV Park		TELEPHONE NUMBER WITH AREA CODE		EMAIL ADDRESS
ADDRESS (PHYSICAL) 2481 Grier Branch Road		CITY Strafford	STATE MO	ZIP CODE 65757
		COUNTY Webster		
Wastewater Treatment Facility: Mo- (Outfall Of)				
3.1 Legal Description: SE ¼, SE ¼, SE ¼, Sec. 29 , T 30 , R 19 (Use additional pages if construction of more than one outfall is proposed.)				
3.2 UTM Coordinates Easting (X): -93.040385 Northing (Y): 37.285223 n For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)				
3.3 Name of receiving streams: Tributary to Grier Branch				
4.0 PROJECT OWNER				
NAME MIKE POPA		TELEPHONE NUMBER WITH AREA CODE 562-761-2300		EMAIL ADDRESS RAGEN305@MSN.COM
ADDRESS 10002 PIONEER BLVD #108		CITY SANTE FE SPRINGS	STATE CA	ZIP CODE 90670
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 SAME		TELEPHONE NUMBER WITH AREA CODE		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 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 Tate Engineering Consultants Ralph Tate, P. E.		TELEPHONE NUMBER WITH AREA CODE (417) 862-5684		EMAIL ADDRESS tateenr@mchsi.com
ADDRESS 4054 W. Page Place		CITY Springfield	STATE MO	ZIP CODE 65802
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 <i>Mike Popa</i>				
PRINTED NAME MIKE POPA			DATE 12-12-2018	
TITLE OR CORPORATE POSITION LLC MANAGER		TELEPHONE NUMBER WITH AREA CODE 562-761-2300		EMAIL ADDRESS RAGEN305@MSN.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.				