

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Branson Cedars Resort            )  
Utility Company LLC,                                    )  
for a Certificate of Convenience and Necessity    )  
Authorizing it to Construct, Install, Own,        )  
Operate, Maintain, Control and Manage            )  
a Sewer System in Taney County, Missouri        )    Case No. \_\_\_\_\_

**APPLICATION**

COMES NOW Branson Cedars Resort Utility Company LLC, pursuant to Sections 393.140, RSMo, 393.170, RSMo 2000, 4 CSR 240-2.060 and 4 CSR 240-3.600 (Water Certificate), and, for its Application states as follows to the Missouri Public Service Commission (Commission):

**BACKGROUND**

1. This Application is being filed by Branson Cedars Resort Utility Company LLC to obtain from the Commission a certificate of convenience and necessity to construct, install, own, operate, maintain, control and manage a sewer system in Taney County, Missouri.
  
2. The Branson Cedars Resort Utility Company LLC is a Missouri limited liability company duly organized and existing under the laws of the State of Missouri with its principal office and place of business located at 769 State Highway 86, Ridgedale, Missouri 65739. Attached hereto as **Appendix 1** is a Certificate of Good Standing issued by the Missouri Secretary of State related to Branson Cedars Resort Utility Company LLC. Branson Cedars Resort Utility Company LLC has no pending action or final unsatisfied judgments or decisions against it from any state or federal agency or court which involve customer service or rates having occurred within three years from the date of this application. Branson Cedars Resort Utility Company LLC has no annual report fees or assessment fees which are currently overdue.
  
3. The present sewer treatment plant consists of a S.T.E.P. system that is connected to all domiciles within the development utilizing storage tanks, dual drain fields, sand traps & UV filtration prior to the outflow back into the aquifer. At present, this system is inadequate for the development at hand, and both the Missouri DNR as well as Taney County are working with the applicant to build and connect a lift station to the main Turkey Creek line that will be brought into the area commencing in 2016. Plans both for the Taney County main line as well as the subdivision lift station and connection point are under design. Expected completion of the new

County sewer line is expected no earlier than late 2016, and hopefully before the end of 2017. Until at which time the new system can be built and connected, both the County & DNR are in agreement that a temporary fix to the present S.T.E.P. system is in order (repair of one half of the existing drain field) along with development-wide unilateral pumping of all effluent & solid waste that exceeds the requisite 9,600 GPD presently approved for the existing system.

4. Communications regarding this application should be addressed to: Michael Hyams, Branson Cedars Resort, 769 State Highway 86, Ridgedale, Missouri 65739; Phone: (417) 689-1411, Email: [mhyams.sanctuary@gmail.com](mailto:mhyams.sanctuary@gmail.com).

#### CERTIFICATE

5. Branson Cedars Resort Utility Company LLC requests permission, approval, and a Certificate of Convenience and Necessity to install, own, operate, maintain, control and manage a sewer system for the public in areas of Taney County as set forth on the maps attached to this Application as **Appendix 2**. Legal descriptions of the areas to be certified are attached hereto as **Appendix 3**.

6. These areas generally encompass an existing development (Branson Cedars Resort) whose sewer system is not currently regulated by the Commission.

7. There are approximately 52 residential lots currently being served by the existing sewer system. When the development is finished, approximately 400 residential lots will be served. Attached hereto as **Appendix 4** is a list of ten residents or landowners from the areas for which this certificate is sought.

8. Marked as **Appendix 5**, attached hereto, and made a part hereof for all purposes, is a feasibility study and engineering report for the sewer system.

9. Branson Cedars Resort Utility Company LLC is not aware of any franchise (either city or county) that would be required in order for it to provide service in these areas. A permit for the operation of this facility has been issued by the Missouri Department of Natural Resources (DNR), a copy of which is attached hereto as **Appendix 6**. Branson Cedars Resort Utility Company LLC is not aware of any other governmental approval that it must obtain.

10. Branson Cedars Resort Utility Company LLC proposes to use the general terms and conditions of service found in its Commission-approved tariff to govern its provision of sewer service to this territory.

11. The area Branson Cedars Resort Utility Company LLC proposes to certificate with this application has a need for an operating sewer system and otherwise has no sewer service available. Branson Cedars Resort Utility Company LLC's preparation and experience in the operation of this sewer system gives it the ability to provide this service in an efficient manner. For these reasons, a grant of the Application will further the public convenience and necessity.

WHEREFORE, Branson Cedars Resort Utility Company LLC requests the Commission grant it permission, approval and a Certificate of Convenience and Necessity authorizing it to construct, install, own, operate, maintain, control and manage waters systems for the public within the areas referred to above, and to issue such other orders as the Commission may be appropriate.

Respectfully submitted,

By:

  
Judson B. Poppen, #51070  
Melissa E. Bade, #63698

NEALE & NEWMAN, L.L.P.  
American National Center  
1949 E. Sunshine, Ste. 1-130  
P.O. Box 10327  
Springfield, Missouri 65808-0327  
Telephone (417) 882-9090  
Facsimile (417) 882-2529  
Email [jpoppen@nnlaw.com](mailto:jpoppen@nnlaw.com)  
[mbade@nnlaw.com](mailto:mbade@nnlaw.com)

ATTORNEYS FOR BRANSON CEDARS  
RESORT UTILITY COMPANY LLC

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and correct written copy of the foregoing was served upon:

Kevin Thompson  
Staff Attorney  
Missouri Public Service Commission  
E-mail: kevin.thompson@psc.mo.gov

Cydney Mayfield  
Staff Attorney  
Missouri Public Service Commission  
E-mail: cydney.mayfield@psc.mo.gov

- by hand-delivering a copy to his/her office
- by mailing a copy to him/her, as prescribed by law
- by transmitting a copy to him/her by facsimile transmission
- by transmitting an electronic copy to him/her

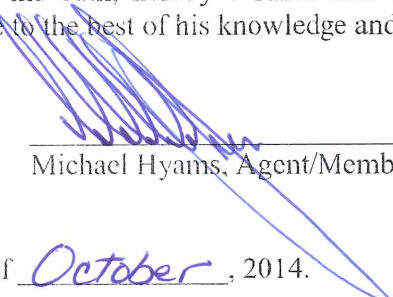
on the 29<sup>th</sup> day of October, 2014.



VERIFICATION

STATE OF MISSOURI     )  
  ) ss.  
COUNTY OF Taney     )

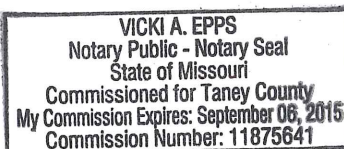
Michael Hyams, first being sworn upon his oath, hereby verifies that the allegations contained in this Application are true and accurate to the best of his knowledge and belief.

  
\_\_\_\_\_  
Michael Hyams, Agent/Member

Subscribed and sworn before me this 28<sup>th</sup> day of October, 2014.

Vicki A. Epps  
\_\_\_\_\_  
Notary Public  
Printed Name: Vicki A. Epps

My Commission Expires: 9-6-15



## APPENDICES

<b>Appendix 1</b>	Certificate of Good Standing
<b>Appendix 2</b>	Platted Maps
<b>Appendix 3</b>	Legal Descriptions
<b>Appendix 4</b>	List of Ten (10) Residents/Landowners
<b>Appendix 5</b>	Feasibility Study/Engineering Report
<b>Appendix 6</b>	DNR Permit

**Appendix 1**

**CERTIFICATE OF GOOD STANDING**

# STATE OF MISSOURI



**Jason Kander**  
**Secretary of State**


CORPORATION DIVISION  
CERTIFICATE OF GOOD STANDING

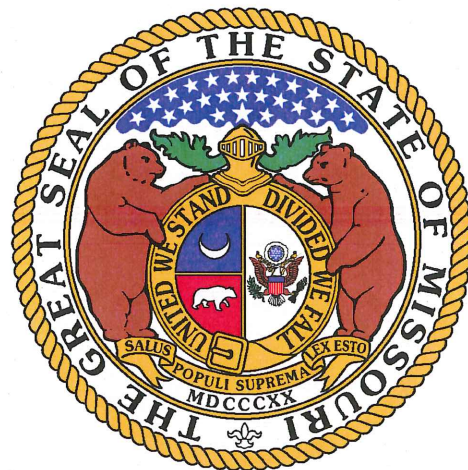
I, JASON KANDER, Secretary of State of the STATE OF MISSOURI, do hereby certify that the records in my office and in my care and custody reveal that

*Branson Cedars Resort Utility Company LLC*  
*LC1315528*

was created under the laws of this State on the 21st day of May, 2013, and is active, having fully complied with all requirements of this office.

IN TESTIMONY WHEREOF, I hereunto set my hand and cause to be affixed the GREAT SEAL of the State of Missouri. Done at the City of Jefferson, this 21st day of October, 2014.

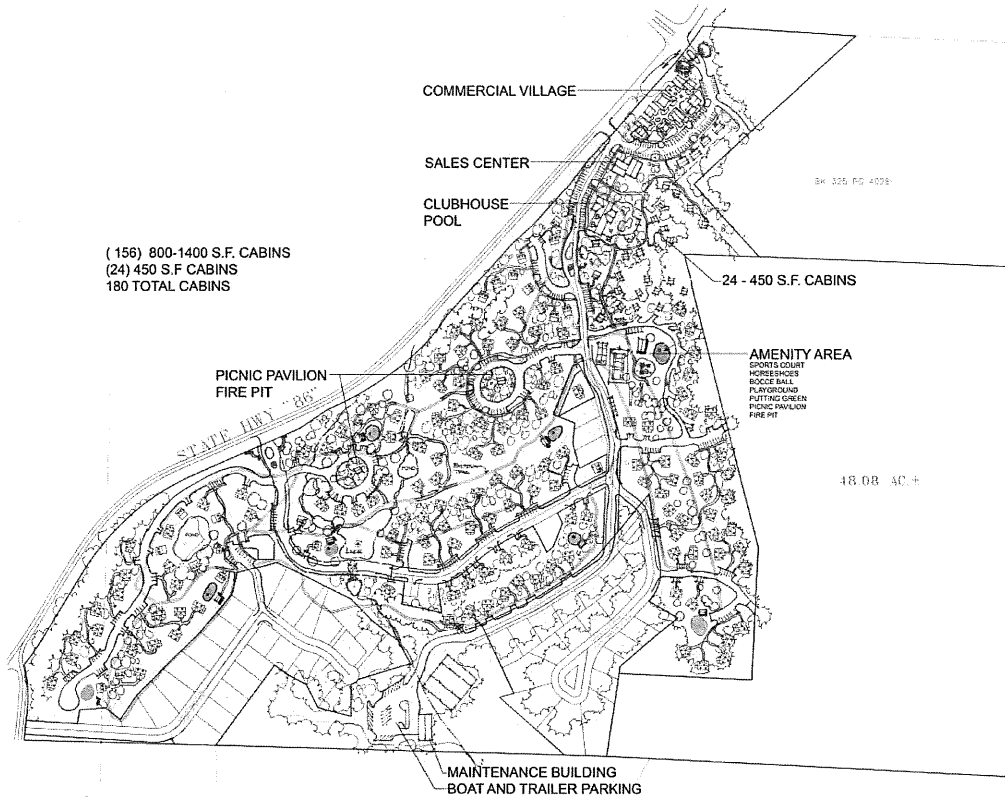
  
Secretary of State



Certification Number: CERT-10212014-0020

**Appendix 2**

**PLATTED MAPS**



JOE# 4914



DESIGN CONCEPT

**BRANSON CEDARS RESORT**

### Appendix 3

#### LEGAL DESCRIPTIONS

The following described real estate situated in Taney County, Missouri, to wit:

All of Oakmont Hills, **Phase 1** as recorded in Slide G, page 636, at the Taney County Recorder's office, Taney County, Missouri; recorded October 16, 2003.

All of Oakmont Hills, **Phase 2** as recorded in Slide I, page 283, at the Taney County Recorder's office, Taney County, Missouri; recorded January 18, 2007.

All of Oakmont Hills, **Phase 3** as recorded in Slide I, page 701, at the Taney County Recorder's office, Taney County, Missouri; recorded October 5, 2007.

All of Oakmont Hills, **Phase 4** to possibly be platted in the future within the general boundaries of the legal description set forth in the attached Special Warranty Deed filed in the Taney County Recorder's Office at Book 2010, Page 47120.





BOOK PAGE  
**2010L47120**  
 10/27/2010 10:55:07AM  
 REC FEE: 30.00  
 NON-STD FEE:  
 PAGES: 3  
 REAL ESTATE DOCUMENT  
 TANEY COUNTY, MISSOURI  
 RECORDERS CERTIFICATION



*Robert A. Dixon*  
 ROBERT A. DIXON

**SPECIAL WARRANTY DEED  
 BY CORPORATION**

Dated: Oct. 21, 2010  
 Grantor: Guaranty Bank, 1341 W. Battlefield, Springfield, MO 65807 ✓  
 Grantee: Tranquility Group, L.L.C., 219 Eagle Point Drive, Branson, MO 65616

THIS INDENTURE, made on the 21<sup>st</sup> day of October, 2010, by and between GUARANTY BANK, a Missouri trust corporation with banking powers, Grantor, and Tranquility Group, L.L.C., a Missouri Limited Liability Company, Grantee. WITNESSETH:

That Grantor, for and in consideration of the sum of Ten Dollars (\$10.00), and other good and valuable considerations to it paid by the said Grantee, the receipt and adequacy of which is hereby acknowledged, does by these presents, GRANT, BARGAIN and SELL, CONVEY and CONFIRM, unto the said Grantee, and its successors and assigns, the following described lots, tracts or parcels of land, lying, being and situate in the County of Taney and State of Missouri, to-wit:

All that part of the Fractional Northwest Quarter of Section 18, Township 21 North, Range 21 West and all that part of the Southeast Quarter of the Northeast Quarter of Section 13, Township 21 North, Range 22 West, all in Taney County, Missouri, being more particularly described as follows:  
 Commencing at the Southeast corner of the Northwest Quarter of said Section 18; Thence N 87° 14'26" W along the South line of said fractional Northwest Quarter of Section 18, 1507.11 feet to a rebar at the Southeast corner of Lot 16 of Oakmont Hills Phase 2 subdivision recorded on Slide-1 page 283 at the Taney County Recorder's Office and the point of beginning; Thence N 08° 30'43" E along the East line of said Oakmont Hills Phase 2 subdivision, 301.52 feet to a #5 rebar stamped P1.S #368-D; Thence S 87° 14'26" E departing said East line, 484.44 feet to a #5 rebar stamped P1.S #368-D; Thence N 02° 45'34" E, 478.19 feet to a #5 rebar stamped P1.S #368-D; Thence N 14° 30'05" W, 1088.28 feet to a #5 rebar stamped P1.S #368-D; Thence S 87° 57'30" E, 272.94 feet to a 1/2 inch rebar; Thence N 42° 16'30" W, 352.70 feet to a 1/2 inch rebar; Thence N 47° 36'42" E, 55.91

feet to a ½ inch rebar; Thence N 47° 42' 42" E, 736.78 feet to a point on the North line of said Section 18; Thence N 86° 24' 19" W, 553.38 feet to a point on the Right-of-Way for State Highway "86"; Thence along and with said Right-of-Way the following bearings and distances: Thence along a curve to the right having a radius of 1901.72 feet, an arc length of 246.84 feet, and a chord bearing of S 38° 37' 54" W to a point; Thence S 42° 21' 01" W, 114.83 feet to a point; Thence S 42° 21' 01" W, 282.13 feet to a point; Thence S 36° 38' 23" W, 100.45 feet to a point; Thence S 42° 21' 01" W, 199.90 feet to a point; Thence S 48° 03' 39" W, 100.45 feet to a point; Thence S 42° 21' 01" W, 349.82 feet to a point; Thence S 36° 47' 02" W, 103.05 feet to a Right-of-Way marker; Thence along a curve to the right having a radius of 1392.70 feet, an arc length of 306.01 feet, and a chord bearing of S 60° 00' 04" W; Thence S 56° 07' 32" W, 118.71 feet to a Right-of-Way marker; Thence S 66° 31' 19" W, 408.24 feet to a point; Thence along a curve to the left having a radius of 909.14 feet, an arc length of 530.88 feet, and a chord bearing of S 50° 02' 55" W; Thence S 31° 29' 32" W, 307.30 feet to a point; Thence along a curve to the right having a radius of 882.49 feet, an arc length of 109.04 feet, and a chord bearing of S 35° 01' 55" W, to a point; Thence S 09° 25' 51" E, departing from said Right-of-Way, 48.47 feet to a point; Thence along a curve to the right having a radius of 403.55 feet, an arc length of 104.63 feet, and a chord bearing of S 02° 00' 11" E; Thence S 05° 21' 40" W, 120.30 feet to a point; Thence S 88° 28' 27" E, 277.06 feet to an aluminum monument; Thence S 88° 28' 27" E, 414.81 feet to a rebar; Thence S 88° 29' 14" E, 1268.22 feet to a rebar; Thence S 88° 19' 01" E, 150.22 feet to the point of beginning; LESS AND EXCEPT all of the lots in Oakmont Hills Phase 1 as recorded in Slide - G, page 636; and LESS AND EXCEPT all of the lots in Oakmont Hills Phase 2 as recorded in Slide - I, page 283; and LESS AND EXCEPT all of Lots Two (2), Nine (9), Eleven (11), Twelve (12) and Thirteen (13) of Oakmont Hills Phase 3 subdivision as recorded in Slide - I, page 701, at the Taney County Recorder's Office, Taney County, Missouri; All being subject to all utility easements and road Rights-of-Way AND EXCEPT ALL INTERESTS IN TIMESHARES RECORDED AND UNRECORDED.

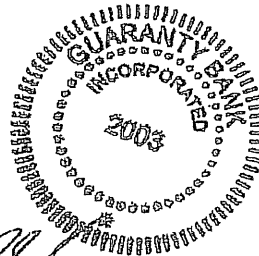
**TO HAVE AND TO HOLD** the premises aforesaid, with all and singular the rights, privileges, appurtenances, and immunities thereto belonging or in anywise appertaining unto the said Grantee, and unto its successors and assigns forever, the said Grantor hereby covenanting that:

- (1) It is lawfully seized of an indefeasible estate in fee in the premises herein conveyed;
- (2) It has good right to convey the same;

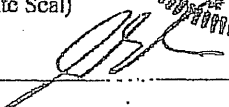
(3) The premises are free and clear of any encumbrances done or suffered by the said Grantor or those under whom the said Grantor claims except as aforesaid; and

(4) Grantor will Warrant and Defend the title to the said premises unto the Grantee and unto its successors and assigns forever, against the lawful claims and demands of all persons whomsoever except as to all general taxes for the year 2010 and thereafter, special taxes and assessments becoming a lien after date hereof, covenants, restrictions, reservations, easements, party wall agreements, community contracts, and building set back lines, all applicable zoning laws and ordinances, if any, and any other interests of record in the office of the Recorder of Deeds of Taney County, Missouri, and any and all time share interests in the Property whether the same are of record or otherwise.

IN WITNESS WHEREOF, the hand and seal of the said grantor on the day and year first above written.



(Corporate Seal)

Attest: 

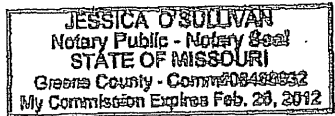
GUARANTY BANK

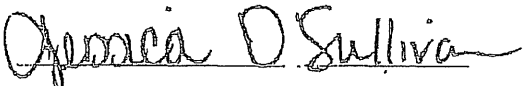
By:   
 Lance Pearce  
 Senior Vice President

STATE OF MISSOURI     )  
                                   ) ss.  
 COUNTY OF Greene     )

On this 21<sup>st</sup> day of October, 2010, before me personally appeared Lance Pearce, to me personally known, who, by me first duly sworn, did say that he is Senior Vice President of Guaranty Bank and that the seal affixed to the foregoing instrument is the corporate seal of said corporation, and that the instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said Dana Elwell acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Notarial Seal at my office in Springfield, Missouri, the day and year last above written.





END OF DOCUMENT



**Appendix 4**

**LIST OF TEN (10) OWNERS/RESIDENTS WITHIN THE AREA TO BE CERTIFIED**

**Michael & Darla Brower  
228 Gerry Garlington Road  
Monroe, LA 71203**

**Jerry & Annie Sales  
708 Lake Road  
Eureka, IL 61530**

**Charles & Brenda Chodrick  
4514 North Oakwood Road  
Enid, OK 73703**

**Eddie & Jennifer Cook  
CMR 427, Box 1620  
APO, AE 09630**

**Darin & Dana Lauer  
24550 South Meadow Circle Road  
Claremore, OK 74019**

**Dr. Floyd & Diane Simpson  
5147 West Skyler Drive  
Springfield, MO 65802**

**Brian & Shelly Younger  
18410 Watson Way  
Inola, OK 74036**

**Tony & Karen Clark  
3516 Belmont Street  
Denton, TX 76210**

**Mike & Peggy Moore  
2681 Sutherland Drive  
Thompson Station, TN 37179**

**Jeff & Debbie Fantin  
24019 Madaca Lane # 101  
Port Charlotte, FL 33954**



**Appendix 5**

**FEASIBILITY REPORT & ENGINEERING REPORT**

# ***SHAFFER & HINES, INC.***

PROFESSIONAL ENGINEERS & LAND SURVEYORS

P.O. Box 493, Nixa, Missouri 65714

Phone (417) 725-4663

Fax (417) 725-5230

---

*"Equal Opportunity Employer"*

October 20, 2014

Mr. Michael Hyams  
**TRANQUILITY GROUP, LLC**  
422 Burk Road  
Highlandville, Missouri 65669

**RE: BRANSON CEDARS  
TANEY COUNTY, MISSOURI**

Dear Michael:

As we have discussed, it is your intent to pursue connection of the Branson Cedars Development to the Turkey Creek wastewater interceptor upon its completion by the Taney County Sewer District in 2016. Based on these previous discussions I prepared an Engineer's Opinion of Cost and an exhibit indicating one possible routing of the proposed improvements which will be required by Branson Cedars at such time the wastewater interceptor is completed. I do want to point out that until we have a better feel for the exact location of the Turkey Creek Interceptor, the estimate and exhibit should be considered as preliminary and subject to change.

Basically the proposed project for Branson Cedars will consist of constructing a regional pumping station to be located near the existing wastewater treatment plant site. This pumping station will be sized to accommodate the wastewater flow from the entire Branson Cedars development. Wastewater collected at the pumping station will be conveyed to the Turkey Creek Interceptor, when completed, via a 6 inch diameter force main. As time goes by the exact routing of the force main will be finalized.

Wastewater will be collected from each individual lot and conveyed to the regional pumping station by means of septic tank effluent pumping systems as well as small diameter wastewater collection lines. These systems will be phased in over several years and constructed as lots develop and/or demand dictates.

Mr. Michael Hyams  
October 20, 2014  
Page Two

It is my opinion that this overall approach to wastewater collection and treatment is a much better alternative than constructing an upgrade to the existing wastewater treatment plant which we have also discussed in the past. It is fortunate that Taney County has proposed the construction of this sewer collection line and that it is near enough that you can access it.

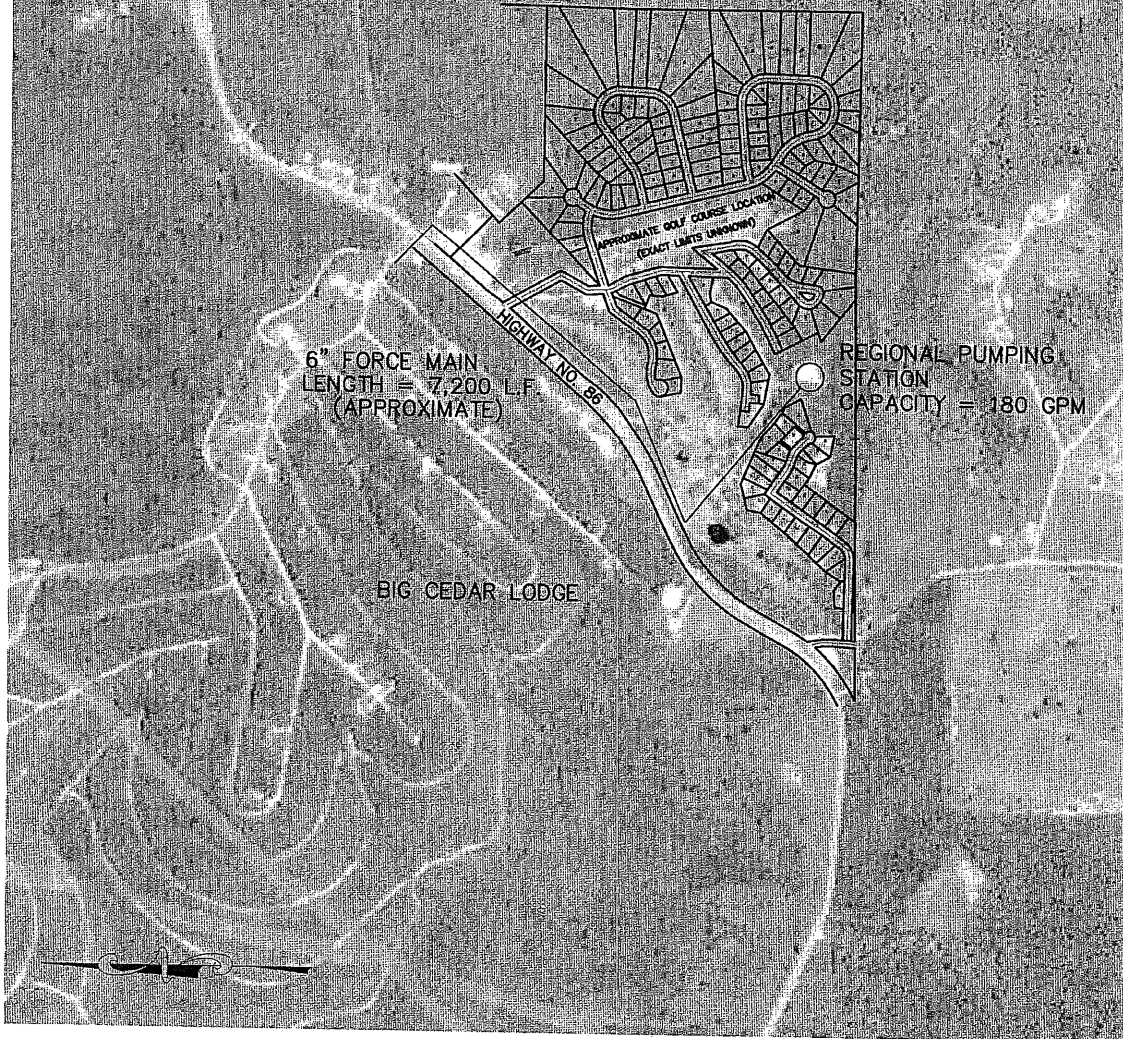
Please contact me if you wish to discuss this project in more detail or if you require additional information.

Sincerely;

**SHAFFER & HINES, INC.**  
**CONSULTING ENGINEERS**

Gary W. Shaffer, P.E.

EXHIBIT  
BRANSON CEDARS  
WASTEWATER TREATMENT  
ALTERNATIVE



**SHAFFER & HINES**<sup>INC.</sup>

CONSULTING ENGINEERS - REGISTERED LAND SURVEYORS

P.O. Box 493, Nixa, Missouri, 65714  
Tel: (417) 725-4663 - Fax: (417) 725-5230  
Email: [gs@shafferhines.com](mailto:gs@shafferhines.com)

**Appendix 6**

**DNR PERMIT**

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



## MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0130656

Owner: Tranquility Group, LLC  
Address: 422 Burk Road, Highlandville, MO 65669

Continuing Authority: Same as Above  
Address: Same as Above

Facility Name: Branson Cedar Resort WWTF  
Facility Address: 769 State Highway 86, Ridgedale, MO 65739

Legal Description: SW¼, SE¼, NW¼, Sec. 18, T21N, R21W, Taney County  
UTM (X/Y): 477207 / 4041777

Receiving Stream: Unnamed Tributary to Blair Branch (U), losing  
First Classified Stream and ID: Table Rock Lake (07313) 303(d)  
USGS Basin & Sub-watershed No.: (11010001-1402)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

### **FACILITY DESCRIPTION**

Outfall #001 - Subdivision - SIC #8641

Septic tank / recirculation tank with duplex pumps / recirculating sand filter / flow splitter / chemical addition to facilitate phosphorous removal / tertiary settling / tertiary filtration / ultraviolet disinfection / sludge disposal by contract hauler

Design organic population equivalent is 96.  
Design flow is 0.009600 MGD.  
Design sludge production is 0.672dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

January 18, 2012  
Effective Date

  
Sara Parker Pauley, Director, Department of Natural Resources

January 17, 2017  
Expiration Date

  
Cynthia S. Davies, Regional Director, Southwest Regional Office



A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 4	
					PERMIT NUMBER MO-0130656	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	once/month**	24 hr. estimate
Biochemical Oxygen Demand <sub>5</sub>	mg/L		15	10	once/month**	grab
Total Suspended Solids	mg/L		20	15	once/month**	grab
pH – Units	SU	***		***	once/month**	grab
<i>E. coli</i> (Note 1)	#/100 ml	126		126	once/month**	grab
Ammonia as N	mg/L	*		*	once/month**	grab
Total Phosphorous as P	mg/L	*		0.5	once/month**	grab
Nitrate (as NO <sub>3</sub> )	mg/L	*		*	once/month**	grab
Aluminum, Total Recoverable (Note 2)	mg/L	*		*	once/month**	grab
Iron, Total Recoverable (Note 2)	mg/L	*		*	once/month**	grab
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MINIMUM	WEEKLY AVERAGE MINIMUM	MONTHLY AVERAGE MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Dissolved Oxygen	mg/L	*		*	once/month**	grab
MONITORING REPORTS SHALL BE SUBMITTED <b>MONTHLY</b> ; THE FIRST REPORT IS DUE <b>MARCH 28, 2012</b> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I &amp; III</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> and <u>August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Sampling shall occur once per quarter in the periods of January through March, April through June, July through September, and October through December, please note that monitoring reports shall be submitted no later than the 28th day of the month following the monitoring period (April 28th, July 28th, October 28th, and January 28th, respectively).
- \*\*\* pH is measured in pH units and is not to be averaged. The pH for all facilities except lagoons is limited to the range of 6.5-9.0 pH units.

Note 1 – Final effluent limits of 126 cfu per 100 ml daily maximum and monthly average applicable year round due to losing stream designation.

Note 2 - If no Aluminum or Iron was used in a given sampling period, an actual analysis is not necessary. Simply report as “0 mg/L”.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to a facility with an area-wide management plan per 10 CSR 20-6.010(3)(B) within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
    - (1) One hundred micrograms per liter (100 µg/L);
    - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
    - (4) The level established in Part A of the permit by the Director.
  - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. Report as no-discharge when a discharge does not occur during the report period.

6. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;

C. SPECIAL CONDITIONS (continued)

- (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
- (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
- (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
- (5) There shall be no significant human health hazard from incidental contact with the water;
- (6) There shall be no acute toxicity to livestock or wildlife watering;
- (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

**Missouri Department of Natural Resources  
Statement of Basis  
Branson Cedar Resort WWTF  
MSOP #: MO-0130656  
Taney County**

A Statement of Basis (Statement) gives pertinent information regarding the applicable regulations and rationale for the development of the NPDES Missouri State Operating Permit (operating permit). This Statement includes Wasteload Allocations, Water Quality Based Effluent Limitations, and Reasonable Potential Analysis calculations as well as any other calculations that effect the effluent limitations of this operating permit. This Statement does not pertain to operating permits that include sewage sludge land application plans and variance procedures, and does not include the public comment process for this operating permit.

A Statement is not an enforceable part of an operating permit.

**Part I – Facility Information**

Facility Type: NON-POTW  
Subdivision - SIC #8641

Facility Description: Septic tank / recirculation tank with duplex pumps / recirculating sand filter / flow splitter / chemical addition to facilitate phosphorous removal / tertiary settling / tertiary filtration / ultraviolet disinfection / sludge disposal by contract hauler

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	0.015	Secondary	Domestic	~4.3

**Receiving Water Body's Water Quality & Facility Performance History:**

The facility has reported 14 effluent exceedances for BOD, Fecal Coliform, Total Phosphorous, and TSS. The facility has failed submit timely DMRs and some DMRs are missing.

This is for a renewal and modification. The modification is to reflect change in ownership. The receiving stream has been revised since the permit was Public Noticed

Comments: The facility was last inspected on June 11, 2008. The inspection resulted in a Letter of Warning for violations noted, including: the grounds of the WWTF were not maintained and the UV disinfection unit was turned off. The facility is working with the Department to correct the deficiencies.

**Part II – Operator Certification Requirements**

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.010(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Not Applicable ; This facility is not required to have a certified operator.

**Part III – Receiving Stream Information**

**APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:**

As per Missouri's Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

- Missouri or Mississippi River [10 CSR 20-7.015(2)]:
- Lake or Reservoir [10 CSR 20-7.015(3)]:
- Losing [10 CSR 20-7.015(4)]:
- Metropolitan No-Discharge [10 CSR 20-7.015(5)]:
- Special Stream [10 CSR 20-7.015(6)]:
- Subsurface Water [10 CSR 20-7.015(7)]:
- All Other Waters [10 CSR 20-7.015(8)]:

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1<sup>st</sup> classified receiving stream's beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Unnamed Tributary to Blair Branch (losing)	U	N/A	General Criteria	11010001	Ozark/White
Table Rock Lake	L2	07313	AQL, LWW, WBC-A, SCR		

\* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery (CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND).

\*\* - Ecological Drainage Unit

**RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:**

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Unnamed Tributary to Blair Branch (losing)	0	0	0

**MIXING CONSIDERATIONS**

Mixing Zone: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(a)].

Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(b)].

**Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions**

**ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

Not Applicable ;

The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

**ANTI-BACKSLIDING:**

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- All limits in this statement are at least as protective as those previously established; therefore, backsliding does not apply.

**AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:**

As per [10 CSR 20-6.010(8)(A)10.], when a Continuing Authority under paragraph 10 CSR 20-6.010(3)(B)1. or 2. is expected to be available for connection within the next five (5) years, any operating permit issued to a permittee under this paragraph, located within the service area of the paragraph (3)(B)1. or 2. facility, shall contain the following special condition... This language is contained in Special Condition #3 of this operating permit.

**ANTIDegradation:**

Policies which ensure protection of water quality for a particular water body where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation requirements are consistent with 40 CFR 131.12 that outlines methods used to assess activities that may impact the integrity of a water and protect existing uses. This policy may compel the state to maintain a level of water quality above those mandated by criteria.

Not Applicable ;

Renewal no degradation proposed and no further review necessary.

**APPLICABLE PERMIT PARAMETERS:**

Effluent parameters for conventional, non-conventional, and toxic pollutants have been obtained from the previous NPDES operating permit for this facility, technology based effluent limits, and from appropriate sections of the renewal application.

**Bio-solids, Sludge, & Sewage Sludge:**

Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sludge is any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address: <http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

- Sludge/biosolids are removed by contract hauler or are stored in the lagoon.

**COMPLIANCE AND ENFORCEMENT:**

Action taken by the Department to resolve violations of the Missouri Clean Water Law, its implementing regulations, and/or any terms and condition of an operating permit.

Not Applicable ;

The permittee/facility is not under enforcement action and is considered to be in compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and condition of an operating permit.

**FINDING OF AFFORDABILITY:**

Pursuant to Section 644.145, RSMo., the Department is required to determine whether a permit or decision is affordable and makes a finding of affordability for certain permitting and enforcement decisions. This requirement applies to discharges from combined or separate sanitary sewer systems or publically-owned treatment works.

Not Applicable;

The Department is not required to determine findings of affordability because the facility is not a **combined or separate sanitary sewer system for a publically-owned treatment works.**



**PRETREATMENT PROGRAM:**

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

Several special conditions pertaining to the permittee's pretreatment program may be included in the permit, and are as follows:

- Implementation and enforcement of the program,
- Annual pretreatment report submittal,
- Submittal of list of industrial users,
- Technical evaluation of need to establish local limitations, and
- Submittal of the results of the evaluation

Not Applicable ;

The permittee, at this time, is not required to have a Pretreatment Program or does not have an approved pretreatment program.

**REASONABLE POTENTIAL ANALYSIS (RPA):**

Limitations must control all pollutants or pollutant parameters that are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above the Missouri Water Quality Standards.

Not Applicable ;

A RPA was not conducted for this facility.

**REMOVAL EFFICIENCY:**

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs). Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ [www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm](http://www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm)

Not Applicable ;

This wastewater treatment facility is not a POTW. Influent monitoring is not being required to determine percent removal.

**SANITARY SEWER OVERFLOWS (SSOs), BYPASSES, INFLOW & INFILTRATION (I&I) – PREVENTION/REDUCTION:**

Sanitary Sewer Overflows (SSOs) are defined as an untreated or partially treated sewage release are considered bypassing under state regulation [10 CSR 20-2.010(11)] and should not be confused with the federal definition of bypass. SSO's have a variety of causes including blockages, line breaks, and sewer defects that allow excess storm water and ground water to (1) enter and overload the collection system, and (2) overload the treatment facility. Additionally, SSO's can be also be caused by lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations.

Additionally, Missouri RSMo §644.026.1 mandates that the Department require proper maintenance and operation of treatment facilities and sewer systems and proper disposal of residual waste from all such facilities.

- Not applicable. This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state.

**SCHEDULE OF COMPLIANCE (SOC):**

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

Not Applicable ;

This permit does not contain a SOC.

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP):**

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* [EPA 832-R-92-006] (Storm Water Management), BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

Not Applicable ;

At this time, the permittee is not required to develop and implement a SWPPP.

**WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:**

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined to total amount of pollutant that may be discharged into that stream without endangering its water quality.

Not Applicable ;

Wasteload allocations were not calculated.

**WLA MODELING:**

Not Applicable ;

A WLA study was either not submitted or determined not applicable by Department staff.

**WATER QUALITY STANDARDS:**

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

**WHOLE EFFLUENT TOXICITY (WET) TEST:**

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

Not Applicable ;

At this time, the permittee is not required to conduct WET test for this facility.

**40 CFR 122.41(m) - Bypasses:**

The federal Clean Water Act (CWA), Section 402 prohibits wastewater dischargers from “bypassing” untreated or partially treated sewage (wastewater) beyond the headworks. A bypass, which includes blending, is defined as an intentional diversion of waste streams from any portion of a treatment facility, [40 CFR 122.41(m)(1)(i)]. Additionally, Missouri regulation 10 CSR 20-2.010(11) defines a bypass as the diversion of wastewater from any portion of wastewater treatment facility or sewer system to waters of the state. Only under exceptional and specified limitations do the federal regulations allow for a facility to bypass some or all of the flow from its treatment process. Bypasses are prohibited by the CWA unless a permittee can meet all of the criteria listed in 40 CFR 122.41(m)(4)(i)(A), (B), & (C). Any bypasses from this facility are subject to the reporting required in 40 CFR 122.41(l)(6) and per Missouri’s Standard Conditions I, Section B, part 2.b. Additionally, Anticipated Bypasses include bypasses from peak flow basins or similar.

- Not Applicable, this facility does not bypass.

**303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):**

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Applicable ;

Table Rock Lake (White River Arm) is listed on the 2010 Missouri 303(d) List for chlorophyll and nitrogen.

– This facility is considered to be a source of or has the potential to contribute to the above listed pollutant(s). When the nutrient implementation procedure is approved, the permit may be reopened and modified to include nutrient monitoring. Once a TMDL is developed, the permit will be modified to include WLAs from the TMDL.

**Adjusted Design Flow:**

10 CSR 20-6.011(1)(B)1. provides for an Adjusted Design Flow when calculating permit fees on human sewage treatment facilities. If the average flow is sixty percent (60%) or less than the system’s design flow, the average flow may be substituted for the design flow when calculating the permit fee on human sewage treatment facilities. If the facility’s actual average flow is consistently 60% or less than the permitted design flow, the facility may qualify for a reduction in your fee when:

- The facility has a valid permit, or has applied for re-issuance, is in compliance with the terms, conditions and effluent limitations of the permit, and the facility has a good compliance history; and
- Flow is not expected to exceed 60% of design flow for the remaining term of the existing operating permit.

Not Applicable ;

At this time, the permittee has not requested an Adjusted Design Flow modification.

**Outfall #001 – Main Facility Outfall  
EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	No	S
BOD <sub>5</sub>	MG/L	1		15	10	No	S
TSS	MG/L	1		20	15	No	S
PH (S.U.)	SU	1	6.5-9.0		6.5-9.0	YES	6.0-9.0
AMMONIA AS N	MG/L	2, 5	*		*	No	****
ESCHERICHIA COLI	***	1,2,3	126		126	No	****
NITRATE (AS NO <sub>3</sub> )	MG/L	8	*		*	No	****
TOTAL RECOVERABLE ALUMINUM	MG/L	8	*		*	No	****
TOTAL RECOVERABLE IRON	MG/L	8	*		*	No	****
DISSOLVED OXYGEN	MG/L	11	*		*	No	****
TOTAL PHOSPHORUS	MG/L	1	*		0.5	No	S
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* - **Monitoring requirement only**

\*\*\* - # of colonies/100mL; the Monthly Average for E. coli is a geometric mean.

\*\*\*\* - Parameter not previously established in previous state operating permit.

N/A – Not applicable

S – Same as previous operating permit

Basis for Limitations Codes:

- |  |                                   |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law       | 6. Antidegradation Policy         |
| 2. Water Quality Standard (includes RPA) | 7. Water Quality Model            |
| 3. Water Quality Based Effluent Limits   | 8. Best Professional Judgment     |
| 4. Lagoon Policy                         | 9. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy                        | 10. WET test Policy               |
|  | 11. Dissolved Oxygen Policy       |

**OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:**

**Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

**Biochemical Oxygen Demand (BOD<sub>5</sub>).**

– Effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.

**Total Suspended Solids (TSS).**

– Effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.

**pH.**

– pH is limited to the range of 6.5 – 9.0 pH units, as per [10 CSR 20-7.031(4)(E)]. pH is measured in pH units and is not to be averaged.

**Ammonia as N.** Monitoring requirement only. Monitoring for ammonia is included to determine whether a “reasonable potential” exists to exceed water quality standards after the discharge begins.

**Fecal Coliform.** *E. coli* has replaced fecal coliform at the applicable bacteria criteria in Missouri’s water quality standards.

**Escherichia coli (E. coli).** Monthly average of 126 per 100 mL and a daily maximum of 126 per 100 mL. Per 10 CSR 20-7.031 (4)(C) the *E. coli* count shall not exceed 126 per 100 mL at any time in a losing stream.

**Total Phosphorus**

To Table Rock Lake and Lake Taneycomo  
0.5 mg/L per 10 CSR 20 - 7.015 (3).

**Aluminum, Total Recoverable** Monitoring requirement only. This facility uses chemicals for phosphorous removal that may contain aluminum. Monitoring is required to determine if reasonable potential exists for this facility’s discharge to exceed water quality standards for Aluminum (Total Recoverable).

**Iron, Total Recoverable.** Monitoring requirement only. This facility uses chemicals for phosphorous removal that may contain iron. Monitoring is required to determine if reasonable potential exists for this facility’s discharge to exceed water quality standards for Iron (Total Recoverable).

**Nitrate.** Because this facility discharges to a losing stream, Nitrate monitoring is required. Losing streams can recharge groundwater. Nitrate can cause serious health risks to animals and humans, therefore it is important to include this parameter.

**Dissolved Oxygen.** Monitoring requirement only. Monitoring for dissolved oxygen are included to determine whether “reasonable potential” to exceed water quality standards exists after the discharge begins.

**Minimum Sampling and Reporting Frequency Requirements.**

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/MONTH	MONTHLY
BOD <sub>5</sub>	ONCE/MONTH	MONTHLY
TSS	ONCE/MONTH	MONTHLY
pH	ONCE/MONTH	MONTHLY
AMMONIA AS N	ONCE/MONTH	MONTHLY
<i>E. COLI</i>	ONCE/MONTH	MONTHLY
ALUMINUM, TOTAL RECOVERABLE	ONCE/MONTH	MONTHLY
IRON, TOTAL RECOVERABLE	ONCE/MONTH	MONTHLY
NITRATE	ONCE/MONTH	MONTHLY
DISSOLVED OXYGEN	ONCE/MONTH	MONTHLY
TOTAL PHOSPHORUS	ONCE/MONTH	MONTHLY

**Sampling Frequency Justification:**

Monthly sampling is being retained because of compliance issues, per Appendix U of Missouri’s Water Pollution Control Permit Manual.

The Clean Water Commission has directed the Department to proceed with amending 10 CSR 20-7.015 to reduce the sampling frequency required for E.coli to a lesser frequency, still protective of water quality standards, for smaller facilities, including those with discharges of 100,000 gallons per day or less.

**Sampling Type Justification**

Sand filters are not defined in the regulations; they are not technically mechanical plants and based on the small flow grab samples are appropriate.

**Administrative Requirements**

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

**Date of Factsheet:** October 26, 2011 (Revised January 10, 2012)

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