

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 RSMo, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No.: MO-0139157

Owner: Land and Buildings, LLC  
Address: 37394 State Hwy K, Warsaw, MO 65355

Continuing Authority: Truman Lake Resort, LLC  
Address: 37394 State Hwy K, Warsaw, MO 65355

Facility Name: Truman Lake Resort Wastewater Treatment Facility  
Facility Address: 37394 State Hwy K, Warsaw, MO 65355

Legal Description: Sec. 24, T39N, R23W, Benton County  
UTM Coordinates: X = 465191, Y = 4219504

Receiving Stream: Tributary to Harry S Truman Reservoir  
First Classified Stream and ID: Presumed Use Streams (C) (5057)  
USGS Basin & Sub-watershed No.: (10290107-0404)

authorizes activities pursuant to the terms and conditions of this permit in accordance with the Missouri Clean Water Law and/or the National Pollutant Discharge Elimination System; it does not apply to other regulated activities.

**FACILITY DESCRIPTION**

**Permitted Feature #001** – Non-POTW

Septic tanks (8) / subsurface irrigation by lateral lines (8 systems) / sludge disposal by contract hauler to a permitted land application facility.

Design population equivalent is 115.

Design Flow is 17,265 gallons per day.

Design sludge production is 2.3 dry tons per year.

Adjusted Design Flow is 9,999 gallons per day.

July 1, 2025

Effective Date

June 30, 2030

Expiration Date

  
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John Hoke, Director, Water Protection Program

## **A. STANDARD CONDITIONS**

In addition to specified conditions stated herein, this permit is subject to the attached Parts I & III standard conditions dated August 1, 2014, and August 1, 2019, and hereby incorporated as though fully set forth herein. Annual reports required per Standard Conditions Part III Section K shall be submitted online to the department via the department's eDMR system as an attachment. This supersedes Standard Conditions Part III Section K #4. EPA reports shall continue to be submitted online via the Central Data Exchange system.

## **B. SPECIAL CONDITIONS**

1. Wastewater Irrigation System (Subsurface/drip irrigation)
  - (a) No-discharge facility requirements. Wastewater shall be stored and irrigated during suitable conditions so that there is no discharge from the septic tanks or irrigation sites.
  - (b) Set Backs. There shall be no irrigation within:
    - (1) 300 feet from any existing potable water supply well not located on the property. Adequate protection shall be provided for wells located on the application site;
    - (2) 10 feet of the property line or public road.
  - (c) Livestock and Crop Restrictions. Vegetation such as grasses or food crops (excluding root vegetables) must be grown over the system. The only equipment allowed on the area is equipment used to maintain the vegetation. No livestock shall be allowed to use the area.
  - (d) Application. Subsurface irrigation shall not cause surfacing of wastewater.
  - (e) Equipment Checks during Irrigation. The irrigation system and application site shall be visually inspected at least once/day during wastewater irrigation to check for equipment malfunctions and runoff from the irrigation site.
2. Subsurface dispersion systems under this permit are Class V wells if they have the capacity to serve 20 or more people and shall comply with the reporting requirements of 40 CFR 144.26. In addition, an inventory form shall be submitted to the Department of Natural Resources' Missouri Geological Survey for these wells, as required under Federal regulations. This form can be requested from the Geological Survey Program or can be found at the following website: <https://dnr.mo.gov/document-search/class-v-well-inventory-form-mo-780-1774>. Questions about whether a subsurface dispersion system is a Class V well can be directed to the Missouri Geological Survey's Energy Resources Unit at 573-368-2100.
3. Subsurface dispersion is authorized during snow covered conditions, but subsurface systems shall not operate when soil is frozen at the depth of dispersion.
4. All subsurface dischargers must comply with 40 CFR 144.82, which prohibits the movement of fluids containing any contaminant into underground sources of drinking water (USDWs) during the construction, maintenance, conversion, and plugging or closure of injection wells.
5. Per 40 CFR 144.12(c) and 40 CFR 144.82(a)(2), if at any time the department learns that a Class V well may cause a violation of primary drinking water regulations under 40 CFR 142, the permittee shall complete one of the following actions upon instruction by the department:
  - (a) Take such actions as may be necessary to prevent the violation; or
  - (b) Comply with conditions imposed by the department during enforcement action
6. Wastewater irrigation records shall be maintained and summarized into an annual operating report for the previous calendar year. This annual report shall be kept onsite and made available to department personnel upon request. The summarized annual report shall include the following:
  - (a) Record of maintenance and repairs performed during the year, average number of times per month the facility is checked to see if it is operating properly, and description of any unusual operating conditions encountered during the year;
  - (b) The number of days the storage basin(s) has discharged during the year, the discharge flow, and the reasons discharge occurred; and
  - (c) A summary of the irrigation operations for the year including: the number of days of irrigation, the total gallons irrigated, the total acres used, the irrigation rate in inches for the year, and the annual precipitation received at the facility.
7. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.15, RSMo, and the Clean Water Act (CWA) section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued:

**B. SPECIAL CONDITIONS (Continued)**

- (a) To 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 CWA, 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.
- 8. Report as no-discharge when irrigation does not occur during the report period.
- 9. The permittee shall develop, maintain, and implement an Operation and Maintenance (O&M) Manual that includes all necessary items to ensure the operation and integrity of the waste handling and wastewater irrigation systems, including key operating procedures, an aerial or topographic site map with the permitted features, irrigation fields, and irrigation buffer zones marked, and a brief summary of the operation of the facility. The O&M manual shall be made available to the operator and shall be reviewed and updated at least every five years or when there is a change in equipment or irrigation sites.
- 10. Access to the storage basin(s) and any associated wastewater irrigation equipment must be sufficiently restricted or secured to prevent entry by children, livestock, and unauthorized persons as well as to protect the facility from vandalism.
- 11. An all-weather access road shall be provided to the treatment facility.
- 12. Wastewater Irrigation Sites. To add additional irrigation sites or to convert any of the land to public-use-areas, a construction permit, geohydrologic evaluation, soils report, and permit modification may be required. The facility shall contact the department for a written determination.
- 13. Renewal Application Requirements.
  - (a) This facility shall submit an appropriate and complete application to the department no less than 180 days prior to the expiration date listed on Page 1 of the permit.
  - (b) Application materials shall include a completed Form B.
  - (c) Application materials shall include a completed Form I.
- 14. The permit holder shall maintain the discharges from this facility such that the annual average flow does not exceed the "Adjusted Design Flow" indicated on the front page of this permit. An annual average flow in excess of the adjusted design flow is a permit violation. The resulting annual average flow for each year shall be submitted to the department upon permit renewal for reevaluation of the Adjusted Design Flow.

**C. NOTICE OF RIGHT TO APPEAL**

If you were adversely affected by this decision, you may be entitled to pursue an appeal before the administrative hearing commission (AHC) pursuant to Sections 621.250 and 644.051.12 RSMo. To appeal, you must file a petition with the AHC within thirty 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>

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0139157**  
**TRUMAN LAKE RESORT WWTF**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)(A)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

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

**Part I – Facility Information**

Application Date: 07/07/23 (No changes to the application have occurred since application submittal, as confirmed by permittee in email dated 01/09/2025).

Expiration Date: 02/29/24

**PERMITTED FEATURE(S) TABLE:**

PERMITTED FEATURE	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE
#001	<i>Septic tanks (8) with subsurface irrigation fields (Domestic)</i>		

Comments:

Special Conditions

- Addition of:
  - Permit renewal application requirements
- Removal of:
  - Permit fees condition (now located in the factsheet),
  - Reporting of Non-detects,
  - Condition for reporting Form S reports via eDMR,
  - Requirement to cease discharge by connecting to a facility with an area-wide management plan since this facility is not located within the jurisdiction of a higher continuing authority,
  - Bypassing condition
- Revision of:
  - Wastewater irrigation system requirements to match our current framework for subsurface systems,
  - Wastewater irrigation recordkeeping requirements,
  - Adjusted design flow (ADF) condition

Supplemental

- This facility was last inspected on March 01, 2019, under the new permit MO-0139157 (previously permitted under MOG823098 but switched to obtain an ADF). During the drafting of this renewal, the permit writer was not able to obtain specific design parameters for each system; therefore, all systems are permitted under one permitted feature. However, each system should be operated and maintained in accordance with the standard and special conditions established in the permit.

## **Part II – Receiving Stream Information**

While this facility is no discharge, a receiving stream is listed for the purposes of showing what stream would be affected in the event of a discharge due to an acute or chronic rain event.

### **RECEIVING STREAM(S) TABLE: PERMITTED FEATURE #001**

WATER-BODY NAME	CLASS	WBID	DESIGNATED USES**	12-DIGIT HUC
Tributary to Harry S Truman Reservoir	--	--	General Criteria	10290107-0404
Presumed Use Streams*	C	5057	AHP (WWH), IRR, LWP, SCR, WBC-B, HHP	
Harry S Truman Reservoir	L2	7207	AHP (WWH), DWS, IRR, LWP, SCR, WBC-A, HHP	

\* The previous permit identified MUDD WBID #3960 and 100K Extent-Remaining Stream. This change is due to a new numbering system and new naming convention of the streams, and the actual receiving stream has not changed.

\*\*As per 10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1<sup>st</sup> classified receiving stream's beneficial water uses to be maintained are in the receiving stream table in accordance with [10 CSR 20-7.031(1)(F)].

Uses found in the receiving streams table, above:

10 CSR 20-7.031(1)(F)1.:

**AHP** = Aquatic Habitat Protection - To ensure the protection and propagation of fish, shellfish, and wildlife. AHP is further subcategorized as:

**WWH** = Warm Water Habitat;

**CLH** = Cool Water Habitat;

**CDH** = Cold Water Habitat;

**EAH** = Ephemeral Aquatic Habitat;

**MAH** = Modified Aquatic Habitat;

**LAH** = Limited Aquatic Habitat.

This permit uses Aquatic Life Protection effluent limitations in 10 CSR 20-7.031 Table A for all aquatic habitat designations unless otherwise specified.

10 CSR 20-7.031(1)(F)2.: Recreation in and on the water

**WBC** = Whole Body Contact recreation where the entire body is capable of being submerged. WBC is further subcategorized as:

**WBC-A** = Whole body contact recreation that supports swimming uses and has public access;

**WBC-B** = Whole body contact recreation that supports swimming;

**SCR** = Secondary Contact Recreation (like fishing, wading, and boating).

10 CSR 20-7.031(1)(F)3. to 7.:

**HHP** = Human Health Protection as it relates to the consumption of fish;

**IRR** = Irrigation - Application of water to cropland or directly to cultivated plants that may be used for human or livestock consumption;

**LWP** = Livestock and wildlife protection - Maintenance of conditions in waters to support health in livestock and wildlife;

**DWS** = Drinking water supply;

**IND** = Industrial water supply

10 CSR 20-7.031(1)(F)8-11.: Wetlands (10 CSR 20-7.031 Table A currently does not have corresponding habitat use criteria for these defined uses)

**WSA** = Storm- and flood-water storage and attenuation;

**WHP** = Habitat for resident and migratory wildlife species;

**WRC** = Recreational, cultural, educational, scientific, and natural aesthetic values and uses;

**WHC** = Hydrologic cycle maintenance.

10 CSR 20-7.031(6):

**GRW** = Groundwater

### **Receiving Water Body's Water Quality**

✓ This facility is designed for wastewater irrigation; therefore, it does not discharge to a 303(d) listed stream.

### **PERMITTED FEATURE #001 – GENERAL CRITERIA CONSIDERATIONS:**

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into the permit for those pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The rule further states that pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above a narrative criterion within an applicable State water quality standard, the permit shall contain a numeric effluent limitation to protect that narrative criterion. In order to comply with this regulation, the permit writer will complete reasonable potential determinations on whether the discharge will violate any of the general criteria listed in 10 CSR 20-7.031(4). These specific requirements are listed below followed by derivation and discussion (the lettering matches that of the rule itself, under 10 CSR 20-7.031(4)). It should also be noted that Section 644.076.1, RSMo as well as Section D – Administrative Requirements of Standard Conditions Part I of this permit states that it shall be unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri that is in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule or regulation promulgated by the commission.

- (A) 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. This facility utilizes irrigation of domestic wastewater to the land surface and therefore does not discharge. Based upon a review of a recent Report of Compliance Inspection for the inspection conducted on March 19, 2019, no evidence of an excursion of this criterion has been observed by the department in the past and the facility has not disclosed any other information their permit application which has the potential to cause or contribute to an excursion of this narrative criterion. Additionally, there had been no indication to the department that the stream has had issues maintaining beneficial uses as a result of the wastewater irrigation. Therefore, based on the information reviewed during the drafting of this permit, and the fact that the facility does not discharge, no reasonable potential to cause or contribute to an excursion of this criterion exists.
- (B) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses. Please see (A) above as justification is the same.
- (C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses. Please see (A) above as justification is the same.
- (D) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life. Please see (A) above as justification is the same.
- (E) Waters shall provide for the attainment and maintenance of water quality standards downstream including waters of another state. Please see (D) above as justification is the same.
- (F) There shall be no significant human health hazard from incidental contact with the water. Please see (A) above as justification is the same.
- (G) There shall be no acute toxicity to livestock or wildlife watering. Please see (A) above as justification is the same.
- (H) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community. Please see (A) above as justification is the same.
- (I) 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. The discharge from this facility is made up of treated domestic wastewater. No evidence of an excursion of this criterion has been observed by the department in the past and the facility has not disclosed any other information related to the characteristics of the discharge on their permit application which has the potential to cause or contribute to an excursion of this narrative criterion. Additionally, any solid wastes received or produced at this facility are wholly contained in appropriate storage facilities, are not discharged, and are disposed of offsite. This discharge is subject to Standard Conditions Part III, which contains requirements for the management and disposal of sludge to prevent its discharge. Therefore, this discharge does not have reasonable potential to cause or contribute to an excursion of this criterion.

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

#### **ADJUSTED DESIGN FLOW:**

10 CSR 20-6.011(1)(B)1 provides for an Adjusted Design Flow when calculating permit fees for wastewater 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 annual operating fee.

If the facility's actual average flow is consistently 60 percent 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.
- ✓ Based on the facility's compliance status and/or the information provided, the facility is approved for an Adjusted Design Flow. Please see **APPENDIX – ADJUSTED DESIGN FLOW CALCULATION.**

#### **ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

- ✓ The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(40)] & [10 CSR 20-7.031(1)(O)], or is an existing facility.

#### **ANTI-BACKSLIDING:**

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

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

#### **ANTIDEGRADATION:**

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(3)], the department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- ✓ No degradation proposed and no further review necessary. Facility did not apply for authorization to increase pollutant loading or to add additional pollutants to their discharge.

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

As per [10 CSR 20-6.010(2)(C)], an applicant may utilize a lower preference continuing authority when a higher level authority is available by submitting information as part of the application to the department for review and approval, provided it does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the department.

#### **BIOSOLIDS & SEWAGE SLUDGE:**

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). 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.

- ✓ Permittee is not authorized to land apply biosolids. Sludge/biosolids are removed by contract hauler. If removal and disposal (landfill, land apply, haul to another permitted treatment facility, etc.) of sludge/biosolids is needed and that method is not listed in the current permit, the permittee must modify the operating permit to add any biosolids/sludge disposal method to the facility description of the operating permit. For time sensitive situations, the permittee may contact the department to see about approval for a one-time removal and disposal of sludge or biosolids that are not identified in the facility description of the operating permit.

#### **COMPLIANCE AND ENFORCEMENT:**

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

#### **Facility Performance History:**

- ✓ The facility is not currently under Water Protection Program enforcement action. This facility was last inspected on March 01, 2019. The inspection showed the following unsatisfactory features: failure to develop and maintain an Operating and Maintenance manual.

#### **CONTINUING AUTHORITY:**

Each application for an operating permit shall identify the person, as that term is defined in section 644.016(19), RSMo, that is the owner of, operator of, or area-wide management authority for a water contaminant source, point source, wastewater treatment facility, or sewer collection system. This person shall be designated as the continuing authority and shall sign the application. By doing so, the person designated as the continuing authority acknowledges responsibility for compliance with all permit conditions.

- ✓ The continuing authority listed on the application is a person. The entity is registered with the Missouri Secretary of State's office and is assigned Charter Number LC1111216 per the Secretary of State's webpage. The corporation name with that charter number was verified by the permit writer to match the corporation name on the application form. The corporation has a status of "Active" on the Secretary of State's webpage at the time of the drafting of this permit.

**FEES:**

It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

**NUMERIC LAKE NUTRIENT CRITERIA**

- ✓ This facility is located in a lake watershed (Harry S Truman Lake) where numeric lake nutrient criteria are applicable, per 10 CSR 20-7.031(5)(N), and has a design flow less than or equal to 0.1 MGD; however, this is a no-discharge facility which irrigates the wastewater.

**OPERATOR CERTIFICATION REQUIREMENTS:**

- ✓ This facility is not required to have a certified operator as it doesn't have a PE greater than 200 and/or is not owned or operated by or for a municipality, public sewer district, county, public water supply district, private sewer company regulated by the PSC, state or federal agency.

**OPERATIONAL CONTROL TESTING REQUIREMENTS**

- ✓ As per [10 CSR 20-9.010(4)], the facility is not required to conduct operational monitoring.

**Part IV – Cost Analysis for Compliance**

- ✓ 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 publicly-owned treatment works.

**Part V – 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.

**WATER QUALITY STANDARD REVISION:**

- ✓ This operating permit does not contain requirements for a water quality standard that has changed twenty-five percent or more since the previous operating permit.

**PUBLIC NOTICE:**

The department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing. The department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit. For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

- ✓ The Public Notice period for this operating permit was from April 25, 2025, through May 26, 2025. No comments received.

**DATE OF FACT SHEET:** MAY 27, 2025

**COMPLETED BY:**

**STEPHANIE GARCIA, ENVIRONMENTAL PROGRAM ANALYST**  
**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**WATER PROTECTION PROGRAM**  
**OPERATING PERMITS SECTION - DOMESTIC WASTEWATER UNIT**  
**(573) 751-1399**  
[stephanie.garcia@dnr.mo.gov](mailto:stephanie.garcia@dnr.mo.gov)



**APPENDIX – ADJUSTED DESIGN FLOW CALCULATION:**

Permitted Design Flow = 17,265 gallons per day (gpd)

Annual Operating Permit Invoiced Fee = \$1,000

Targeted Actual Flow for Reduced Fee = 17,265 gpd x 60% = 10,359 gpd

Metered Water Usage for One Year = 2,397,826 gallons

Average Water Usage = 2,397,826 gallons per year/365 days per year =

6,569 gpd x 1.3 = 8,540 gpd

Eligible for Reduction: Since the target flow of 10,359 gpd is greater than the actual flow of 8,540 gpd, you are eligible for a reduced fee.

Adjusted Annual Operating Permit Fee = \$300



STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION  
REVISED  
AUGUST 1, 2014

These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

## Part I – General Conditions

### Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
  - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
2. **Monitoring Requirements.**
  - a. Records of monitoring information shall include:
    - i. The date, exact place, and time of sampling or measurements;
    - ii. The individual(s) who performed the sampling or measurements;
    - iii. The date(s) analyses were performed;
    - iv. The individual(s) who performed the analyses;
    - v. The analytical techniques or methods used; and
    - vi. The results of such analyses.
  - b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.
3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
4. **Test Procedures.** The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is “sufficiently sensitive” when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.
5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

6. **Illegal Activities.**

- a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or both.
- b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

### Section B – Reporting Requirements

1. **Planned Changes.**

- a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
  - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
  - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1);
  - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
  - iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.

2. **Non-compliance Reporting.**

- a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



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- b. The following shall be included as information which must be reported within 24 hours under this paragraph.
    - i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
    - ii. Any upset which exceeds any effluent limitation in the permit.
    - iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.
  - c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.
3. **Anticipated Noncompliance.** The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.
  4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.
  5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
  6. **Other Information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
  7. **Discharge Monitoring Reports.**
    - a. Monitoring results shall be reported at the intervals specified in the permit.
    - b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
    - c. Monitoring results shall be reported to the Department no later than the 28<sup>th</sup> day of the month following the end of the reporting period.
- b. Notice.
    - i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
    - ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
  - c. Prohibition of bypass.
    - i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
      1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      3. The permittee submitted notices as required under paragraph 2. b. of this section.
    - ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.
3. **Upset Requirements.**
    - a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
    - b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
      - ii. The permitted facility was at the time being properly operated; and
      - iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
      - iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
    - c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

## Section C – Bypass/Upset Requirements

1. **Definitions.**
  - a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
  - b. *Severe Property Damage*: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
  - c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
2. **Bypass Requirements.**
  - a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.

## Section D – Administrative Requirements

1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
  - a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
  - b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement



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- imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
- d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.
2. **Duty to Reapply.**
- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
- c. A permittee with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
5. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
6. **Permit Actions.**
- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
- i. Violations of any terms or conditions of this permit or the law;
- ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
- iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- iv. Any reason set forth in the Law or Regulations.
- b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. **Permit Transfer.**
- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
- b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
- c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



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10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.
12. **Closure of Treatment Facilities.**
  - a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
  - b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.
13. **Signatory Requirement.**
  - a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
  - b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
  - c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.
14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

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**PART III – BIOSOLIDS AND SLUDGE FROM DOMESTIC TREATMENT FACILITIES**

**SECTION A – GENERAL REQUIREMENTS**

1. PART III Standard Conditions pertain to biosolids and sludge requirements under the Missouri Clean Water Law and regulations for domestic and municipal wastewater and also incorporates federal sludge disposal requirements under 40 CFR Part 503 for domestic wastewater. The Environmental Protection Agency (EPA) has principal authority for permitting and enforcement of the federal sludge regulations under 40 CFR Part 503 for domestic biosolids and sludge.
2. PART III Standard Conditions apply only to biosolids and sludge generated at domestic wastewater treatment facilities, including public owned treatment works (POTW) and privately owned facilities.
3. Biosolids and Sludge Use and Disposal Practices:
  - a. The permittee is authorized to operate the biosolids and sludge generating, treatment, storage, use, and disposal facilities listed in the facility description of this permit.
  - b. The permittee shall not exceed the design sludge/biosolids volume listed in the facility description and shall not use biosolids or sludge disposal methods that are not listed in the facility description, without prior approval of the permitting authority.
  - c. For facilities operating under general operating permits that incorporate Standard Conditions PART III, the facility is authorized to operate the biosolids and sludge generating, treatment, storage, use and disposal facilities identified in the original operating permit application, subsequent renewal applications or subsequent written approval by the department.
4. Biosolids or Sludge Received from other Facilities:
  - a. Permittees may accept domestic wastewater biosolids or sludge from other facilities as long as the permittee's design sludge capacity is not exceeded and the treatment facility performance is not impaired.
  - b. The permittee shall obtain a signed statement from the biosolids or sludge generator or hauler that certifies the type and source of the sludge
5. Nothing in this permit precludes the initiation of legal action under local laws, except to the extent local laws are preempted by state law.
6. This permit does not preclude the enforcement of other applicable environmental regulations such as odor emissions under the Missouri Air Pollution Control Law and regulations.
7. This permit may (after due process) be modified, or alternatively revoked and reissued, to comply with any applicable biosolids or sludge disposal standard or limitation issued or approved under Section 405(d) of the Clean Water Act or under Chapter 644 RSMo.
8. In addition to Standard Conditions PART III, the Department may include biosolids and sludge limitations in the special conditions portion or other sections of a site specific permit.
9. Exceptions to Standard Conditions PART III may be authorized on a case-by-case basis by the Department, as follows:
  - a. The Department may modify a site-specific permit following permit notice provisions as applicable under 10 CSR 20-6.020, 40 CFR § 124.10, and 40 CFR § 501.15(a)(2)(ix)(E).
  - b. Exceptions cannot be granted where prohibited by the federal sludge regulations under 40 CFR Part 503.



## **SECTION B – DEFINITIONS**

1. Best Management Practices are practices to prevent or reduce the pollution of waters of the state and include agronomic loading rates (nitrogen based), soil conservation practices, spill prevention and maintenance procedures and other site restrictions.
2. Biosolids means organic fertilizer or soil amendment produced by the treatment of domestic wastewater sludge.
3. Biosolids land application facility is a facility where biosolids are spread onto the land at agronomic rates for production of food, feed or fiber. The facility includes any structures necessary to store the biosolids until soil, weather, and crop conditions are favorable for land application.
4. Class A biosolids means a material that has met the Class A pathogen reduction requirements or equivalent treatment by a Process to Further Reduce Pathogens (PFRP) in accordance with 40 CFR Part 503.
5. Class B biosolids means a material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PSRP) in accordance with 40 CFR Part 503.
6. Domestic wastewater means wastewater originating from the sanitary conveniences of residences, commercial buildings, factories and institutions; or co-mingled sanitary and industrial wastewater processed by a (POTW) or a privately owned facility.
7. Feed crops are crops produced primarily for consumption by animals.
8. Fiber crops are crops such as flax and cotton.
9. Food crops are crops consumed by humans which include, but is not limited to, fruits, vegetables and tobacco.
10. Industrial wastewater means any wastewater, also known as process wastewater, not defined as domestic wastewater. Per 40 CFR Part 122.2, process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Land application of industrial wastewater, residuals or sludge is not authorized by Standard Conditions PART III.
11. Mechanical treatment plants are wastewater treatment facilities that use mechanical devices to treat wastewater, including, sand filters, extended aeration, activated sludge, contact stabilization, trickling filters, rotating biological contact systems, and other similar facilities. It does not include wastewater treatment lagoons or constructed wetlands for wastewater treatment.
12. Plant Available Nitrogen (PAN) is nitrogen that will be available to plants during the growing seasons after biosolids application.
13. Public contact site is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.
14. Sludge is the solid, semisolid, or liquid residue removed during the treatment of wastewater. Sludge includes septage removed from septic tanks or equivalent facilities. Sludge does not include carbon coal byproducts (CCBs), sewage sludge incinerator ash, or grit/screenings generated during preliminary treatment of domestic sewage.
15. Sludge lagoon is part of a mechanical wastewater treatment facility. A sludge lagoon is an earthen or concrete lined basin that receives sludge that has been removed from a wastewater treatment facility. It does not include a wastewater treatment lagoon or sludge treatment units that are not a part of a mechanical wastewater treatment facility.
16. Septage is the sludge pumped from residential septic tanks, cesspools, portable toilets, Type III marine sanitation devices, or similar treatment works such as sludge holding structures from residential wastewater treatment facilities with design populations of less than 150 people. Septage does not include grease removed from grease traps at a restaurant or material removed from septic tanks and other similar treatment works that have received industrial wastewater. The standard for biosolids from septage is different from other sludges. See Section H for more information.

## **SECTION C – MECHANICAL WASTEWATER TREATMENT FACILITIES**

1. Biosolids or sludge shall be routinely removed from wastewater treatment facilities and handled according to the permit facility description and the requirements of Standard Conditions PART III or in accordance with Section A.3.c., above.
2. The permittee shall operate storage and treatment facilities, as defined by Section 644.016(23), RSMo, so that there is no biosolids or sludge discharged to waters of the state. Agricultural storm water discharges are exempt under the provisions of Section 644.059, RSMo.
3. Mechanical treatment plants shall have separate biosolids or sludge storage compartments in accordance with 10 CSR 20, Chapter 8. Failure to remove biosolids or sludge from these storage compartments on the required design schedule is a violation of this permit.

## **SECTION D – BIOSOLIDS OR SLUDGE DISPOSED AT OTHER TREATMENT FACILITY OR BY CONTRACT HAULER**

1. Permittees that use contract haulers, under the authority of their operating permit, to dispose of biosolids or sludge, are responsible for compliance with all the terms of this permit. Contract haulers that assume the responsibility of the final disposal of biosolids or sludge, including biosolids land application, must obtain a Missouri State Operating Permit unless the hauler transports the biosolids or sludge to another permitted treatment facility.
2. Testing of biosolids or sludge, other than total solids content, is not required if biosolids or sludge are hauled to a permitted wastewater treatment facility, unless it is required by the accepting facility.

## **SECTION E – INCINERATION OF SLUDGE**

1. Please be aware that sludge incineration facilities may be subject to the requirements of 40 CFR Part 503 Subpart E, Missouri Air Conservation Commission regulations under 10 CSR 10, and solid waste management regulations under 10 CSR 80, as applicable.
2. Permittee may be authorized under the facility description of this permit to store incineration ash in lagoons or ash ponds. This permit does not authorize the disposal of incineration ash. Incineration ash shall be disposed in accordance with 10 CSR 80; or, if the ash is determined to be hazardous, with 10 CSR 25.
3. In addition to normal sludge monitoring, incineration facilities shall report the following as part of the annual report, mass of sludge incinerated and mass of ash generated. Permittee shall also provide the name of the ash disposal facility and permit number if applicable.

## **SECTION F – SURFACE DISPOSAL SITES AND BIOSOLIDS AND SLUDGE LAGOONS**

1. Please be aware that surface disposal sites of biosolids or sludge from wastewater treatment facilities may be subject to other laws including the requirements in 40 CFR Part 503 Subpart C, Missouri Air Conservation Commission regulations under 10 CSR 10, and solid waste management regulations under 10 CSR 80, as applicable.
2. Biosolids or sludge storage lagoons are temporary facilities and are not required to obtain a permit as a solid waste management facility under 10 CSR 80. In order to maintain biosolids or sludge storage lagoons as storage facilities, accumulated biosolids or sludge must be removed routinely, but not less than once every two years unless an alternate schedule is approved in the permit. The amount of biosolids or sludge removed will be dependent on biosolids or sludge generation and accumulation in the facility. Enough biosolids or sludge must be removed to maintain adequate storage capacity in the facility.
  - a. In order to avoid damage to the lagoon seal during cleaning, the permittee may leave a layer of biosolids or sludge on the bottom of the lagoon, upon prior approval of the Department; or
  - b. Permittee shall close the lagoon in accordance with Section I.

## **SECTION G – LAND APPLICATION OF BIOSOLIDS**

1. The permittee shall not land apply biosolids unless land application is authorized in the facility description, the special conditions of the issued NPDES permit, or in accordance with Section A.3.c., above.
2. This permit only authorizes “Class A” or “Class B” biosolids derived from domestic wastewater to be land applied onto grass land, crop land, timber, or other similar agricultural or silviculture lands at rates suitable for beneficial use as organic fertilizer and soil conditioner.
3. Class A Biosolids Requirements: Biosolids shall meet Class A requirements for application to public contact sites, residential lawns, home gardens or sold and/or given away in a bag or other container.
4. Class B biosolids that are land applied to agricultural and public contact sites shall comply with the following restrictions:
  - a. Food crops that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.
  - b. Food crops below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for four months or longer prior to incorporation into the soil.
  - c. Food crops below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than four months prior to incorporation into the soil.
  - d. Animal grazing shall not be allowed for 30 days after application of biosolids.
  - e. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.
  - f. Turf shall not be harvested for one year after application of biosolids if used for lawns or high public contact sites in close proximity to populated areas such as city parks or golf courses.
  - g. After Class B biosolids have been land applied to public contact sites with high potential for public exposure, as defined in 40 CFR § 503.31, such as city parks or golf courses, access must be restricted for 12 months.
  - h. After Class B biosolids have been land applied public contact sites with low potential for public exposure as defined in 40 CFR § 503.31, such as a rural land application or reclamation sites, access must be restricted for 30 days.
5. Pollutant limits
  - a. Biosolids shall be monitored to determine the quality for regulated pollutants listed in Table 1, below. Limits for any pollutants not listed below may be established in the permit.
  - b. The number of samples taken is directly related to the amount of biosolids or sludge produced by the facility (See Section J, below). Samples should be taken only during land application periods. When necessary, it is permissible to mix biosolids with lower concentrations of biosolids as well as other suitable Department approved material to achieve pollutant concentration below those identified in Table 1, below.
  - c. Table 1 gives the ceiling concentration for biosolids. Biosolids which exceed the concentrations in Table 1 may not be land applied.



**TABLE 1**

Biosolids ceiling concentration	
Pollutant	Milligrams per kilogram dry weight
Arsenic	75
Cadmium	85
Copper	4,300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7,500

- d. Table 2 below gives the low metal concentration for biosolids. Because of its higher quality, biosolids with pollutant concentrations below those listed in Table 2 can safely be applied to agricultural land, forest, public contact sites, lawns, home gardens or be given away without further analysis. Biosolids containing metals in concentrations above the low metals concentrations but below the ceiling concentration limits may be land applied but shall not exceed the annual loading rates in Table 3 and the cumulative loading rates in Table 4. The permittee is required to track pollutant loading onto application sites for parameters that have exceeded the low metal concentration limits.

**TABLE 2**

Biosolids Low Metal Concentration	
Pollutant	Milligrams per kilogram dry weight
Arsenic	41
Cadmium	39
Copper	1,500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2,800

- e. Annual pollutant loading rate.

**Table 3**

Biosolids Annual Loading Rate	
Pollutant	Kg/ha (lbs./ac) per year
Arsenic	2.0 (1.79)
Cadmium	1.9 (1.70)
Copper	75 (66.94)
Lead	15 (13.39)
Mercury	0.85 (0.76)
Nickel	21 (18.74)
Selenium	5.0 (4.46)
Zinc	140 (124.96)

- f. Cumulative pollutant loading rates.

**Table 4**

Biosolids Cumulative Pollutant Loading Rate	
Pollutant	Kg/ha (lbs./ac)
Arsenic	41 (37)
Cadmium	39 (35)
Copper	1500 (1339)
Lead	300 (268)
Mercury	17 (15)
Nickel	420 (375)
Selenium	100 (89)
Zinc	2800 (2499)

6. Best Management Practices. The permittee shall use the following best management practices during land application activities to prevent the discharge of biosolids to waters of the state.
- Biosolids shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under § 4 of the Endangered Species Act or its designated critical habitat.
  - Apply biosolids only at the agronomic rate of nitrogen needed (see 5.c. of this section).
  - The applicator must document the Plant Available Nitrogen (PAN) loadings, available nitrogen in the soil, and crop

nitrogen removal when either of the following occurs: 1) When biosolids are greater than 50,000 mg/kgTN; or 2) When biosolids are land applied at an application rate greater than two dry tons per acre per year.

- i. PAN can be determined as follows:  
(Nitrate + nitrite nitrogen) + (organic nitrogen x 0.2) + (ammonia nitrogen x volatilization factor<sup>1</sup>).  
<sup>1</sup> Volatilization factor is 0.7 for surface application and 1 for subsurface application. Alternative volatilization factors and mineralization rates can be utilized on a case-by-case basis.
- ii. Crop nutrient production/removal to be based on crop specific nitrogen needs and realistic yield goals. **NOTE:** There are a number of reference documents on the Missouri Department of Natural Resources website that are informative to implement best management practices in the proper management of biosolids, including crop specific nitrogen needs, realistic yields on a county by county basis and other supporting references.
- iii. Biosolids that are applied at agronomic rates shall not cause the annual pollutant loading rates identified in Table 3 to be exceeded.
- d. Buffer zones are as follows:
  - i. 300 feet of a water supply well, sinkhole, water supply reservoir or water supply intake in a stream;
  - ii. 300 feet of a losing stream, no discharge stream, stream stretches designated for whole body contact recreation, wild and scenic rivers, Ozark National Scenic Riverways or outstanding state resource waters as listed in the Water Quality Standards, 10 CSR 20-7.031;
  - iii. 150 feet of dwellings or public use areas;
  - iv. 100 feet (35 feet if biosolids application is down-gradient or the buffer zone is entirely vegetated) of lake, pond, wetlands or gaining streams (perennial or intermittent);
  - v. 50 feet of a property line. Buffer distances from property lines may be waived with written permission from neighboring property owner.
  - vi. For the application of dry, cake or liquid biosolids that are subsurface injected, buffer zones identified in 5.d.i. through 5.d.iii above, may be reduced to 100 feet. The buffer zone may be reduced to 35 feet if the buffer zone is permanently vegetated. Subsurface injection does not include methods or technology reflective of combination surface/shallow soil incorporation.
- e. Slope limitation for application sites are as follows:
  - i. For slopes less than or equal to 6 percent, no rate limitation;
  - ii. Applied to a slope 7 to 12 percent, the applicator may apply biosolids when soil conservation practices are used to meet the minimum erosion levels;
  - iii. Slopes > 12 percent, apply biosolids only when grass is vegetated and maintained with at least 80 percent ground cover at a rate of two dry tons per acre per year or less.
  - iv. Dry, cake or liquid biosolids that are subsurface injected, may be applied on slopes not to exceed 20 percent. Subsurface injection does not include the use of methods or technology reflective of combination surface/shallow soil incorporation.
- f. No biosolids may be land applied in an area that it is reasonably certain that pollutants will be transported into waters of the state.
- g. Biosolids may be land applied to sites with soil that are snow covered, frozen, or saturated with liquid when site restrictions or other controls are provided to prevent pollutants from being discharged to waters of the state during snowmelt or stormwater runoff. During inclement weather or unfavorable soil conditions use the following management practices:
  - i. A maximum field slope of 6% and a minimum 300 feet grass buffer between the application site and waters of the state. A 35 feet grass buffer may be utilized for the application of dry, cake or liquid biosolids that are subsurface injected. Subsurface injection does not include the use of methods or technology reflective of combination surface/shallow soil incorporation;
  - ii. A maximum field slope of 2% and 100 feet grass buffer between the application site and waters of the state. A 35 feet grass buffer may be used for the application of dry, cake or liquid biosolids that are subsurface injected. Subsurface injection does not include the use of methods or technology reflective of combination surface/shallow soil incorporation;
  - iii. Other best management practices approved by the Department.

## SECTION H – SEPTAGE

1. Haulers that land apply septage must obtain a state permit. An operating permit is not required for septage haulers who transport septage to another permitted treatment facility for disposal.
2. Do not apply more than 30,000 gallons of septage per acre per year or the volume otherwise stipulated in the operating permit.
3. Septic tanks are designed to retain sludge for one to three years which will allow for a larger reduction in pathogens and vectors, as compared to mechanical treatment facilities.
4. Septage must comply with Class B biosolids regarding pathogen and vector attraction reduction requirements before it may be applied to crops, pastures or timberland. To meet required pathogen and vector reduction requirements, mix 50 pounds of hydrated lime for every 1,000 gallons of septage and maintain a septage pH of at least 12 pH standard units for 30 minutes or more prior to application.
5. Lime is to be added to the pump truck and not directly to the septic tanks, as lime would harm the beneficial bacteria of the septic tank.
6. As residential septage contains relatively low levels of metals, the testing of metals in septage is not required.

## SECTION I– CLOSURE REQUIREMENTS

1. This section applies to all wastewater facilities (mechanical and lagoons) and sludge or biosolids storage and treatment facilities. It does not apply to land application sites.
2. Permittees of a domestic wastewater facility who plan to cease operation must obtain Department approval of a closure plan which addresses proper removal and disposal of all sludges and/or biosolids. Permittee must maintain this permit until the facility is closed in accordance with the approved closure plan per 10 CSR 20 – 6.010 and 10 CSR 20 – 6.015.
3. Biosolids or sludge that are left in place during closure of a lagoon or earthen structure or ash pond shall not exceed the agricultural loading rates as follows:
  - a. Biosolids and sludge shall meet the monitoring and land application limits for agricultural rates as referenced in Section G, above.
  - b. If a wastewater treatment lagoon has been in operation for 15 years or more without sludge removal, the sludge in the lagoon qualifies as a Class B biosolids with respect to pathogens due to anaerobic digestion, and testing for fecal coliform is not required. For other lagoons, testing for fecal coliform is required to show compliance with Class B biosolids limitations. In order to reach Class B biosolids requirements, fecal coliform must be less than 2,000,000 colony forming units or 2,000,000 most probable number. All fecal samples must be presented as geometric mean per gram.
  - c. The allowable nitrogen loading that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. For a grass cover crop, the allowable PAN is 300 pounds/acre. Alternative, site-specific application rates may be included in the closure plan for department consideration.
    - i. PAN can be determined as follows:
$$(\text{Nitrate} + \text{nitrite nitrogen}) + (\text{organic nitrogen} \times 0.2) + (\text{ammonia nitrogen} \times \text{volatilization factor}^1).$$
<sup>1</sup> Volatilization factor is 0.7 for surface application and 1 for subsurface application. Alternative volatilization factors and mineralization rates can be utilized on a case-by-case basis.
4. Domestic wastewater treatment lagoons with a design treatment capacity less than or equal to 150 persons, are “similar treatment works” under the definition of septage. Therefore the sludge within the lagoons may be treated as septage during closure activities. See Section B, above. Under the septage category, residuals may be left in place as follows:
  - a. Testing for metals or fecal coliform is not required.
  - b. If the wastewater treatment lagoon has been in use for less than 15 years, mix lime with the sludge at a rate of 50 pounds of hydrated lime per 1000 gallons (134 cubic feet) of sludge.
  - c. The amount of sludge that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. 100 dry tons/acre of sludge may be left in the basin without testing for nitrogen. If 100 dry tons/acre or more will be left in the lagoon, test for nitrogen and determine the PAN using the calculation above. Allowable PAN loading is 300 pounds/acre.
5. Biosolids or sludge left within the domestic lagoon shall be mixed with soil on at least a 1 to 1 ratio, and unless otherwise approved, the lagoon berm shall be demolished, and the site shall be graded and contain  $\geq 70\%$  vegetative density over 100% of the site so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion. Alternative biosolids or sludge and soil mixing ratios may be included in the closure plan for department consideration.
6. Lagoon and earthen structure closure activities shall obtain a storm water permit for land disturbance activities that equal or exceed one acre in accordance with 10 CSR 20-6.200.
7. When closing a mechanical wastewater plant, all biosolids or sludge must be cleaned out and disposed of in accordance with the Department approved closure plan before the permit for the facility can be terminated.
  - a. Land must be stabilized which includes any grading, alternate use or fate upon approval by the Department, remediation, or other work that exposes sediment to stormwater per 10 CSR 20-6.200. The site shall be graded and contain  $\geq 70\%$  vegetative density over 100% of the site, so as to avoid ponding of storm water and provide adequate

- surface water drainage without creating erosion.
- b. Hazardous Waste shall not be land applied or disposed during mechanical plant closures unless in accordance with Missouri Hazardous Waste Management Law and Regulations pursuant to 10 CSR 25.
  - c. After demolition of the mechanical plant, the site must only contain clean fill defined in Section 260.200.1(6) RSMo as uncontaminated soil, rock, sand, gravel, concrete, asphaltic concrete, cinderblocks, brick, minimal amounts of wood and metal, and inert solids as approved by rule or policy of the Department for fill, reclamation, or other beneficial use. Other solid wastes must be removed.
8. If biosolids or sludge from the domestic lagoon or mechanical treatment plant exceeds agricultural rates under Section G and/or I, a landfill permit or solid waste disposal permit must be obtained if the permittee chooses to seek authorization for on-site sludge disposal under the Missouri Solid Waste Management Law and regulations per 10 CSR 80, and the permittee must comply with the surface disposal requirements under 40 CFR Part 503, Subpart C.

## SECTION J – MONITORING FREQUENCY

1. At a minimum, biosolids or sludge shall be tested for volume and percent total solids on a frequency that will accurately represent sludge quantities produced and disposed. Please see the table below.

**TABLE 5**

Biosolids or Sludge produced and disposed (Dry Tons per Year)	Monitoring Frequency (See Notes 1, and 2)		
	Metals, Pathogens and Vectors, Total Phosphorus, Total Potassium	Nitrogen TKN, Nitrogen PAN <sup>1</sup>	Priority Pollutants <sup>2</sup>
319 or less	1/year	1 per month	1/year
320 to 1650	4/year	1 per month	1/year
1651 to 16,500	6/year	1 per month	1/year
16,501+	12/year	1 per month	1/year

<sup>1</sup> Calculate plant available nitrogen (PAN) when either of the following occurs: 1) when biosolids are greater than 50,000 mg/kg TN; or 2) when biosolids are land applied at an application rate greater than two dry tons per acre per year.

<sup>2</sup> Priority pollutants (40 CFR 122.21, Appendix D, Tables II and III) are required only for permit holders that must have a pre-treatment program. Monitoring requirements may be modified and incorporated into the operating permit by the Department on a case-by-case basis.

Note 1: Total solids: A grab sample of sludge shall be tested one per day during land application periods for percent total solids. This data shall be used to calculate the dry tons of sludge applied per acre.

Note 2: Table 5 is not applicable for incineration and permit holders that landfill their sludge.

2. Permittees that operate wastewater treatment lagoons, peak flow equalization basins, combined sewer overflow basins or biosolids or sludge lagoons that are cleaned out once a year or less, may choose to sample only when the biosolids or sludge is removed or the lagoon is closed. Test one composite sample for each 319 dry tons of biosolids or sludge removed from the lagoon during the reporting year or during lagoon closure. Composite sample must represent various areas at one-foot depth.
3. Additional testing may be required in the special conditions or other sections of the permit.
4. Biosolids and sludge monitoring shall be conducted in accordance with federal regulation 40 CFR § 503.8, Sampling and analysis.

## SECTION K – RECORD KEEPING AND REPORTING REQUIREMENTS

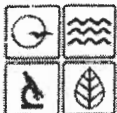
1. The permittee shall maintain records on file at the facility for at least five years for the items listed in Standard Conditions PART III and any additional items in the Special Conditions section of this permit. This shall include dates when the biosolids or sludge facility is checked for proper operation, records of maintenance and repairs and other relevant information.
2. Reporting period
  - a. By February 19<sup>th</sup> of each year, applicable facilities shall submit an annual report for the previous calendar year period for all mechanical wastewater treatment facilities, sludge lagoons, and biosolids or sludge disposal facilities.
  - b. Permittees with wastewater treatment lagoons shall submit the above annual report only when biosolids or sludge are removed from the lagoon during the report period or when the lagoon is closed.
3. Report Form. The annual report shall be prepared on report forms provided by the Department or equivalent forms approved by the Department.
4. Reports shall be submitted as follows:  
Major facilities, which are those serving 10,000 persons or more or with a design flow equal to or greater than 1 million gallons per day or that are required to have an approved pretreatment program, shall report to both the Department and EPA if the facility land applied, disposed of biosolids by surface disposal, or operated a sewage sludge incinerator. All other facilities shall maintain their biosolids or sludge records and keep them available to Department personnel upon request. State reports shall be submitted to the address listed as follows:

DNR regional or other applicable office listed in the  
permit (see cover letter of permit)  
ATTN: Sludge Coordinator

Reports to EPA must be electronically submitted online via the Central Data Exchange at: <https://cdx.epa.gov/> Additional information is available at: <https://www.epa.gov/biosolids/compliance-and-annual-reporting-guidance-about-clean-water-act-laws>

5. Annual report contents. The annual report shall include the following:
  - a. Biosolids and sludge testing performed. If testing was conducted at a greater frequency than what is required by the permit, all test results must be included in the report.
  - b. Biosolids or sludge quantity shall be reported as dry tons for the quantity produced and/or disposed.
  - c. Gallons and % solids data used to calculate the dry ton amounts.
  - d. Description of any unusual operating conditions.
  - e. Final disposal method, dates, and location, and person responsible for hauling and disposal.
    - i. This must include the name and address for the hauler and sludge facility. If hauled to a municipal wastewater treatment facility, sanitary landfill, or other approved treatment facility, give the name of that facility.
    - ii. Include a description of the type of hauling equipment used and the capacity in tons, gallons, or cubic feet.
  - f. Contract Hauler Activities:

If using a contract hauler, provide a copy of a signed contract from the contractor. Permittee shall require the contractor to supply information required under this permit for which the contractor is responsible. The permittee shall submit a signed statement from the contractor that he has complied with the standards contained in this permit, unless the contract hauler has a separate biosolids or sludge use permit.
  - g. Land Application Sites:
    - i. Report the location of each application site, the annual and cumulative dry tons/acre for each site, and the landowners name and address. The location for each spreading site shall be given as a legal description for nearest ¼, ¼, Section, Township, Range, and county, or UTM coordinates. The facility shall report PAN when either of the following occurs: 1) When biosolids are greater than 50,000 mg/kg TN; or 2) when biosolids are land applied at an application rate greater than two dry tons per acre per year.
    - ii. If the “Low Metals” criteria are exceeded, report the annual and cumulative pollutant loading rates in pounds per acre for each applicable pollutant, and report the percent of cumulative pollutant loading which has been reached at each site.
    - iii. Report the method used for compliance with pathogen and vector attraction requirements.
    - iv. Report soil test results for pH and phosphorus. If no soil was tested during the year, report the last date when tested and the results.



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM

**FORM B: APPLICATION FOR OPERATING PERMIT FOR  
FACILITIES THAT RECEIVE PRIMARILY DOMESTIC WASTE AND  
HAVE A DESIGN FLOW LESS THAN OR EQUAL TO 100,000  
GALLONS PER DAY**

**FOR AGENCY USE ONLY**

CHECK NUMBER

DATE RECEIVED

FEE SUBMITTED

JETPAY CONFIRMATION NUMBER

**READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM**

**1. THIS APPLICATION IS FOR:**

- ☐ An operating permit for a new or unpermitted facility. Construction Permit # \_\_\_\_\_  
(Include completed antidegradation review or request for antidegradation review, see instructions)
- ☐ A new site-specific operating permit formerly general permit #MOG
- ☒ A site-specific operating permit renewal: Permit #MO-0139157. Expiration Date November 2023 (?)
- ☐ A site-specific operating permit modification: Permit #MO-\_\_\_\_\_. Reason: \_\_\_\_\_
- ☐ General permit (NON-POTWs) (MOGD –discharging < 50,000 GPD or MOG823 – Land Application of Domestic Wastewater):  
Permit #MO-\_\_\_\_\_. Expiration Date \_\_\_\_\_

1.1 Is the appropriate fee included with the application (see instructions for appropriate fee)? ☒ YES ☐ NO \$300

**2. FACILITY**

NAME TRUMAN LAKE RESORT, LLC TELEPHONE NUMBER WITH AREA CODE 660-723-9397

ADDRESS (PHYSICAL) 37394 Hwy K CITY WARSAW STATE MO ZIP CODE 65355

2.1 Legal description: Sec. , T , R SEE ATTACHED DEED County BENTON

2.2 UTM Coordinates Easting (X): 465377.99 Northing (Y): 4219535.95 ZONE 15S  
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

2.3 Name of receiving stream: NOT APPLICABLE

2.4 Number of outfalls: 0 Wastewater outfalls: 0 Stormwater outfalls: 0 Instream monitoring sites: 0

**3. OWNER:**

NAME LAND AND BUILDINGS, LLC EMAIL ADDRESS dcmertz@gmail.com TELEPHONE NUMBER WITH AREA CODE 660-723-9397

ADDRESS 37394 Hwy K CITY WARSAW STATE MO ZIP CODE 65355

3.1 Request review of draft permit prior to public notice? ☒ YES ☐ NO

3.2 Are you a publicly owned treatment works? ☐ YES ☒ NO  
If yes, please attach the Financial Questionnaire. See: <https://dnr.mo.gov/forms/780-2511-f.pdf>

3.3 Are you a privately owned treatment works? ☒ YES ☐ NO

3.4 Are you a privately owned treatment facility regulated by the Public Service Commission? ☐ YES ☒ NO

**4. CONTINUING AUTHORITY:**

NAME TRUMAN LAKE RESORT, LLC EMAIL ADDRESS dcmertz@gmail.com TELEPHONE NUMBER WITH AREA CODE 660-723-9397

ADDRESS 37394 Hwy K CITY WARSAW STATE MO ZIP CODE 65355

If the continuing authority is different than the owner, include a copy of the contract agreement between the two parties and a description of the responsibilities of both parties within the agreement.

**5. OPERATOR**

NAME DAVID MERTZ TITLE MEMBER CERTIFICATE NUMBER NONE

EMAIL ADDRESS dcmertz@gmail.com TELEPHONE NUMBER WITH AREA CODE 660-723-9397

**6. FACILITY CONTACT**

NAME DAVID MERTZ TITLE MEMBER

EMAIL ADDRESS dcmertz@gmail.com TELEPHONE NUMBER WITH AREA CODE 660-723-9397

ADDRESS 37394 Hwy K CITY WARSAW STATE MO ZIP CODE 65355

MO 780-1512 (03-21)

JUL 7 2023

## 7. DESCRIPTION OF FACILITY

**7.1 Process Flow Diagram or Schematic:** Provide a diagram showing the processes of the treatment plant. Show all of the treatment units, including disinfection (e.g. – chlorination and dechlorination), influents, and outfalls. Specify where samples are taken. Indicate any treatment process changes in the routing of wastewater during dry weather and peak wet weather. Include a brief narrative description of the diagram.  
Attach sheets as necessary.

SEE ATTACHED SHEET.

**7.2 Attach an aerial photograph or USGS topographic map showing the location of the facility and outfall.**

Please see the following website:

<https://modnr.maps.arcgis.com/apps/webappviewer/index.html?id=1d81212e0854478ca0dae87c33c8c5ce>

ATTACHED.



**8. ADDITIONAL FACILITY INFORMATION**

- 8.1 Number of people presently connected or population equivalent (P.E.) 110 Design P.E. 115
- 8.2 Connections to the facility:  
Number of units presently connected:  
Residential: 1 Commercial: 1 Industrial: \_\_\_\_\_  
*CAMPER TRAILERS FOR VACATION USE, NOT CONTINUALLY OCCUPIED*
- 8.3 Design flow: 8640 GALLONS PER DAY Actual flow: 2590 GPD TO 9516 GPD
- 8.4 Will discharge be continuous through the year? ☐ Yes ☒ No *NO DISCHARGE*  
Discharge will occur during the following months: NONE  
How many days of the week will discharge occur? 0
- 8.5 Is industrial wastewater discharged to the facility? ☐ Yes ☒ No  
If yes, attach a list of the industries that discharge to your facility
- 8.6 Does the facility accept or process leachate from landfills? ☐ Yes ☒ No
- 8.7 Is wastewater land applied? ☐ Yes ☒ No  
If yes, attach Form I. See: <https://dnr.mo.gov/forms/780-1686-f.pdf>
- 8.8 Does the facility discharge to a losing stream or sinkhole? ☐ Yes ☒ No
- 8.9 Has a wasteload allocation study been completed for this facility? ☐ Yes ☒ No

**9. LABORATORY CONTROL INFORMATION**

## LABORATORY WORK CONDUCTED BY PLANT PERSONNEL

- Lab work conducted outside of plant. ☐ Yes ☒ No
- Push-button or visual methods for simple test such as pH, settleable solids. ☐ Yes ☒ No
- Additional procedures such as dissolved oxygen, chemical oxygen demand, biological oxygen demand, titrations, solids, volatile content. ☐ Yes ☒ No
- More advanced determinations, such as BOD seeding procedures, fecal coliform/*E. coli*, nutrients (including Ammonia), Oil & Grease, total oils, phenols, etc. ☐ Yes ☒ No
- Highly sophisticated instrumentation, such as atomic absorption and gas chromatograph. ☐ Yes ☒ No

**10. COLLECTION SYSTEM**

- 10.1 Are there any municipal satellite collection systems connected to this facility? ☐ Yes ☒ No  
If yes, please list all connected to this facility, contact phone number and length of each collection system

FACILITY NAME	CONTACT PHONE NUMBER	LENGTH OF SYSTEM (FEET OR MILES)

- 10.2 Length of pipe in the sewer collection system? (If available, include totals from satellite collection systems)

4000 Feet, or \_\_\_\_\_ Miles (either unit is appropriate)

- 10.3 Does significant infiltration occur in the collection system? ☐ Yes ☒ No

If yes, briefly explain any steps underway or planned to minimize inflow and infiltration:



**11. BYPASSING**

Does any bypassing occur in the collection system or at the treatment facility? ☐ Yes ☒ No

If yes, explain:

**12. SLUDGE HANDLING, USE AND DISPOSAL**

12.1 Is the sludge a hazardous waste as defined by 10 CSR 25? ☐ Yes ☒ No

12.2 Sludge production, including sludge received from others: \_\_\_\_\_ Design dry tons/year \_\_\_\_\_ Actual dry tons/year UNKNOWN

12.3 Capacity of sludge holding structures:  
Sludge storage provided: 2448 cubic feet; 1460 days of storage; UNKNOWN average percent solids of sludge;  
☐ No sludge storage is provided. ☐ Sludge is stored in lagoon.

12.4 Type of Storage: ☒ Holding tank (SEPTIC) ☐ Building  
☐ Basin ☐ Lagoon  
☐ Concrete Pad ☐ Other (Describe) \_\_\_\_\_

12.5 Sludge Treatment:  
☐ Anaerobic Digester ☐ Lagoon ☐ Composting  
☒ Storage Tank (SEPTIC) ☐ Aerobic Digester ☐ Other (Attach description)  
☐ Lime Stabilization ☐ Air or Heat Drying

12.6 Sludge Use or Disposal:  
☐ Land Application ☐ Surface Disposal (Sludge Disposal Lagoon, Sludge held for more than two years)  
☒ Contract Hauler ☐ Hauled to Another treatment facility  
☐ Incineration ☐ Sludge Retained in Wastewater treatment lagoon  
☐ Solid waste landfill

12.7 Person responsible for hauling sludge to disposal facility:  
☐ By applicant ☒ By others (complete below)

NAME <u>AMERICAN SEPTIC</u>		EMAIL ADDRESS	
ADDRESS <u>533 Hwy 54</u>	CITY <u>HERMITAGE</u>	STATE <u>MO</u>	ZIP CODE <u>65668</u>
CONTACT PERSON <u>KEVIN POSEY</u>		TELEPHONE NUMBER WITH AREA CODE <u>417-745-2405</u>	
		PERMIT NO. MO-	

12.8 Sludge use or disposal facility  
☐ By applicant ☒ By others (Complete below.)

NAME <u>AMERICAN SEPTIC</u>		EMAIL ADDRESS	
ADDRESS <u>533 Hwy 54</u>	CITY <u>HERMITAGE</u>	STATE <u>MO</u>	ZIP CODE <u>65668</u>
CONTACT PERSON <u>KEVIN POSEY</u>		TELEPHONE NUMBER WITH AREA CODE <u>417-745-2405</u>	
		PERMIT NO. MO-	

12.9 Does the sludge or biosolids disposal comply with federal sludge regulations under 40 CFR 503?  
☒ Yes ☐ No (Explain)

### 13. ELECTRONIC DISCHARGE MONITORING REPORT (eDMR) SUBMISSION SYSTEM

Per 40 CFR Part 127, National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure a timely, complete, accurate, and nationally-consistent set of data. One of the following options must be checked in order for this application to be considered complete. Visit <https://dnr.mo.gov/env/wpp/edmr.htm> to for information on the Department's eDMR system and how to register.

- ☐ I will register an account online to participate in the Department's eDMR system through the Missouri Gateway for Environmental Management (MoGEM) before any reporting is due, in compliance with the Electronic Reporting Rule.
- ☐ I have already registered an account online to participate in the Department's eDMR system through MoGEM.
- ☐ I have submitted a written request for a waiver from electronic reporting. See instructions for further information regarding waivers.
- ☒ The permit I am applying for does not require the submission of discharge monitoring reports.

### 14. JETPAY

Permit fees may be paid online by credit card or eCheck through a system called JetPay. Use the URL provided to access JetPay and make an online payment.

New Site Specific Permit: <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/591/>

Construction Permits: <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/592/>

Modification Fee: <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/596/>

New General Domestic WW: <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/772/>

### 15. CERTIFICATION

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.

NAME (TYPE OR PRINT)

DAVID MERTZ

OFFICIAL TITLE

MEMBER

TELEPHONE NUMBER WITH AREA CODE

660-723-9397

SIGNATURE

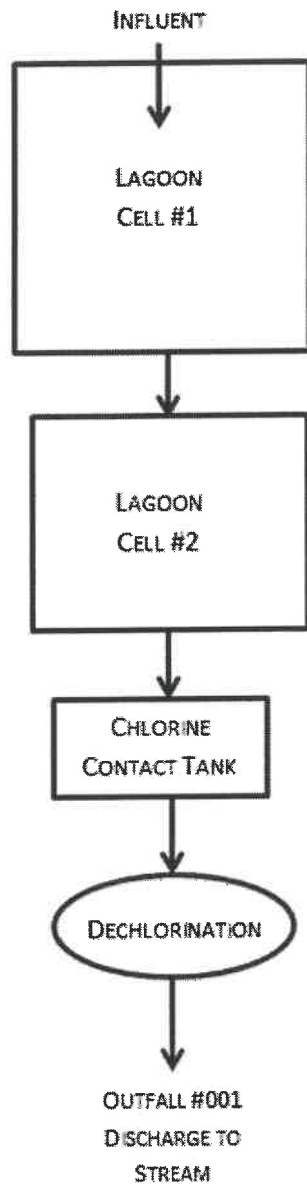
David C. Mertz MEMBER

DATE SIGNED

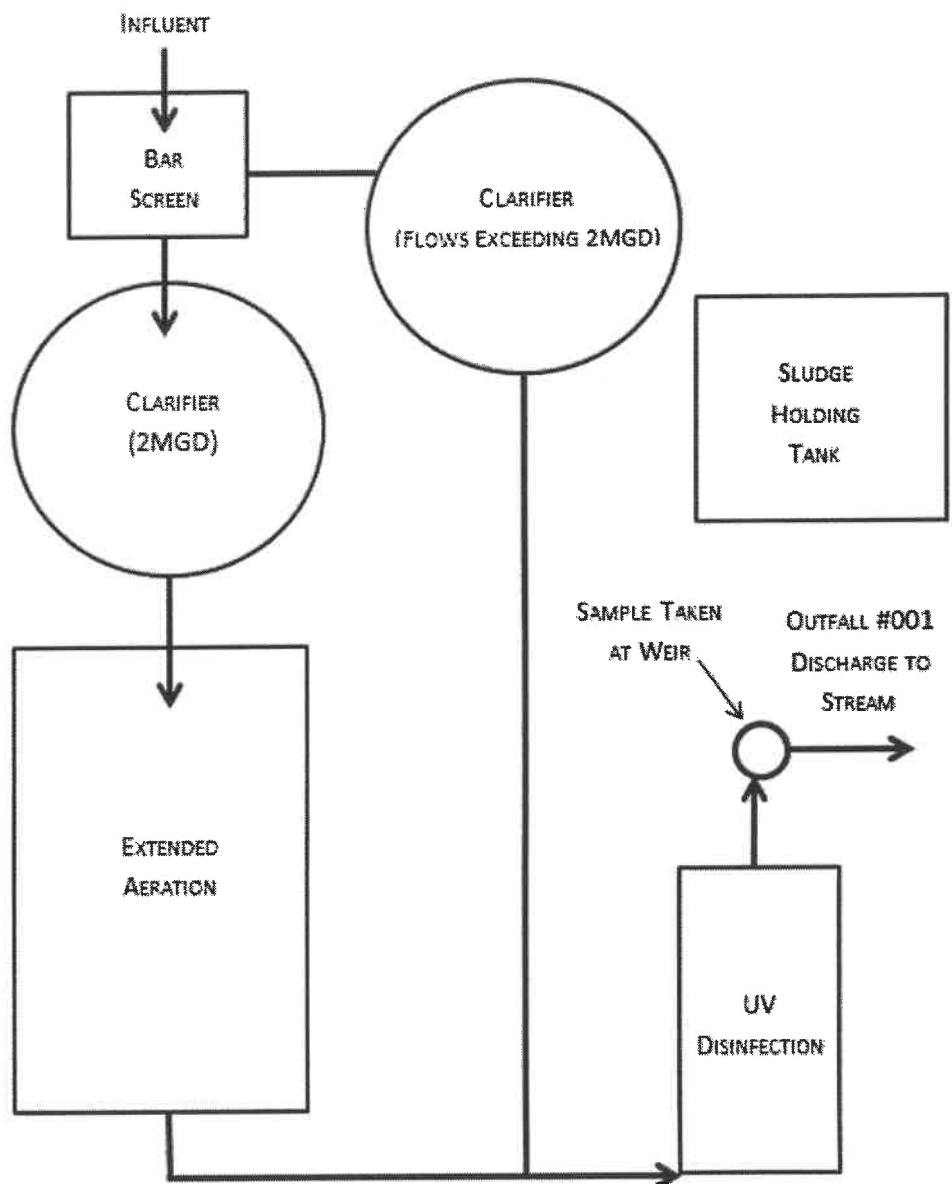
6/29/2023

## 7.1 Process Flow Diagram Examples

### WASTEWATER TREATMENT LAGOON



### WASTEWATER TREATMENT FACILITY



7.2 A topographic map is available on the Web at <https://modnr.maps.arcgis.com/apps/webappviewer/index.html?id=1d81212e0854478ca0dae87c33c8c5ce> or from the Department of Natural Resources' Geological Survey Division in Rolla at 573-368-2125.

8.1-8.6 Self-explanatory.

8.7 If wastewater is land applied submit Form I: [www.dnr.mo.gov/forms/780-1686-f.pdf](http://www.dnr.mo.gov/forms/780-1686-f.pdf).

8.9-8.9 Self-explanatory



**INSTRUCTIONS FOR COMPLETING FORM B: APPLICATION FOR OPERATING PERMIT FOR FACILITIES  
THAT RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW  
LESS THAN OR EQUAL TO 100,000 GALLONS PER DAY  
(Facilities over 100,000 gallons per day of domestic waste must use FORM B2)  
(Facilities that receive wastes other than domestic contact the department)**

1. Check the appropriate box. **Do not check more than one item.** Operating permit refers to a permit issued by the Department of Natural Resources' Water Protection Program. If an Antidegradation Review has not been conducted, submit the application located at the following link to the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102: [dnr.mo.gov/forms/780-1893-f.pdf](http://dnr.mo.gov/forms/780-1893-f.pdf).

**1.1 Fees Information:**

**DOMESTIC OPERATING PERMIT FEES – PRIVATE**

Annual operating permit fees are based on flow.

Annual fee/Design flow	Annual fee/Design flow	Annual fee/Design flow
\$150.....<5,000 gpd	\$1,000.....15,000-24,999 gpd	\$4,000.....100,000-249,999 gpd
→ \$300.....5,000-9,999 gpd	\$1,500.....25,000-29,999 gpd	\$5,000.....≥250,000 gpd
\$600.....10,000-14,999 gpd	\$3,000.....30,000-99,999 gpd	

New domestic wastewater treatment facilities must submit the annual fee with the original application.

→ If the application is for a site-specific permit re-issuance, send no fees. You will be invoiced separately by the department on the anniversary date of the original permit. Permit fees must be current for the department to reissue the operating permit. Late fees of 2% per month are charged and added to outstanding annual fees.

**PUBLIC SEWER SYSTEM OPERATING PERMIT FEES** (city, public sewer district, public water district, or other publicly owned treatment works that charge a service connection fee). Annual fee is based on number of service connections. Fees listings are found in 10 CSR 20-6.011 which is available at <http://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-6.pdf>. New public sewer system facilities should not submit any fee as the department will invoice the permittee.

**OPERATING PERMIT MODIFICATIONS**, including transfers, are subject to the following fees:

- a. Operating permits that charge a service connection fee - \$200 each.
- b. All other permits
  - (1) \$100 each for a minor modification (name changes, address changes, other non-substantive changes) or
  - (2) A fee equal to 25% of the facility's annual operating fee for a major modification.

2. Name of Facility – Include the name by which this facility is locally known. Example: Southwest Sewage Treatment Plant, Country Club Mobile Home Park, etc. Provide the street address or location of the facility. If the facility lacks a street name or route number, provide the names of the closest intersection, highway, country road, etc.

**2.1 Self-explanatory**

- 2.2 Global Positioning System, or GPS, is a satellite-based navigation system. The department prefers that a GPS receiver is used at the outfall pipe and the displayed coordinates submitted. If access to a GPS receiver is not available, use a mapping system to approximate the coordinates; the department's mapping system is available at <https://modnr.maps.arcgis.com/apps/webappviewer/index.html?id=1d81212e0854478ca0dae87c33c8c5ce>.

**2.3-2.4 Self-explanatory**

3. Owner – Provide the legal name, mailing address, phone number, and email address of the owner. The owner identified in this section and subsequently reflected on the certificate page of the operating permit, is the owner of the regulated activity/discharge being applied for and is not necessarily the owner of the real property on which the activity or discharge is occurring.

Prior to submitting a permit to public notice, the Department of Natural Resources shall provide the permit applicant 10 days to review the draft permit for nonsubstantive drafting errors. In the interest of expediting permit issuance, permit applicants may waive the opportunity to review draft permits prior to public notice.

- 3.2-3.4 Self-explanatory. The Financial Questionnaire is available at: <https://dnr.mo.gov/forms/780-2511-f.pdf>

4. Continuing Authority - 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. A continuing authority is not, however, an entity or individual that is contractually hired by the permittee to sample or operate and maintain the system for a defined time period, such as a certified operator or analytical laboratory. To access the regulatory requirement regarding continuing authority, 10 CSR 20-6.010(2), please visit <http://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-6.pdf>. If the continuing authority is not an individual(s), government, or otherwise required to register with the Missouri Secretary of State (SoS), then the business name must be listed exactly as it appears on the SoS's webpage: <https://bsd.sos.mo.gov/BusinessEntity/BEsearch.aspx?SearchType=0>

5. Operator – Provide the name, certificate number, title, mailing address, primary phone number, and e-mail address of the operator of the facility.

6. Provide the name, title, mailing address, primary phone number, and e-mail address of a person who is thoroughly familiar with the operation of the facility and with the facts reported in this application and who can be contacted by the department.

**INSTRUCTIONS FOR COMPLETING FORM B: APPLICATION FOR OPERATING PERMIT FOR FACILITIES  
THAT RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW  
LESS THAN OR EQUAL TO 100,000 GALLONS PER DAY (continued)**

9. Self-explanatory.  
10.1 Self-explanatory.  
10.2 Self-explanatory.  
10.3 If Inflow and Infiltration (I&I) is a problem at the facility, list possible actions to be taken to repair the collection and treatment facility.
11. Include overflows of combined sewers and lift stations or bypassing of the wastewater treatment facility. Provide a detailed description of the circumstances that sewage bypassing occurs and the frequency of occurrence.
12. A copy of 10 CSR 25 is available on the Web at [www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp#10-25](http://www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp#10-25).  
12.1-12.8 Self-explanatory.  
12.9 Refer to University of Missouri Extension Environmental Quality publications about biosolids (WQ420-WQ426). The documents are available at [extension.missouri.edu/main/DisplayCategory.aspx?C=74](http://extension.missouri.edu/main/DisplayCategory.aspx?C=74). In addition, the federal sludge regulations are available through the U.S. Government Printing Office at <https://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>.
13. Electronic Discharge Monitoring Report (eDMR) Submission System – Visit the eDMR site at <http://dnr.mo.gov/env/wpp/edmr.htm> and click on the “Facility Participation Package” link. The eDMR Permit Holder and Certifier Registration Form and information about the eDMR system can be found in the Facility Participation Package. Waivers to electronic reporting may be granted by the Department per 40 CFR 127.15 under certain, special circumstances. A written request must be submitted to the Department for approval. Waivers may be granted to facilities owned or operated by:
- a. members of religious communities that choose not to use certain technologies.
  - b. permittees located in areas with limited broadband access. The National Telecommunications and Information Administration (NTIA) in collaboration with the Federal Communications Commission (FCC) have created a broadband internet availability map: <https://broadbandmap.fcc.gov/#/>. Please contact the department if you need assistance.
14. **JETPAY**  
Applicants can pay fees online by credit card or eCheck through a system called JetPay.
- a. Per Section 37.001, RSMo, a transaction fee will be included. The transaction fee is paid to the third party vendor JetPay, not the Department of Natural Resources.
  - b. Be sure to select the correct fee type and corresponding URL to ensure your payment is applied appropriately. If you are unsure what type of fee to pay, please contact the Water Protection Program's Budget, Fees, and Grants Management Unit by phone at (573) 522-1485 for assistance.
  - c. Upon successful completion of your payment, JetPay provides a payment confirmation. Submit this form with a copy of the payment confirmation if requesting a new permit or a permit modification. For permit renewals of active permits, the Department will invoice fees annually in a separate request.
  - d. If you are unable to make your payment online, but want to pay with credit card, you may email your name, phone number, and invoice number, if applicable, to [sherry.bell@dnr.mo.gov](mailto:sherry.bell@dnr.mo.gov). The Budget, Fees, and Grants Management Unit will contact you to assist with the credit card payment. **Please do not include your credit card information in the email.**
  - e. Applicants can find fee rates in 10 CSR 20-6.011 (<https://dnr.mo.gov/pubs/pub2564.htm>).
15. **CERTIFICATION**  
Signature - All applications must be signed as follows and the signatures must be **handwritten**:
- a. For a corporation, by an officer having responsibility for the overall operation of the regulated facility or activity or for environmental matters.
  - b. For a partnership or sole proprietorship, by a general partner or the proprietor.
  - c. For a municipal, state, federal or other public facility, by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.

**Submittal of an incomplete application may result in the application being returned.**

This completed form and any attachments along with the applicable permit fees, should be submitted to:  
[cleanwaterpermits@dnr.mo.gov](mailto:cleanwaterpermits@dnr.mo.gov)

OR

Department of Natural Resources  
Water Protection Program  
ATTN: NPDES Permits and Engineering Section  
P.O. Box 176  
Jefferson City, MO 65102

Map of regional offices with addresses and phone numbers are available on the Web at <http://dnr.mo.gov/regions/>. If there are any questions concerning this form, contact the appropriate regional office or the Department of Natural Resources, Water Protection Program, Operating Permits Section at 800-361-4827 or 573-522-4502.



11-1119

FILED FOR RECORD ON THE 4<sup>th</sup> DAY OF  
April 2011 AT 8  
O'CLOCK 04 MIN A M. RECORDED  
IN BOOK 607 PAGE 561  
BEVERLY BURNETT, RECORDER OF DEEDS,  
BENTON COUNTY, MO.  
BY: Fatima Hallack DEPUTY

### Warranty Deed

47745 D-2-2-1, E-1-1-1

THIS DEED, made and entered into this 2nd day of April, 2011, by and between

**Kenneth G. Howe and Margaret M. Howe, husband and wife**  
as "Grantor", and

**Land and Buildings, LLC, a Missouri Limited Liability Company**

as "Grantee", whose mailing address is: 308 W. 8TH ST., APT. 220  
KANSAS CITY, MO 64105

WITNESSETH, that Grantor, in consideration of the sum of Ten Dollars and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by Grantor, does hereby, GRANT, BARGAIN AND SELL, Convey and Confirm to Grantee and to the successor, heirs, and assigns of Grantee, the following described real property (the Property), situated in the County of **BENTON**, State of Missouri, to-wit:

That part of the South half of the Northeast quarter and the North half of the Southeast quarter of Section 24, Township 39 North, Range 23 West of the 5th P. M. in Benton County, Missouri, to-wit:

Beginning at the northeast corner of the Southwest quarter of the Northeast quarter of said Section 24-39-23; thence east along the north line of the Southeast quarter of the Northeast quarter of said Section 24, 620 feet, more or less; thence south parallel with the west line of the Southeast quarter of the Northeast quarter of said Section 24 to the northwesterly right-of-way of Highway 83; thence southwesterly along said Highway 83 right of way to the west line of the Northeast quarter of the Southeast quarter of said Section 24; thence north along said west line to a point 1589.1 feet, more or less, south from the northeast corner of the Southwest quarter of the Northeast quarter of said Section 24; thence westerly 408.56 feet, more or less, to the easterly and northeasterly right-of-way line of Missouri State Highway "K"; thence following said Highway "K" right-of-way line in a westerly and northwesterly direction to the north line of the Southwest quarter of the Northeast quarter of said Section 24; thence east along said north line of the Southwest quarter of the Northeast quarter 915 feet, more or less, to the point of beginning.

LESS AND EXCEPT HOWEVER, THE FOLLOWING DESCRIBED THREE TRACTS OF LAND:

BOOK 607 PAGE 561

**TRACT 1:** Part of the Northwest quarter of the Southeast quarter of Section 24, Township 39 North, Range 23 West of the 5th P. M. in Benton County, Missouri, described as follows:

Beginning on the east line of said Northwest quarter of the Southeast quarter at a point South  $1^{\circ} 50' 41''$  West 1589.1 feet from the northeast corner of the Southwest quarter of the Northeast quarter of said Section 24; thence South  $88^{\circ} 44' 01''$  West 408.56 feet to the center line of public road; thence North  $1^{\circ} 49' 36''$  West 205 feet along said center line of public road; thence North  $88^{\circ} 46' 24''$  East 421.69 feet, more or less, to the east line of said Northwest quarter of the Southeast quarter; thence South  $1^{\circ} 50' 41''$  West 205 feet to the point of beginning.

**TRACT 2:** That part of the above described tract, if any, lying within the East half of the Southwest quarter of the Northeast quarter of the Southeast quarter of Section 24, Township 39 North, Range 23 West.

**TRACT 3:** PART OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 24, TOWNSHIP 39 NORTH, RANGE 23 WEST OF THE 5TH P.M. IN BENTON COUNTY, MISSOURI, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE NORTH LINE OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 24 WHICH POINT IS  $N89^{\circ}15'56''W$  398.22 FEET FROM THE NORTHEAST CORNER OF SAID SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 24; THENCE ALONG THE NORTH LINE OF SAID SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 24,  $N89^{\circ}15'56''W$  516.61 FEET TO THE NORTHEASTERLY RIGHT-OF-WAY LINE OF MISSOURI "K"; THENCE WITH SAID RIGHT-OF-WAY LINE HAVING A RADIUS OF 920 FEET MORE OR LESS WITH A CORD BEARING  $S27^{\circ}55'33''E$  106.21 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE CONTINUING ALONG SAID HIGHWAY RIGHT-OF-WAY LINE  $S32^{\circ}29'15''E$  278.56 FEET; THENCE LEAVING SAID HIGHWAY RIGHT OF WAY LINE  $N66^{\circ}33'41''E$  343.15 FEET; THENCE  $N0^{\circ}44'04''E$  185.70 FEET TO THE POINT OF BEGINNING.

Subject to easements, restrictions, reservations, and covenants of record, if any.

**TO HAVE AND TO HOLD** the Property aforesaid with all and singular, the rights, privileges, appurtenances and immunities thereto belonging or in any wise appertaining unto Grantee, and to the successors, heirs, and assigns of Grantee forever. Grantor hereby covenanting that Grantor is lawfully seized of an indefeasible estate in fee of the Property herein conveyed; that Grantor has good right to convey the same; that the Property is free and clear from any encumbrance done or suffered by Grantor or those under whom Grantor claims, except as stated above and except for all taxes and assessments, general and special, not now due and payable; and that Grantor, will WARRANT AND DEFEND the title to said Property unto Grantee, and to the successors, heirs, and assigns of Grantee forever, against the lawful claims and demands of all persons whomsoever.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, as a masculine or feminine gender, according to the context.

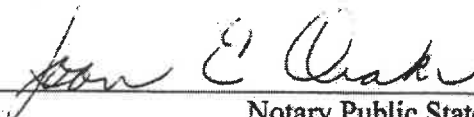
IN WITNESS WHEREOF, Grantor has executed this instrument the day and year first above written.

  
KENNETH G. HOWE

  
MARGARET M. HOWE

In the **STATE OF MISSOURI, COUNTY OF Benton** on this **2nd day of April, 2011**, before me, the undersigned, a Notary Public in and for said County and State, personally appeared **Kenneth G. Howe and Margaret M. Howe, husband and wife** to me known to be the person(s) described in and who executed the foregoing instrument, and acknowledged that he/she/they executed the same as his/her/their free act and deed.

Witness my hand and Notarial Seal subscribed and affixed in said County and State, the day and year in this certificate above written.

  
\_\_\_\_\_  
Notary Public State of Missouri  
Commissioned filed in \_\_\_\_\_ County  
My Commission expires \_\_\_\_\_





## Triple-Net Lease Agreement

**PARTIES:** This Lease Agreement is made this 2nd day of April, 2011, by and between Land and Buildings, LLC (Lessor) and Truman Lake Resort, LLC (Lessee).

The Parties hereby agree as follows:

**DESCRIPTION OF LEASED PREMISES:** The Lessor hereby agrees to lease to the Lessee, and the Lessee does hereby lease from the Lessor the following described premises: The land, campground, store, storage buildings, and all other real property improvements on the 42 acres located at 37394 Hwy K, Warsaw, MO, identified by parcel number 20602400000005004 in the Benton County GIS system

**TRIPLE NET (NNN) LEASE:** It is the intention of the Parties, and they hereby agree, that this Lease shall be considered a "Triple Net Lease".

Therefore, the Lessor shall pay all expenses associated with the property and any operations therein, including all taxes and all insurances, except for interest and principal on the real estate mortgage Lessee holds with Hawthorn Bank.

The Lessor may build on or improve the leased property, at its own expense. Any real property improvements may be used by Lessor but shall be the property of the Lessee.

**RENT:** Rent shall be \$34,700 per year.

**TERM OF LEASE:** The term of this Lease Agreement is perpetual until such time as it is dissolved by either party.

**BINDING EFFECT:** This Lease Agreement and any amendments thereto shall be binding upon the Lessor and the Lessees and/or their respective successors, heirs, assigns, executors and administrators.

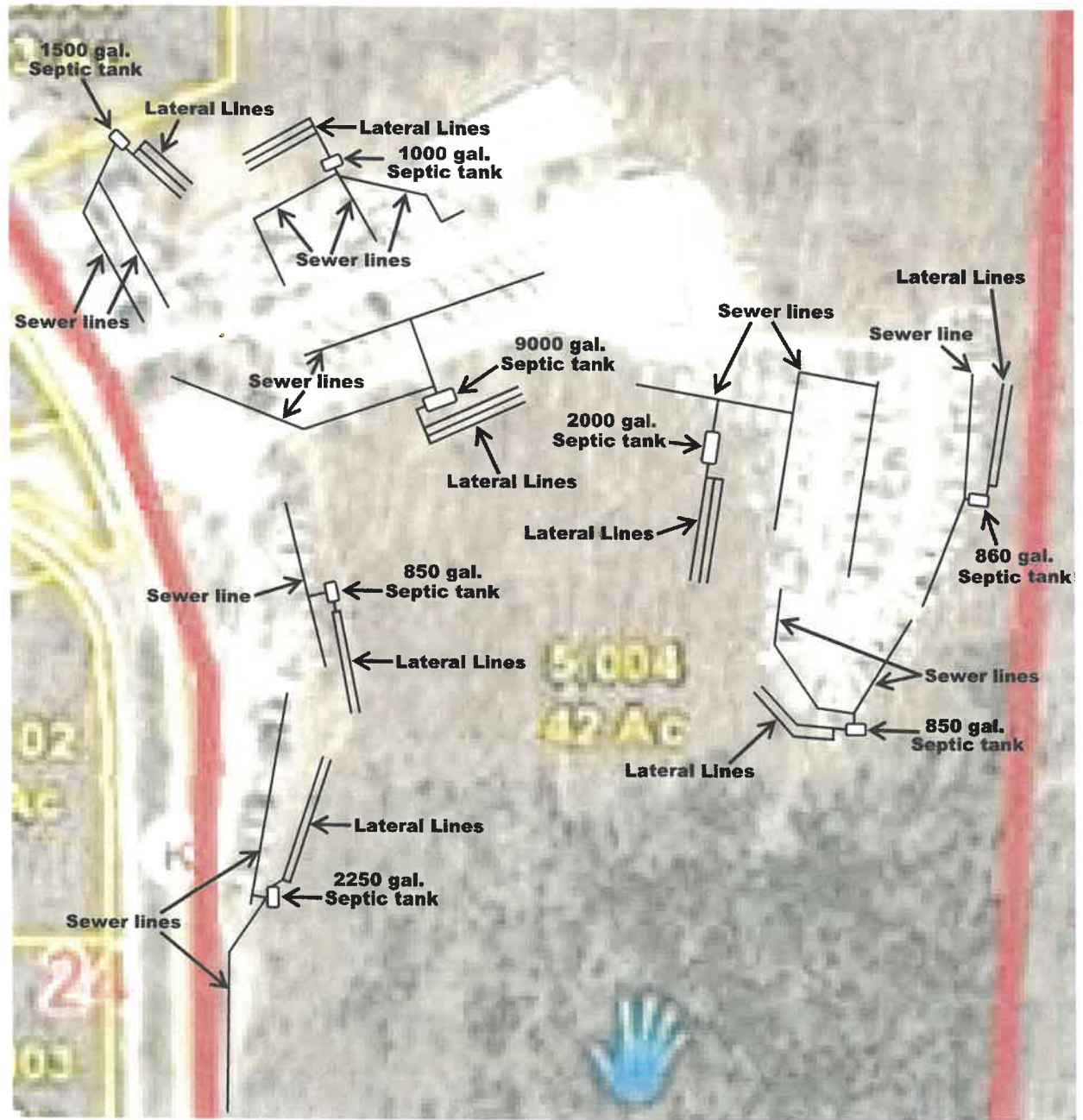
IN WITNESS WHEREOF, the parties hereto set their hands and seal this 2nd day of APRIL, 20 11.

David C. Mertz, MEMBER  
David C. Mertz, Member, Land and Buildings, LLC

David C. Mertz, MEMBER  
David C. Mertz, Member, Truman Lake Resort, LLC

**For item 7.1:**

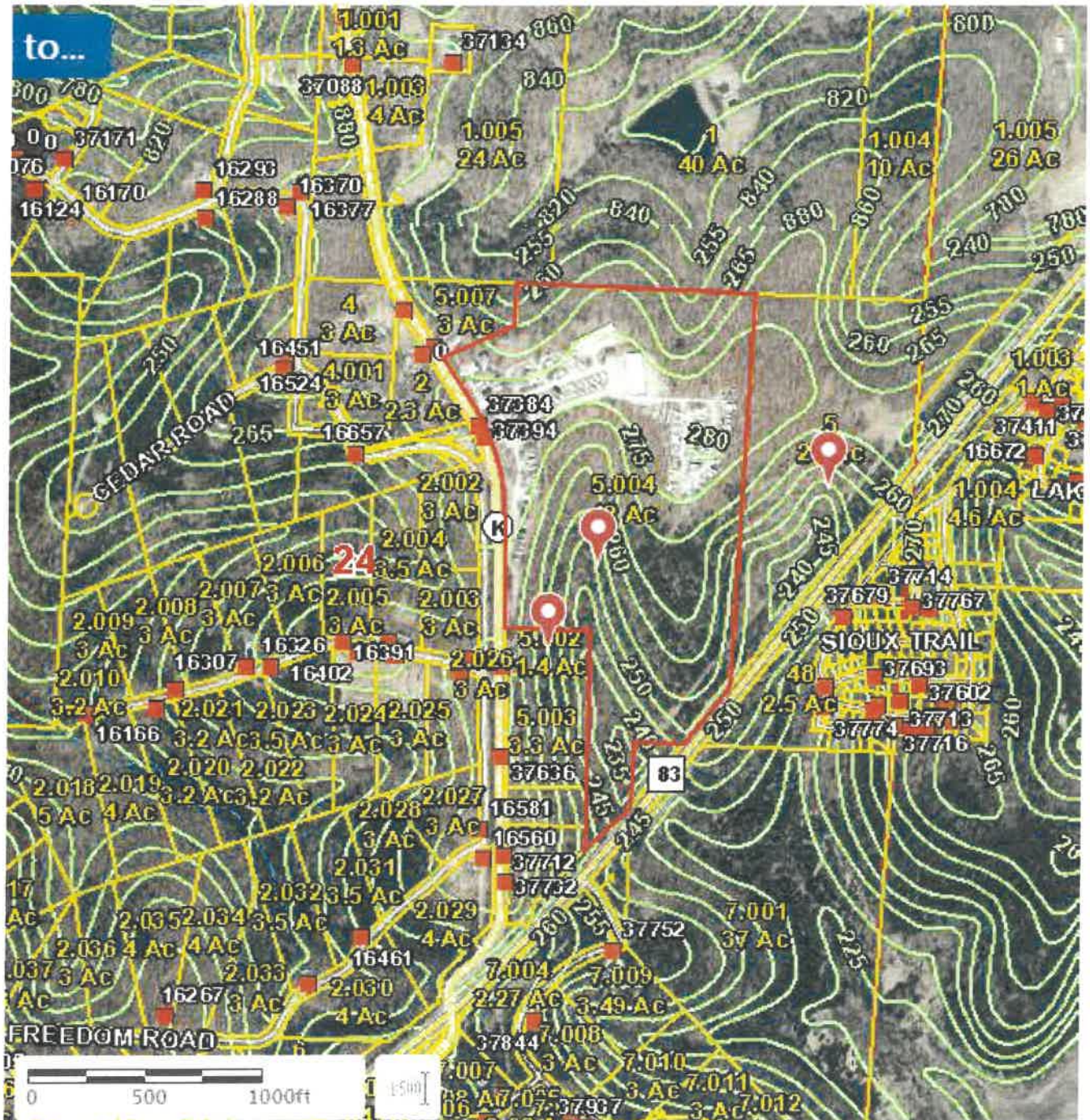
This diagram indicates the approximate location of the sewage treatment system components at Truman Lake Resort. Since the system consists only of sewer lines, septic tanks, and drainfields, there is no discharge anywhere.





For item 7.2:

A map from the Benton County GIS showing the location of Truman Lake Resort (in red), the surrounding land contour, and any nearby streams (indicated in blue). Note that the two streams indicated on this map are to the northwest and southwest, each 1/4 mile away from the nearest portions of our sewage treatment system.





# Water meter readings & flow calculations

2023

Date read	Well reading	Gallons pumped	Bait room reading	minus gallons used for fish	equals gallons to drains	Average gallons per day
1/31	5338977	80489	2568770	0	80489	2596
2/28	5416466	77489	2568770	0	77489	2748
3/31	5558955	142489	2568770	0	<del>142489</del>	4586
4/30	5804602	245647	2550688	18,082	227565	7586
5/31	6146802	342200	2599362	48674	293526	9469
6/30	16196340	340010	2665590	66238	273,762	9125
7/31						
8/31						
9/30						
10/31						
11/30						
12/31						

# Water meter readings & flow calculations

Year 2022

Date read	Well reading	Gallons pumped	Bait room reading	minus gallons used for fish	equals gallons to drains	Average gallons per day
1/31	2511215 <del>1822836</del>	80,489 <del>341664</del>	2138836 <del>2010182</del>	0 <del>628654</del>	80,489 <del>276996</del>	2590 <del>8938</del>
2/28	2588704 <del>1859623</del>	77,489 <del>330787</del>	2138836 <del>2068700</del>	0 <del>603088</del>	77,489 <del>270228</del>	2743 <del>9328</del>
3/31	2731193	142489	2138836	0	142489	4596
4/30	2976840	245647	2170706	31870	213777	7126
5/31	3319040	342200	2249380	78674	263526	8501
6/30	361017	341977	2281104	31,724	310,253	9410
7/31	4007984	346987	2344178	63074	283893	9158
8/31	4349648	341664	2402662	58484	283180	9135
9/30	4687385	337737	2454926	52264	285473	9516
10/31	4980442	293057	2506250	51324	241733	7798
11/30	5162499	182057	2568770	62520	119537	3985
12/31	5258488	95989	2568770	0	95989	3096