

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

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

Permit No. MO-0136476

Owner: US Army Corps of Engineers
Address: 15968 Truman Road, Warsaw, MO 65355

Continuing Authority: Sterett Creek Marina, Inc.
Address: 18174 Marina Road, Warsaw, MO 65355

Facility Name: Sterett Creek Marina, Inc.
Address: US HWY 65 to Marina Road, Warsaw, MO 65355

Legal Description: NE ¼, NW ¼, Sec. 33, T41N, R22W Benton County
UTM (X/Y): (468290/4238577)

Receiving Stream: Truman Reservoir (L2)
First Classified Stream and ID: Truman Reservoir (L2) (7207)
USGS Basin & Sub-watershed No.: (10290105-0507)

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

FACILITY DESCRIPTION

Marina/campground - SIC #4493/7033
Outfall 001 -No-discharge System
Three cell storage lagoon/wastewater irrigation/sludge is retained in lagoon or land applied.
Design population equivalent is 135.
Design flow is 16,167 gallons per day (1-in-10 year design including net rainfall minus evaporation).
Average design flow is 13,489 gallons per day (dry weather flows).
Design sludge production is 1.9 dry tons per year.

Continued Page 2

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

July 22, 2011
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

July 21, 2016
Expiration Date
MO 780-0041 (10-93)

Dorothy Franklin, Acting Director, Kansas City Regional Office

FACILITY DESCRIPTION (continued)

Facility Type:

No-discharge Storage and Irrigation System.

Design Basis:

	<u>Avg Annual</u>	<u>Seasonal (March – November)</u>
Design dry weather flows	<u>13,489</u> gpd	<u>17,738</u> gpd
Design with 1-in-10 year flows	<u>16,167</u> gpd	<u>21,293</u> gpd
Design PE <u>135</u>		

Storage Basin/Tank:

Freeboard for basin:	<u>1.0</u> feet
Storage volume (minimum to maximum water levels)	<u>977,618</u> gallons

Days of Storage

Storage Capacity:

Design for Dry weather Flows:	<u>72</u> days
Design with 1-in 10 year flows:	<u>60</u> days

Land Application:

Irrigation Volume/year: 5,855,568 gallons (including 1-in-10 year flows)

Land Application to grass field next to Lagoon.

Legal Description: NE ¼, NW ¼, Sec. 33, T41N, R22W.

UTM (X/Y): 468290/4238577

Receiving Stream: Truman Reservoir (L2)

First Classified Stream and ID: Truman Reservoir (L2) (7207)

USGS Basin & Sub-watershed No.: (10290105-0507)

Irrigation areas: 6.5 acres at design loading (6.5 acres total available)

Application rates/acre: 0.2 inch/hour; 1 inch/day; 3 inches/week; 40 inches/year

Field slopes: less than 2.5 percent

Equipment type: sprinklers, single portable line with 10 sprinklers

Vegetation: grass

Application rate is based on: hydraulic loading rate

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS				PAGE NUMBER 3 of 6		
				PERMIT NUMBER MO-0136476		
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001 - Land Application Operational Monitoring (Notes 1-3)</u>						
Lagoon Freeboard	feet	*			once/month	measured
Rainfall	inches	*			daily	total
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>January 28, 2012</u> .						
<u>Outfall #001 - Land Application to Grass Field next to Lagoon (Notes 2, 3 & 4)</u>						
Irrigation Period	hours	*			once/day	total
Volume Irrigated	gallons	*			once/day	total
Application Area	acres	*			once/day	total
Application Rate	inches/ acre	*			once/day	total
Total Kjeldahl Nitrogen as N	mg/L	*			Twice/Irrigation Season**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>January 28, 2012</u> .						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 & August 15, 1994</u> AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Sample twice during the irrigation season between March and November.

Note 1 - **No-discharge facility requirements.** Wastewater shall be stored and land applied during suitable conditions so that there is no-discharge from the lagoon or irrigation site. An emergency discharge may occur when excess wastewater has accumulated above feasible irrigation rates due to precipitation exceeding the 1-in-10-year 365 day rainfall or the 25-year 24-hour storm event.

Note 2 - Records shall be maintained and summarized into an annual operating report, which shall be submitted by January 28th of each year for the previous calendar year period using report forms approved by the Department. The 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 lagoon has discharged during the year, the discharge flow, the reasons discharge occurred and effluent analysis performed; and
- c. A summary of the irrigation operations including freeboard at the start and end of the irrigation season, the number of days of irrigation for each month, the total gallons irrigated, the total acres used, crops grown, crop yields per acre, the application rate in inches/acre per day and for the year, the monthly and annual precipitation received at the facility and summary of testing results.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 3 - Lagoon freeboard shall be reported as lagoon water level in feet below the overflow level. See Special Conditions for Wastewater Irrigation System requirements.

Note 4 - Wastewater that is irrigated shall be sampled at the irrigation pump or wet well.

C. SPECIAL CONDITIONS

1. Emergency Discharge. Outfall 001 may only discharge if rainfall exceeds the 1 in 10 year (Data taken from the Missouri Climate Atlas) or the 24 hour, 25 year (Data taken from NRCS Urban Hydrology for Small Watersheds) rainfall events. **Discharge for any other reason shall constitute a permit violation and shall be reported in accordance with Standard Conditions, Part 1, Section B.2.b.** Monitoring shall take place once per day while discharging. Test results are due on the 28th day of the month after the cessation of the discharge. Permittee shall monitor for the following constituents:

Constituent	Units
Flow	MGD
Biochemical Oxygen Demand ₅	mg/L
Total Suspended Solids	mg/l
Total Ammonia Nitrogen	mg/L
Temperature	°C
pH – Units	Standard Units

2. Report as no-discharge when a land application does not occur during the report period.
3. Land application plots within fields must be marked such that individual 20 acre plots can be easily recognized for land application and sampling.
4. Water Quality Standards
 - a. Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - b. General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
5. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.

C. SPECIAL CONDITIONS (continued)

- (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

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

- 6. Lagoons and earthen basins shall have a liner that is designed, constructed and maintained. If operating records indicate excessive percolation, the department may require corrective action as necessary to eliminate excess leakage.
- 7. Wastewater Irrigation System.
 - (a.) Discharge Reporting. Any unauthorized discharge from the lagoon or irrigation system shall be reported to the department as soon as possible but always within 24 hours. Discharge is allowed only as described in the Facility Description and Effluent Limitations sections of this permit.
 - (b.) Lagoon Operating Levels - No-discharge Systems. The minimum and maximum operating water levels for the storage lagoon shall be clearly marked. Each lagoon shall be operated so that the maximum water elevation does not exceed one foot below the overflow point except due to exceedences of the 1-in-10 year or 25-year-24 hour storm events. Wastewater shall be land applied whenever feasible based on soil and weather conditions and permit requirements. Storage lagoon(s) shall be lowered to the minimum operating level prior to each winter by November 30.
 - (c.) Emergency Spillway. Lagoons and earthen storage basins should have an emergency spillway to protect the structural integrity of earthen structures during operation at near full water levels and in the event of overflow conditions. The spillway shall be at least one foot below top of berm. The department may waive the requirement for overflow structures on small existing basins.
 - (d.) General Irrigation Requirements. The wastewater irrigation system shall be operated so as to provide uniform distribution of irrigated wastewater over the entire irrigation site. A complete ground cover of vegetation shall be maintained on the irrigation site unless the system is approved for row crop irrigation. Wastewater shall be land applied only during daylight hours. The wastewater irrigation system shall be capable of irrigating the annual design flow during an application period of less than 100 days or 800 hours per year.
 - (e.) Saturated/Frozen Conditions. There shall be no irrigation during frozen, snow covered, or saturated soil conditions.
 - (f.) Buffer Zones. There shall be no irrigation within 300 feet of any down gradient pond, lake, sinkhole, losing stream or water supply withdrawal; 100 feet of gaining streams or tributaries; 150 feet of dwelling or public use areas; or 50 feet of the property line.
 - (g.) Public Access Restrictions. Public access shall not be allowed to the irrigation site(s).
 - (h.) Operation and Maintenance Manual.

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 land application systems. Copies of the O&M Manual and subsequent revisions shall be submitted to Regional Office for review and approval. The O&M Manual shall be reviewed and updated at least every five years.
 - (i.) Equipment Checks during Irrigation. The irrigation system and application site shall be visually inspected at least once per day during wastewater irrigation to check for equipment malfunctions and runoff from the irrigation site.

C. SPECIAL CONDITIONS (continued)

- (j) Nitrogen Loading Rates. Wastewater irrigation rates shall not exceed a nitrogen application rate of 150 pounds total nitrogen per acre per year. Application rates shall not exceed the rate listed on page 2 of this permit. The calculation procedures are as follows: Total Kjeldahl Nitrogen as N x (0.226) x (inches per acre irrigated) = pounds total N per acre. For the purposes of this permit, Total Kjeldahl Nitrogen = Total Nitrogen, because of the low contributions of Nitrate & Nitrite from this type of facility.

D. PERMIT TRANSFER

This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.

E. PERMIT RENEWAL REQUIREMENTS

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than six (6) months prior to the permit's expiration date. Failure to apply for renewal may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

F. TERMINATION

In order to terminate this permit, the permittee shall notify the department by submitting Form J, included with the State Operating Permit. The permittee shall complete Form J and mail it to the department at the address noted in the cover letter of this permit. Proper closure of any storage structure is required prior to permit termination. A closure plan shall be submitted to the department and approved prior to initiating closure activities.

G. DUTY OF COMPLIANCE

The permittee shall comply with all conditions of this permit. Any noncompliance with this permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF ISSUANCE
OF
MO-0136476
STERETT CREEK MARINA

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution 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 storm water 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)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.

This Factsheet is for a Major , Minor , Industrial Facility ; Variance ; Master General Permit ; General Permit Covered Facility ; and/or permit with widespread public interest .

Part I – Facility Information

Facility Type: Marina with Campgrounds
 Facility SIC Code(s): 4493/7033

Facility Description:

Three cell storage lagoon with 6.5 acres for wastewater irrigation. Sludge is retained in the lagoon. The Sterett Creek Marina is a recreational area with a campground, marina, motel, restaurant and two mobile homes.

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	0.021	Equivalent to Secondary	Domestic	0.21

Outfall 001; Land Application
 Legal Description: NE ¼, NW ¼, Sec. 33, T41N, R22W.
 UTM (X/Y): 468290/4238577
 Receiving Stream: Truman Reservoir (L2)
 First Classified Stream and ID: Truman Reservoir (L2) (7207)
 USGS Basin & Sub-watershed No.: (10290105-0507)

Water Quality History:

The facility has always operated as a no discharge facility so there is no water quality history to review.

Comments:

Observations and comments from March 25, 2009 inspection report completed by Mr. Bill Vossberg, KCRO inspector.

“As part of the inspection, a file review of the USCOE-Sterett Creek Park was conducted. The file review disclosed that the USCOE did receive a letter –of- approval LA-3000474-0 dated January 2, 1988. The Letter-of-Approval is no longer in effect. Letters dated January 14, 1997 and March 7, 1997 from the Jefferson City Regional Office (JCRO) required the USCOE to apply for a No-Discharge General Permit. An additional letter from the JCRO dated June 2, 1998 requested information needed to complete the USCOE permit application Form E for Sterett Creek Park and other referenced facilities. As best as can be determined from the file review, the USCOE did not provide the information requested by the JCRO on Sterett Creek Park for that facility to be permitted by the department.”

“There was evidence of berm damage by muskrats and turtles on all three (3) berms.”

“The level of the wastewater in all three (3) berms was one to two feet below the 2-ft freeboard level.”

“The water color was a clear emerald green.”

“There was no general purpose transfer pump to distribute the wastewater to the through the portable piping and sprinkler heads. There was no power source to the influent weir where the transfer pump would be positioned.”

“According to Roger Weter, to the best of his knowledge the last land application at this site was approximately ten (10) years ago in 1999.”

“NOV KCR2009041415405640 is being issued for: operating, using or maintaining a domestic wastewater no-discharge system without a Missouri State Operating Permit (MSOP).”

It was reported that in 1996 the pump for the lagoon was replaced due to being under water from the floods of 1993, 1994, and 1995. The irrigation field was also under water during the flooding of 1993, 1994, and 1995. Truman Reservoir water elevation was up some 30 plus feet for all three years.

The United State Army Corps of Engineers has applied for a construction permit to install a new pump, build a pump house, and reinstall the sprinkler system for the no discharge treatment facility at Sterett Creek Marina.

Part II – Operator Certification Requirements

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation.

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

Part III – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

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

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

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

RECEIVING STREAM(S) TABLE:

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Truman Reservoir	L2	7207	AQL, DWS, LWW, SCR, WBC (A)	10290105	Ozark/Osage

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

** - Ecological Drainage Unit

RECEIVING STREAM MONITORING REQUIREMENTS:

No receiving water monitoring requirements recommended at this time.

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

ANTI-BACKSLIDING:

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

- No discharge facility; therefore, backsliding does not apply.

ANTIDegradation:

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)], 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 discharge facility, therefore no degradation is proposed.

BIO-SOLIDS, SLUDGE, & SEWAGE SLUDGE:

Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sludge is any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works.

Applicable (new operating permits) .

The permittee has proposed that sludge and bio-solids are to be retained in the lagoon and removed by a contract hauler when necessary.

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.

Applicable .

The permittee/facility is currently under enforcement action due to operating without a Missouri State Operating Permit.

PRETREATMENT PROGRAM:

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

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

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

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

Not Applicable .

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

REMOVAL EFFICIENCY:

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD₅) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals. Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm.

Applicable ;

This is a no-discharge facility, and therefore achieves 100% removal efficiency.

SANITARY SEWER OVERFLOWS (SSOs), AND INFLOW & INFILTRATION (I&I):

Collection systems are a critical element in the successful performance of the wastewater treatment process. Under certain conditions, poorly designed, built, managed, operated, and/or maintained systems can pose risks to public health, the environment, or both. Causes of SSOs include, but are not limited to, the following: high levels of I&I during wet weather; blockages; structural, mechanical, or electrical failures; collapsed or broken sewer pipes; insufficient conveyance capacity; and vandalism. Effective and continuous management, operation, and maintenance, as well as ensuring adequate capacity and rehabilitation when necessary are critical to maintaining collection system capacity and performance while extending the life of the system.

Not Applicable ;

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

SCHEDULE OF COMPLIANCE (SOC):

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

Not Applicable ;

This permit does not contain a SOC.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

A plan to schedule activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. The plan may include, but is not limited to, treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Not Applicable ;

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

VARIANCE:

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

Not Applicable ;

This operating permit is not drafted under premises of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

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

Not Applicable ;

No discharge facility. Wasteload allocations were not calculated.

WHOLE EFFLUENT TOXICITY (WET) TEST:

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

Not Applicable ; WET testing does not apply to no-discharge facilities.

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

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

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

Not Applicable ;
This facility does not discharge.

Part V – Effluent Limits Determination

Outfall #001 – Lagoon with wastewater irrigation

EFFLUENT LIMITATIONS TABLE:

There are no effluent limits associated with this no-discharge facility. However, the following monitoring is required for the land applied wastewater.

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
TOTAL KJELDAHL NITROGEN AS N	MG/L	9	*			NO	

* - Monitoring requirement only

Basis for Limitations Codes:

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

Monitoring Frequency

Land application rate	Parameters	Frequency	Land application limit?
24-40 inches	TKN	Twice per irrigation season	150 lbs Nitrogen per acre per year

Part VI – 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.

PUBLIC NOTICE:

As per the Missouri Clean Water Law, the Missouri Clean Water Commission, and the federal Clean Water Act, persons wishing to comment on Missouri State Operating Permits are directed to do so by a department approved Public Notice coversheet. This Public Notice coversheet is attached to a Missouri State Operating Permit during the Public Notice period.

- The Public Notice period for this operating permit was from September 3, 2010 to October 4, 2010. No responses received or responses to the Public Notice of this operating permit do not warrant the modification of effluent limits and/or the terms and conditions of this permit.

DATE OF FACT SHEET: AUGUST 30, 2010

DATE OF FACT SHEET: JUNE 23, 2011 REVISED

COMPLETED BY:

SCOTT F. HONIG, P.E. ENVIRONMENTAL ENGINEER

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APPENDIX A – FACILITY LAGOON AND LAND APPLICATION SITE

