

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. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.: **MO0104493**

Owner: Gerald Brink
Owner's Address: 13369 Bahn Fyre Rd., St. Louis, MO 63128

Continuing Authority: Same as above
Continuing Authority's Address: Same as above

Facility Name: Formerly Little Dixie Truck Port WWTF
Facility Address: 11550 Dillon Outer Rd., Rolla, MO 65401

Legal Description: NW ¼, NE ¼, Sec. 32, T38N, R7W, Phelps County
Latitude/Longitude: (+3758377/-09142520)

Receiving Stream: Unnamed tributary to Bourbeuse River (U)
First Classified Stream and ID: Bourbeuse River (C) (02049)
USGS Basin & Sub-watershed No.: (07140103-020001)

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

FACILITY DESCRIPTION

Outfall #001 – Former Service Station/Truck Stop – Sewerage Systems (domestic) SIC # 4952 – **Certified Wastewater Operator Not Required**

Two (2) cell facultative lagoon/Sludge retained in lagoon
Design population equivalent = 49
Design flow = 2,500 gallons per day
Actual flow = 1,540 gallons per day
Design sludge production = 0.74 dry tons per year

This operating permit authorizes only wastewater and stormwater discharges under the Law and the National Pollutant Discharge Elimination System. This operating permit does not apply to other regulated areas. This operating permit may be appealed in accordance with the Law, Section 644.051.6, RSMo, and Section 621.250, RSMo, and Missouri Clean Water Commission regulations [10 CSR 20-6.020], Permits, Public Participation, Hearings and Notice to Governmental Agencies, and [10 CSR 20-1.020], Organization, Clean Water Commission Appeals and Requests for Hearings.

December 31, 2009
Effective Date

December 31, 2009
Renewal Date


Mark N. Templeton, Director, Department of Natural Resources

December 30, 2014
Expiration Date

Gary L. Gaines, P.E., Director, Southeast Regional Office

A. <u>EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</u>					PAGE 2 of 4	
PERMIT NUMBER: MO0104493						
Permittee authorized to discharge from outfall(s) with serial number(s) as specified in the application for this operating permit. Final effluent limitations shall become effective upon issuance (renewal) date of this operating permit and remain in effect until expiration. Such discharges shall be controlled, limited and monitored by permittee as specified below:						
OUTFALL NUMBER and EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall # 001</u>						
Flow	MGD	*		*	Once/quarter**	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		65	45	Once/quarter**	grab
Total Suspended Solids	mg/L		110	70	Once/quarter**	grab
pH – Units	SU	***		***	Once/quarter**	grab
Ammonia as N	mg/L	*		*	Once/quarter**	grab
Temperature	°C	*		*	Once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>Quarterly</u> . FIRST REPORT DUE <u>April 28, 2010</u> . THERE SHALL BE <u>NO</u> DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. <u>STANDARD CONDITIONS</u>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS OPERATING PERMIT SUBJECT TO ATTACHED <u>Part I and Part III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring and reporting

** See table below for quarterly sampling and reporting

Sample discharge at least once for the months of:	Report is due:
January, February, March (1 st Quarter)	April 28
April, May, June (2 nd Quarter)	July 28
July, August, September (3 rd Quarter)	October 28
October, November, December (4 th Quarter)	January 28

*** pH measured in pH standard units (SUs) and is not to be averaged. pH is to be maintained at or above 6.0 pH units

C. SPECIAL CONDITIONS

1. This operating 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 operating permit; or
 - (2) Controls any pollutant not limited in the operating permit.
- (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
- (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

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

C. SPECIAL CONDITIONS (continued)

2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to area wide wastewater treatment system within ninety (90) calendar days of notice of its availability.
4. Changes in Discharges of Toxic Substances

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

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the operating permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the operating permit application; or
 - (4) The level established in Part A of the operating permit by the Director.
 - (b) That permittee has begun or expects to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the operating permit application.
5. Report as no-discharge when a discharge does not occur during the reporting period.
 6. General Criteria. The following 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 waters of the state from meeting the following conditions:
 - (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;
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (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;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community; or
 - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in the Missouri Solid Waste Management Law, Section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to Section 260.200-260.247, RSMo.

C. SPECIAL CONDITIONS (continued)

7. Permittee shall comply with any applicable requirements listed in MCWC regulations [10 CSR 20-8], Design Guides, and [10 CSR 20-9], Treatment Plant Operations, unless facility has received written notification that the Department has approved a modification to the requirements. Monitoring frequencies contained in this operating permit shall not be construed by permittee as a modification of monitoring frequencies listed in MCWC regulation [10 CSR 20-9], Treatment Plant Operations. If a modification of monitoring frequencies listed in MCWC regulation [10 CSR 20-9], Treatment Plant Operations, is needed, permittee shall submit a written request to the Department for review and, if deemed necessary, approval.

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF THE RENEWAL OF
MISSOURI STATE OPERATING PERMIT # MO0104493
FORMERLY LITTLE DIXIE TRUCK PORT WASTEWATER TREATMENT FACILITY
ROLLA, PHELPS COUNTY

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 pollutant(s) discharge from point sources into the waters of the United States, and stormwater releases from certain point sources. All such discharges are unlawful without an operating permit (Section 301 of the "Clean Water Act"). After an operating permit is obtained, a discharge, not in compliance with all operating 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 (the Federal "Clean Water Act" and the "Missouri Clean Water Law" Section 644, as amended). MSOPs are issued for a period of five (5) calendar years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.020(1)(A)2.], Permits, Public Participation, Hearings and Notice to Governmental Agencies, Public Participation, a Fact Sheet shall be prepared to give pertinent information regarding the applicable regulations, development rationale of effluent limitations and conditions, and the public participation process for the MSOP (operating permit) listed below.

A Fact Sheet is not an enforceable part of an operating permit.

This Fact Sheet is for a(n):

- ☐ Major
- ☒ Minor
- ☐ Industrial Facility
- ☐ Variance
- ☐ Master General Permit
- ☐ General Permit Covered Facility
- ☐ And/or operating permit with widespread public interest

Part I – Facility Information

Facility Address: 11550 Dillon Outer Rd., Rolla, MO 65401

Facility Type: Non-Publicly Owned Treatment Works – Former Service Station/Truck Stop

Facility Standard Industrial Classification (SIC) Code(s): 4952 (Sewerage Systems-domestic)

Facility Description:

Outfall # 001 – Former Service Station/Truck Stop – Sewerage Systems (domestic) SIC # 4952 – **Certified Wastewater Operator**

Not Required

Two (2) cell facultative lagoon/Sludge retained in lagoon

Design population equivalent = 49

Design flow = 2,500 gallons per day

Actual flow = 1,540 gallons per day

Design sludge production = 0.74 dry tons per year

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?

☐ Yes

☒ No

Application Date: August 14, 2007

Expiration Date: January 9, 2008

Last Inspection: July 30, 2007

☒ In Compliance

☐ Non Compliance

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)*	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	0.004	Equivalent Secondary	Treated Domestic	5.7

* - Cubic feet per second (CFS)

Outfall # 001

Legal Description: NW ¼, NE ¼, Sec. 32, T38N, R7W, Phelps County

Latitude/Longitude: (+3758377/-09142520)

Receiving Stream: Unnamed tributary to Bourbeuse River (U)

First Classified Stream and ID: Bourbeuse River (C) (02049)

USGS Basin & Sub-watershed No.: (07140103-020001)

Receiving Water Body's Water Quality and Facility Performance History: No impacts noted.

Comments: None.

Part II – Operator Certification Requirements

As per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.010(8)], Water Quality, Construction and Operating Permits, Terms and Conditions of a Permit, permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law (MCWL) and applicable permit conditions and MCWC regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with MCWC regulation [10 CSR 20-9.020(2)], Treatment Plant Operations, Classification of Wastewater Treatment Systems, Wastewater Treatment System Requirements. As per MCWC regulation [10 CSR 20-9.020(2)(A)], Treatment Plant Operations, Wastewater Treatment Systems Operation Scope Monitoring, requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Owned or operated by or for:

☐ Municipalities

☐ Public Sewer District

☐ County

☐ Public Water Supply Districts

☐ Private sewer company regulated by the Public Service Commission

☐ State or Federal agencies

Each of the above entities are only applicable if they have a Population Equivalent greater than two hundred (200) and/or fifty (50) or more service connections.

- Department required:

☐ Yes

☒ No



This facility does not currently retain an operator with the correct level of certification required to operate the wastewater treatment facility. The MCWL and its implementing MCWC regulation [10 CSR 20-9.020(2)(F)], Treatment Plant Operations, Classification of Wastewater Treatment Systems, Wastewater Treatment Systems Requirements, allows the Department to develop a schedule of activities including the date by which compliance shall be obtained. This schedule of activities may be established in this operating permit as a Schedule of Compliance (SOC) or following Department consultation with permittee.



This facility not required to have a certified operator.

Part III – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE: As per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.015], Water Quality, Effluent Regulations, the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation and 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)]

As per MCWC regulation [10 CSR 20-7.031], Water Quality, Water Quality Standards, the Department defines the MCWC water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses". The receiving stream and/or first classified receiving stream's beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with MCWC regulation [10 CSR 20-7.031(3)], Water Quality, Water Quality Standards, General Criteria.

RECEIVING STREAM(S) TABLE:

WATER BODY NAME	CLASS	WBID*	DESIGNATED USES**	8-DIGIT HUC***	EDU***
Unnamed tributary to Bourbeuse River	U	---	General Criteria	07140103	Ozark/Gasconade Drainage
Bourbeuse River	C	02049	LWW; AQL; CLF; WBC (B)****		

* - Water Body Identification (WBID) Number

** - Irrigation (IRR); Livestock and 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)

*** - Hydrologic Unit Code (HUC); Ecological Drainage Unit (EDU)

**** - Use Attainability Analysis (UAA), for above stated water body, conducted [DATE], supporting Whole Body Contact (WBC) Recreation use designation retention

***** - Use Attainability Analysis (UAA) has not been conducted for above stated water body

RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS*)		
	1Q ₁₀ **	7Q ₁₀ **	30Q ₁₀ **
Unnamed tributary to Bourbeuse River (U)	---	---	---
Bourbeuse River (C) (02049)	0.0	0.0	0.0

* - Cubic feet per second (CFS)

** - Average minimum flow for one (1) consecutive calendar day that has a probable recurrence interval of once-in-ten (10) calendar years (1Q₁₀); Average minimum flow for seven (7) consecutive calendar days that has a probable recurrence interval of once-in-ten (10) calendar years (7Q₁₀); Average minimum flow for 30 (30) consecutive calendar days that has a probable recurrence interval of once-in-ten (10) calendar years (30Q₁₀)

MIXING CONSIDERATIONS TABLE:

Mixing Zone: Not Allowed per MCWC regulation [10 CSR 20-7.031(4)(A)4.B.(I)(a)], Water Quality, Water Quality Standards, Specific Criteria, For mixing zones, Streams with seven (7)-day Q_{10} low flows of less than 0.1 cfs, Mixing zone, the allowable mixing zone is one-quarter (1/4) of the stream width, cross-sectional area or volume of flow; length of one-quarter (1/4) mile
Zone of Initial Dilution: Not Allowed MCWC regulation [10 CSR 20-7.031(4)(A)4.B.(I)(b)], Water Quality, Water Quality Standards, Specific Criteria, For mixing zones, Streams with seven (7)-day Q_{10} low flows of less than 0.1 cfs, Zone of initial dilution

RECEIVING STREAM MONITORING REQUIREMENTS: No receiving water monitoring requirements recommended at this time.

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

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES: As per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.015(4)(A)], Water Quality, Effluent Regulations, Effluent Limitations for Losing Streams, discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream, and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

☐ **Applicable**

Facility discharges to a Losing Stream as defined by MCWC regulation [10 CSR 20-2.010(36)], Definitions, Losing stream, and [10 CSR 20-7.031(1)(N)], Water Quality, Water Quality Standards, Definitions, Losing Stream, and has submitted alternative evaluation(s).

☒ **Not Applicable**

Facility does not discharge to a Losing Stream as defined by MCWC regulation [10 CSR 20-2.010(36)], Definitions, Losing Streams, and [10 CSR 20-7.031(1)(N)], Water Quality, Water Quality Standards, Definitions, Losing stream.

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

☐ **New facility. Backsliding does not apply.**☒ **All limits in this Factsheet are at least as protective as those previously established; therefore, backsliding does not apply.**☐ **Interim and/or final effluent limitations in this operating permit for the reissuance of this operating permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and [40 CFR Part 122.44].**

ANTIDEGRADATION: In accordance with MCWC regulation [10 CSR 20-7.031(2)], Water Quality, Water Quality Standards, Antidegradation, the Department shall 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.



Renewal and/or modification. No degradation proposed and no further review necessary.



New and/or expanded discharge. As per MCWC regulation [10 CSR 20-7.031(2)(D)], Water Quality, Water Quality Standards, Antidegradation, the three (3) levels of protection provided by the antidegradation policy in subsections (A), (B) and (C) of this section shall be implemented according to procedures developed by the Department. On April 20, 2007, the MCWC approved the *Missouri Antidegradation Rule and Implementation Procedure* (Antidegradation Rule), which is applicable to new or upgraded/expanded facilities. The implementation of the Antidegradation Rule occurred on August 31, 2008. Any construction permit application or other applicable permit applications submitted prior to August 31, 2008, will not be required to have an Antidegradation Review.



Master General Permit Antidegradation Review conducted during template development.

AREA-WIDE WASTE TREATMENT MANAGEMENT AND CONTINUING AUTHORITY: As per MCWC regulation [10 CSR 20-6.010(3)(B)], Permits, Construction and Operating Permits, Continuing Authorities: “... An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver 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.”.

BIO-SOLIDS, SLUDGE AND 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; 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(es); 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 (Renewal or modification(s) to existing operating permit)**

Facility has been approved to land apply as per MSOP, Paragraph B., Standard Conditions, Part III, and a Department-approved bio-solids management plan.

☐ **Applicable (New operating permit)**

Permittee has proposed that sludge and bio-solids are not to be removed by a contract hauler for this facility. Permittee has proposed to land apply the sludge and bio-solids as per MSOP, Paragraph B., Standard Conditions, Part III. The Department has reviewed and approved permittee's bio-solids management plan, and therefore, permittee and/ or facility is approved to land apply said sludge and bio-solids as a means of treatment or disposal.

☐ **Not Applicable**

This condition not applicable to permittee for this specific facility.

COMPLIANCE AND ENFORCEMENT: Enforcement is the action taken by the Department's Division of Environmental Quality's Water Protection Program's Water Pollution Control Branch's Compliance and Enforcement Section to bring an entity into compliance with the Missouri Clean Water Law (MCWL), implementing MCWC regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the Department's Division of Environmental Quality's Water Protection Program's Water Pollution Control Branch's Compliance and Enforcement Section is to resolve violations and return the entity to compliance.

☐ **Applicable**

☒ **Not Applicable**

Permittee and/or facility not currently under the Department's Division of Environmental Quality's Water Protection Program enforcement action.

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 Publicly Owned Treatment Works (POTW), or combination of POTW, operated by the same authority and/or municipality, with a total design flow greater than (>) five-point-zero (5.0) million gallons per day (MGD) and receiving industrial wastes that interfere with or pass through the POTW or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at a POTW/municipality with a design flow less than (<) 5.0 MGD if needed to prevent interference with operations or pass through.

Several special conditions pertaining to permittee's and/or facility's pretreatment program may be included in an operating permit, and are as follows:

- Implementation and enforcement of the pretreatment 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

☐ Applicable

This permittee and/or facility have an approved pretreatment program in accordance with the requirements of [40 CSR Part 403] and MCWC regulation [10 CSR 20-6.100], Permits, General Pretreatment Regulation, and said permittee and/or facility is expected to implement and enforce its approved pretreatment program.

☒ Not Applicable

Permittee and/or facility, at this time, not required to have a pretreatment program or do not have a Department-approved pretreatment program.

REASONABLE POTENTIAL ANALYSIS (RPA): Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard.

In accordance with [40 CFR Part 122.44(d)(iii)], if the Department permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the Water Quality Standard, the operating permit must contain effluent limitations for that pollutant.

☐ Applicable

A Reasonable Potential Analysis (RPA) conducted on appropriate parameters.

☒ Not Applicable

A Reasonable Potential Analysis (RPA) not conducted for this facility. Data not available to conduct RPA for the Ammonia parameter (no monitoring required by previous operating permit).

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 (POTW)/municipalities (see the United States Environmental Protection Agency's (EPA's) Web site 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 at: www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm.

☐ Applicable

Secondary Treatment is 85% removal [40 CFR Part 133.102(a)(3) and (b)(3)].

☐ Applicable

Equivalent to Secondary Treatment is 65% removal [40 CFR Part 133.105(a)(3) and (b)(3)].

☐ Applicable

Facility not a Publicly Owned Treatment Works (POTW); however, influent monitoring is being required to determine percent removal.

☒ Not Applicable

Influent monitoring not being required for this facility to determine percent removal.

SANITARY SEWER OVERFLOWS (SSOs), BYPASSES, INFLOW AND INFILTRATION (I&I) – PREVENTION/REDUCTION: Sanitary Sewer Systems (SSSs) are municipal wastewater collection systems that convey domestic, commercial and industrial wastewater, and limited amounts of infiltrated groundwater and stormwater (i.e., inflow and infiltration (I&I)) to a Publicly Owned Treatment Works. SSSs are not designed to collect large amounts of stormwater runoff from precipitation events.

Untreated or partially treated discharges from SSSs are commonly referred to as Sanitary Sewer Overflows (SSOs). SSOs have a variety of causes including: blockages; line breaks; sewer defects that allow excess stormwater and ground water to overload SSS; lapses in sewer system operation and maintenance; inadequate sewer design and construction; power failures; and vandalism. A SSO is defined as an untreated or partially treated sewage release from a SSS. SSOs can occur at any point in an SSS, during dry weather or wet weather. SSOs include overflows that reach waters of the state. SSOs also include overflows out of manholes and onto city streets, sidewalks and other terrestrial locations. SSSs can back up into buildings including private residences. When sewage backups are caused by problems in the publicly-owned portion of an SSS, said sewage backups are considered SSOs.

☐ Applicable

Permittee and/or facility required to develop or implement a program for maintenance and repair of the collection system and shall be required in this operating permit by either means of a Special Condition or Schedule of Compliance (SOC). In addition, the Department considers the development of this program as an implementation of this condition.

At this time, the Department recommends the United States Environmental Protection Agency's (US EPA's) *Guide for Evaluating Capacity, Management, Operation and Maintenance (CMOM) Programs At Sanitary Sewer Collection Systems* (Document # EPA 305-B-05-002). The *CMOM* identifies some of the criteria used by the US EPA to evaluate a collection system's management, operation and maintenance, and was intended for use by the US EPA, state, regulated community and/or third party entities. The *CMOM* is applicable to small, medium and large systems; both public and privately owned; and both regional and satellite collection systems. The *CMOM* does not substitute for the Federal Clean Water Act, the Missouri Clean Water Law, MCWC regulations, and both federal and state regulations, as said *CMOM* is not a regulation.

☒ Not Applicable

Permittee and/or facility not required to develop and/or implement a program for maintenance and repair of the collection system; however, it is a violation of the Missouri Clean Water Law and associated MCWC regulations to allow untreated wastewater to discharge to waters of the state.

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

☐ Applicable

The time given for effluent limitations of this operating permit listed under Paragraph A., Effluent Limitations and Monitoring Requirements, via Interim and/or Final Effluent Limitations, were established in accordance with MCWC regulation [10 CSR 20-7.031(10)], Water Quality, Water Quality Standards.

☒ Not Applicable

This operating permit does not contain a Schedule of Compliance (SOC).

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

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

Additionally, in accordance with the Stormwater Management, a Stormwater Pollution Prevention Plan (SWPPP) is a series of steps and activities to: (1) Identify sources of pollution or contamination; and (2) Select and carry out actions which prevent or control the pollution of stormwater discharges.

☐ Applicable

A Stormwater Pollution Prevention Plan (SWPPP) shall be developed and implemented for each site, and shall incorporate required practices identified by the Department with jurisdiction; incorporate erosion control practices specific to site conditions; and provide for maintenance and adherence to the SWPPP.

☒ Not Applicable

At this time, permittee and/or facility not required to develop and implement a Stormwater Pollution Prevention Plan (SWPPP).

VARIANCE: As per the Missouri Clean Water Law, Section 644.061.4, RSMo, variances shall be granted for such period of time and under such terms and/or conditions as shall be specified by the MCWC in its order. Said variance(s) may be extended by affirmative action of the MCWC. In no event shall the variance(s) be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law, Sections 644.006-644.141, RSMo, or any standard, rule or MCWC regulation promulgated pursuant to Missouri Clean Water Law, Sections 644.006-644.141, RSMo.

☐ Applicable

☒ Not Applicable

This operating permit not drafted under premises of a petition for variance(s).

WASTELOAD ALLOCATIONS (WLAS) FOR LIMITS: As per MCWC regulation [10 CSR 20-2.010(78)], Definitions, Waste load allocation, the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

☐ Applicable

Wasteload allocations (WLAs) were calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

$$C = \frac{(Cs \times Qs) + (Ce \times Qe)}{(Qe + Qs)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where C = downstream concentration

Cs = upstream concentration

Qs = upstream flow

Ce = effluent concentration

Qe = effluent flow

Chronic wasteload allocations (WLAs) were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute WLAs were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).

Water quality based maximum daily and average monthly interim and/or final effluent limitations were calculated using methods and procedures outlined in the United States Environmental Protection Agency's (US EPA's) "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

☒ Not Applicable

Wasteload allocations (WLAs) were not calculated.

WASTELOAD ALLOCATIONS (WLA) MODELING: There are two (2) general types of effluent limitations: technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBELs must be used.

☐ Applicable

A wasteload allocations (WLA) study including modeling was submitted to the Department by _____. The wasteload allocations (WLA) study determined that the (parameter) for_____.

☒ Not Applicable

A wasteload allocations (WLA) study was either not submitted or determined not applicable by Department staff.

WATER QUALITY STANDARDS: Per MCWC regulation [10 CSR 20-7.031(3)], Water Quality, Water Quality Standards, General Criteria, shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish, in each National Pollutant Discharge Elimination System (NPDES) operating permit, conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

WHOLE EFFLUENT TOXICITY (WET) TESTING: A Whole Effluent Toxicity (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.

☐ Applicable

In accordance with the Clean Water Act (CWA) [§101(a)(3)], requiring Whole Effluent Toxicity (WET) testing is reasonably appropriate for site-specific MSOPs for discharges to waters of the state issued under the National Pollutant Discharge Elimination System (NPDES). Furthermore, WET testing is a means by which the Department determines that MCWC regulation [10 CSR 20-7.031(3)(D), (F) and (G)], Water Quality, Water Quality Standards, General Criteria, are being met by the permitted facility. In addition to justification for WET testing, WET tests are required under MCWC regulation [10 CSR 20-6.010(8)(A)4.], Construction and Operating Permits, Terms and Conditions of Permits, to be performed by specialists who are properly trained in conducting WET testing according to the methods prescribed by the Federal Government as referenced in [40 CFR Part 136]. WET testing shall be required by all facilities meeting the following criteria:

☐ Facility designated as a Major

☐ Facility continuously or routinely exceeds its design flow

☐ Facility (industrial) that alters its production process throughout the year

☐ Facility handles large quantities of toxic substances, or substances that are toxic in large amounts

☐ Facility has Water Quality-Based Effluent Limitations (WQBELs) for toxic substances (other than Ammonia, NH₃)

☐ Facility is a Publicly Owned Treatment Works (POTW), municipality or domestic discharger with a design flow greater than (>) twenty-two-thousand-five-hundred (22,500) gallons per day (gpd)

☐ Other: Facility is a Publicly Owned Treatment Works (POTW), municipality or domestic discharge with a design flow less than (<) twenty-two-thousand-five-hundred (22,500) gallons per day (gpd)

☒ Not Applicable

At this time, permittee and/or facility not required to conduct Whole Effluent Toxicity (WET) testing for this facility.

303(d) LIST AND 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 (WBC) (such as swimming), maintaining fish and other aquatic life (AQL), and providing drinking water for people (DWS), livestock and wildlife watering (LWW). 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 Total Maximum Daily Load (TMDL) is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation.

☐ Applicable

(Receiving water body's name) or (1st classified water body's name) is listed on the (YEAR) Missouri 303(d) List for (pollutant).

☐ Facility not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of the above referenced water body.

☐ Facility considered to be a source of or has the potential to contribute to the impairment of the above referenced water body or considered to contribute the above listed pollutant(s).

☒ Not Applicable

Facility does not discharge to a 303(d) listed stream.

Part V – Effluent Limits Determination

Outfall # 001 – Main Facility Outfall

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNITS	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS OPERATING PERMIT EFFLUENT LIMITATIONS
FLOW	MGD	1	*	N/A	*	NO	S
BIOCHEMICAL OXYGEN DEMAND ₅	MG/L	1	N/A	65	45	NO	S
TOTAL SUSPENDED SOLIDS	MG/L	1	N/A	110	80	NO	S
pH	SU	1	> 6.0	N/A	> 6.0	NO	S
AMMONIA AS N	MG/L	5/9	*	N/A	*	YES	***
TEMPERATURE	°C	5/9	*	N/A	*	YES	***
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the DERIVATION AND DISCUSSION OF INTERIM AND/OR FINAL EFFLUENT LIMITATIONS section below.						

* - Monitoring requirement only

** - # of colonies/100mL; the monthly average for the Fecal Coliform parameter is a geometric mean

*** - Parameter not previously established in previous operating permit

N/A – Not applicable

S – Same as previous operating permit

Basis for Limitations Codes:

- | | |
|--|--|
| 1. State or Federal Regulation/Law | 7. Antidegradation Policy |
| 2. Water Quality Standard [includes Reasonable Potential Analysis (RPA)] | 8. Water Quality Model |
| 3. Water Quality Based Effluent Limits (WQBELs) | 9. Best Professional Judgment |
| 4. Lagoon Policy | 10. Total Maximum Daily Load (TMDL)/Operating Permit in lieu of TMDL |
| 5. Ammonia Policy | 11. Whole Effluent Toxicity (WET) test Policy |
| 6. Dissolved Oxygen Policy | |

OUTFALL # 001 – DERIVATION AND DISCUSSION OF INTERIM AND/OR FINAL EFFLUENT LIMITATIONS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)], volume of effluent discharged from each outfall required to assure compliance with operating permit's effluent limitations. If permittee is unable to obtain effluent flow, then it is permittee's responsibility to inform the Department, which may require an operating permit modification submittal.
- **Biochemical Oxygen Demand (BOD₅).** Effluent limitations have been retained from previous operating permit per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.015(8)(B)3.D.(II)(a)], Water Quality, Water Quality Standards, Effluent Limitations for All Waters, Except Those in Paragraphs (1)(A)1.-6. (please see **Part III – Receiving Stream Information, APPLICABLE DESIGNATION OF WATERS OF THE STATE** section above).
- **Total Suspended Solids (TSS).** Effluent limitations have been retained from previous operating permit per MCWC regulation [10 CSR 20-7.015(8)(B)3.D.(II)(a).], Water Quality, Water Quality Standards, Effluent Limitations for All Waters, Except Those in Paragraphs (1)(A)1.-6. (please see **Part III – Receiving Stream Information, APPLICABLE DESIGNATION OF WATERS OF THE STATE** section above).
- **pH.** Effluent limitations have been retained from previous operating permit per MCWC regulation [10 CSR 20-7.015(8)(B)3.A.], Water Quality, Water Quality Standards, Effluent Limitations for All Waters, Except Those in Paragraphs (1)(A)1.-6. (please see **Part III – Receiving Stream Information, APPLICABLE DESIGNATION OF WATERS OF THE STATE** section above).
- **Total Ammonia Nitrogen.** Monitoring requirement only. Monitoring for the Ammonia parameter included to determine whether "reasonable potential" to exceed water quality standards exists.
- **Temperature.** Monitoring requirement only. Monitoring for the Temperature parameter included due to toxicity of Ammonia varies by temperature.
- **Fecal Coliform.** Facility's discharge is greater than (>) two (2) upstream miles from the first classified stream. In accordance with MCWC regulation [10 CSR 7.015(8)(B)(4)], Water Quality, Water Quality Standards, Effluent Limitations for All Waters, Except Those in Paragraphs (1)(A)1.-6., Fecal coliform, final effluent limitations for the Fecal Coliform parameter not required.
- **Minimum Sampling and Reporting Frequency Requirements.** Quarterly sampling and reporting requirements. This sampling frequency will yield sufficient data points for the Department to perform a Reasonable Potential Analysis at the end of the operating permit cycle for the Ammonia parameter.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/QUARTER	ONCE/QUARTER
BIOCHEMICAL OXYGEN DEMAND ₅	ONCE/QUARTER	ONCE/QUARTER

TOTAL SUSPENDED SOLIDS	ONCE/QUARTER	ONCE/QUARTER
pH	ONCE/QUARTER	ONCE/QUARTER
AMMONIA AS N	ONCE/QUARTER	ONCE/QUARTER
TEMPERATURE	ONCE/QUARTER	ONCE/QUARTER

All sampling data taken must be submitted to the Department even if sampling occurs more frequently than quarterly. Permittee may collect samples on a more frequent basis and averaged (except for the pH parameter) to show compliance with monthly averages listed in the operating permit.

See table below for quarterly sampling collection and reporting:

Sample discharge at least once for the months of:	Report is due:
January, February, March (1 st Quarter)	April 28
April, May, June (2 nd Quarter)	July 28
July, August, September (3 rd Quarter)	October 28
October, November, December (4 th Quarter)	January 28

Discharge monitoring reports are to be submitted to the Department quarterly

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 (MCWC), proposes to issue an operating permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. Proposed determinations are tentative pending public comment.

PUBLIC NOTICE: As per the Missouri Clean Water Law, MCWC regulations, and the federal Clean Water Act, persons wishing to comment on Missouri State Operating Permits (MSOPs) 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 is tentatively schedule to begin on November 25, 2009, or is in process.



The Public Notice period for this operating permit was from November 25, 2009, through December 26, 2009. No responses received or responses to the Public Notice of this operating permit do not warrant the modification of interim and/or final effluent limitations and/or major modifications to the terms and conditions of this operating permit.

DATE OF INITIAL FACT SHEET: NOVEMBER 12, 2009

DATE OF REVISED FACT SHEET: DECEMBER 29, 2009

COMPLETED BY:

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