

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-0110779

Owner: Integrated Services, Inc.
Address: P.O. Box 400, Valley Park, MO 63088

Continuing Authority: Peerless Landfill, Inc.
Address: P.O. Box 400, Valley Park, MO 63088

Facility Name: Peerless Demolition Landfill
Address: 75 Shady Lane, Valley Park, MO 63088

Legal Description: See page 2
Latitude/Longitude: See page 2

Receiving Stream: Meramec River (P)
First Classified Stream and ID: Meramec River (P)(02185)
USGS Basin & Sub-watershed No.: see page 2

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

FACILITY DESCRIPTION

See 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.

February 26, 2010
Effective Date


Mark N. Templeton Director, Department of Natural Resources

February 25, 2015
Expiration Date


Mike Struckhoff, Director, St. Louis Regional Office

FACILITY DESCRIPTION (continued)

Outfall #001 – This outfall is eliminated.

Outfall #002 – Open Demolition Landfill – SIC #4953
Stormwater runoff
Average flow is 40,000 gallons per day.
Design flow is based on 10-year, 24-hour rainfall event is 1.53 MGD
Legal Description: Landgrant 880, St. Louis County
Latitude/Longitude: +3832225/-09030190
USGS Basin & Sub-watershed No.:07140102-080002

Outfall #003 – Open Demolition Landfill – SIC #4953
Stormwater runoff
Average flow is 30,000 gallons per day.
Design flow is based on 10-year, 24-hour rainfall event is 0.98 MGD
Legal Description: Landgrant 880, St. Louis County
Latitude/Longitude: +3832402/-09030173
USGS Basin & Sub-watershed No.:07140102-080002

Outfall #004 – Open Demolition Landfill – SIC #4953
Stormwater runoff
Average flow is 40,000 gallons per day.
Design flow is based on 10-year, 24-hour rainfall event is 1.24 MGD
Legal Description: Landgrant 880, St. Louis County
Latitude/Longitude: +3832392/-09030099
USGS Basin & Sub-watershed No.:07140102-080003

Outfall #005 – Open Demolition Landfill – SIC #4953
Detention Basin. Emergency discharge only. Receives flow from Outfalls #003 and #004. Discharge is normally zero gallons per day except during unusual precipitation events.
Legal Description: Landgrant 880, St. Louis County
Latitude/Longitude: +3832448/-09030115
USGS Basin & Sub-watershed No.:07140102-080002

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMIT NUMBER MO-0110779

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>Outfalls #002, #003 and #004</u>						
Flow	MGD	*		*	Instantaneous once/quarter**	estimate
BETX	mg/L	0.75		0.75	once/quarter**	grab
Biochemical Oxygen Demand ₅	mg/L	60		45	once/quarter**	grab
Chemical Oxygen Demand	mg/L	120		90	once/quarter**	grab
Total Suspended Solids	mg/L	80		60	once/quarter**	grab
Settleable Solids	mg/L/hr	1.5		1.0	once/quarter**	grab
Total Dissolved Solids	mg/L	*		*	once/quarter**	grab
Conductivity (Specific Conductance)	µmhos/cm	*		*	once/quarter**	grab
Chloride Plus Sulfates	mg/L	1000		*	once/quarter**	grab
Iron, Total Recoverable	µg/L	*		*	once/quarter**	grab
pH – Units	SU	****		****	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE July 28, 2010.

Oil and Grease	mg/L	15		10	once/year	grab
Ammonia as N	mg/L	***		***	once/year	grab
Antimony, Total Recoverable	mg/L	*		*	once/year	grab
Arsenic, Total Recoverable	µg/L	*		*	once/year	grab
Barium, Total Recoverable	µg/L	*		*	once/year	grab
Beryllium, Total Recoverable	µg/L	*		*	once/year	grab
Boron, Total Recoverable	µg/L	*		*	once/year	grab
Cadmium, Total Recoverable	µg/L	*		*	once/year	grab
Calcium	mg/L	*		*	once/year	grab
Chloride	mg/L	*		*	once/year	grab
Chromium (III), Total Recoverable	µg/L	*		*	once/year	grab
Chromium (VI), Total Dissolved	µg/L	*		*	once/year	grab
Cobalt, Total Recoverable	µg/L	*		*	once/year	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2010. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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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:

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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfalls #002, #003 and #004</u> (continued)						
Copper, Total Recoverable	µg/L	*		*	once/discharge	grab
Fluoride	mg/L	*		*	once/discharge	grab
Total Hardness	mg/L	*		*	once/discharge	grab
Lead, Total Recoverable	µg/L	*		*	once/discharge	grab
Magnesium, Total Recoverable	µg/L	*		*	once/discharge	grab
Manganese, Total Recoverable	µg/L	*		*	once/discharge	grab
Mercury, Total Recoverable	µg/L	*		*	once/discharge	grab
Nickel, Total Recoverable	µg/L	*		*	once/discharge	grab
Nitrate and Nitrite as N	mg/L	*		*	once/discharge	grab
Phosphorus, Total Recoverable	µg/L	*		*	once/discharge	grab
Selenium, Total Recoverable	µg/L	*		*	once/discharge	grab
Silver, Total Recoverable	µg/L	*		*	once/discharge	grab
Sodium, Total Recoverable	µg/L	*		*	once/discharge	grab
Sulfate	µg/L	*		*	once/discharge	grab
Thallium, Total Recoverable	µg/L	*		*	once/discharge	grab
Total Organic Carbon	µg/L	*		*	once/discharge	grab
Vanadium, Total Recoverable	mg/L	*		*	once/discharge	grab
Zinc, Total Recoverable	µg/L	*		*	once/discharge	grab

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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #005</u>						
Flow	MGD	*		*	once/discharge	estimate
BETX	mg/L	0.75		0.75	once/discharge	grab
Biochemical Oxygen Demand ₅	mg/L	60		45	once/discharge	grab
Chemical Oxygen Demand	mg/L	120		90	once/discharge	grab
Total Suspended Solids	mg/L	80		60	once/discharge	grab
Settleable Solids	mg/L/hr	1.5		1.0	once/discharge	grab
Total Dissolved Solids	mg/L	*		*	once/discharge	grab
Conductivity (Specific Conductance)	µmhos/cm	*		*	once/discharge	grab
Chloride Plus Sulfates	mg/L	1000		*	once/discharge	grab
Iron, Total Recoverable	µg/L	*		*	once/discharge	grab
pH – Units	SU	****		****	once/discharge	grab
Oil and Grease	mg/L	15		10	once/discharge	grab
Ammonia as N	mg/L	***		***	once/discharge	grab
Antimony, Total Recoverable	mg/L	*		*	once/discharge	grab
Arsenic, Total Recoverable	µg/L	*		*	once/discharge	grab
Barium, Total Recoverable	µg/L	*		*	once/discharge	grab
Beryllium, Total Recoverable	µg/L	*		*	once/discharge	grab
Boron, Total Recoverable	µg/L	*		*	once/discharge	grab
Cadmium, Total Recoverable	µg/L	*		*	once/discharge	grab
Calcium	mg/L	*		*	once/discharge	grab
Chloride	mg/L	*		*	once/discharge	grab
Chromium (III), Total Recoverable	µg/L	*		*	once/discharge	grab
Chromium (VI), Total Dissolved	µg/L	*		*	once/discharge	grab
Cobalt, Total Recoverable	µg/L	*		*	once/discharge	grab

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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall 005 continued</u>						
Copper, Total Recoverable	µg/L	*		*	once/discharge	grab
Fluoride	mg/L	*		*	once/discharge	grab
Total Hardness	mg/L	*		*	once/discharge	grab
Lead, Total Recoverable	µg/L	*		*	once/discharge	grab
Magnesium, Total Recoverable	µg/L	*		*	once/discharge	grab
Manganese, Total Recoverable	µg/L	*		*	once/discharge	grab
Mercury, Total Recoverable	µg/L	*		*	once/discharge	grab
Nickel, Total Recoverable	µg/L	*		*	once/discharge	grab
Nitrate and Nitrite as N	mg/L	*		*	once/discharge	grab
Phosphorus, Total Recoverable	µg/L	*		*	once/discharge	grab
Selenium, Total Recoverable	µg/L	*		*	once/discharge	grab
Silver, Total Recoverable	µg/L	*		*	once/discharge	grab
Sodium, Total Recoverable	µg/L	*		*	once/discharge	grab
Sulfate	µg/L	*		*	once/discharge	grab
Thallium, Total Recoverable	µg/L	*		*	once/discharge	grab
Total Organic Carbon	µg/L	*		*	once/discharge	grab
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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- * Monitoring requirement only.
- **

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

- *** The discharge shall not exceed the appropriate values in Table B 10 CSR 20, 7.031.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

C. SPECIAL CONDITIONS

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

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
2. Storm water samples shall be taken during a precipitation event that results in a discharge.
3. Report as no-discharge when a discharge does not occur during the report period.
4. All design and operating specifications and all Solid Waste Management Program approval conditions pertaining to water quality are hereby made a part of this permit and shall apply throughout the life of the permit without regard to other conditions, permits, occurrences, etc.
5. This permit does not allow the discharge of leachate. All leachate shall be handled in accordance with the Solid Waste Disposal Operating Permit, Report of Approval of Plans and Specifications (with conditions).
6. Changes in Discharges of Toxic Substances

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

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

C. SPECIAL CONDITIONS (continued)

7. 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.
8. All activities performed to control erosion on the landfill site (seeding, mulching, terracing, etc.) shall be described and submitted along with the second quarter and fourth quarter Discharge Monitoring Reports. If no erosion controls are undertaken, indicate so on the reports.

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0110779
PEERLESS DEMOLITION LANDFILL

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:

- 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: Storm water, Non-POTW
Facility SIC Code(s): 4953

Facility Description:

Open Demolition Landfill – SIC #4953
Stormwater runoff

Outfall #001 – This outfall is eliminated.

Outfall #002 –

Average flow is 40,000 gallons per day.
Design flow is based on 10-year, 24-hour rainfall event is 1.53 MGD
Legal Description: Landgrant 880, St. Louis County
Latitude/Longitude: +3832225/-09030190
Receiving Stream: Name Meramec River (P)
First Classified Stream and ID: Meramec River (P) (02185)

Outfall #003 –

Average flow is 30,000 gallons per day.
Design flow is based on 10-year, 24-hour rainfall event is 0.98 MGD
Legal Description: Landgrant 880, St. Louis County
Latitude/Longitude: +3832402/-09030173
Receiving Stream: Meramec River (P)
First Classified Stream and ID: Meramec River (P) (02185)

Outfall #004 –

Average flow is 40,000 gallons per day.
Design flow is based on 10-year, 24-hour rainfall event is 1.24 MGD
Legal Description: Landgrant 880, St. Louis County
Latitude/Longitude: +3832392/-09030099
Receiving Stream: Meramec River (P)
First Classified Stream and ID: Meramec River (P) (02185)

Outfall #005 –

Detention Basin. Emergency discharge only. Receives flow from Outfalls #003 and #004. Discharge normally zero gallons per day except during unusual precipitation events.
Legal Description: Landgrant 880, St. Louis County
Latitude/Longitude: +3832448/-09030115
Receiving Stream: Meramec River (P)
First Classified Stream and ID: Meramec River (P) (02185)

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

No

Application Date: 03/21/2008
Expiration Date: 08/21/2008

OUTFALL(S) TABLE:

OUTFALL	AVERAGE FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#002	0.062	None	Storm water	0
#003	0.046	None	Storm water	0
#004	0.062	None	Storm water	0
#005	0.00	None	Storm water	0

Receiving Water Body's Water Quality & Facility Performance History:
Stream survey in 1999 showed high levels of arsenic, chromium, copper, iron and zinc.

Comments:
No comments

Part II – Operator Certification Requirements

This facility is not required to have a certified operator.

Part III – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

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

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

10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 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**
003 and 004 -Meramec River	P	02185	LWW, AQL, DWS, IND, WBC-A		Ozark/Meramec
002 Tributary to Williams Creek Williams Creek	U		None		Ozark/Meramec
	P		LWW , AQL		Ozark/Meramec

* - 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(S) LOW-FLOW VALUES TABLE:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Meramec River (P)	366.9	382.7	438.2

MIXING CONSIDERATIONS TABLE:

MIXING ZONE (CFS) [10 CSR 20-7.031(4)(A)4.B.(III)(a)]			ZONE OF INITIAL DILUTION (CFS) [10 CSR 20-7.031(4)(A)4.B.(III)(b)]		
1Q10	7Q10	30Q10	1Q10	7Q10	30Q10
91.7	95.9	109.6	9.2	9.6	11.0

RECEIVING STREAM MONITORING REQUIREMENTS:

No receiving water monitoring requirements recommended at this time.

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

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:

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

Not Applicable

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

ANTI-BACKSLIDING:

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

All limits in this Factsheet 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(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.

Renewal no degradation proposed and no further review necessary.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

As per [10 CSR 20-6.010(3)(B)], ...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, & 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.

Not Applicable

This condition is not applicable to the permittee for this specific facility.

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.

Not Applicable

The permittee/facility is not currently under 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 POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

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

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

Not Applicable

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

REASONABLE POTENTIAL ANALYSIS (RPA):

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 permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Not Applicable

A RPA was not conducted for this facility.

REMOVAL EFFICIENCY:

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (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.

Not Applicable

Influent monitoring is not being required to determine percent removal.

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

Sanitary Sewer Systems (SSSs) are municipal wastewater collection system that convey domestic, commercial, and industrial wastewater, and limited amounts of infiltrated groundwater and storm water (i.e. I&I), to a POTW. SSSs are not designed to collect large amounts of storm water runoff from precipitation events.

Untreated or partially treated discharges from SSSs are commonly referred to as SSOs. SSOs have a variety of causes including blockages, line breaks, sewer defects that allow excess storm water and ground water to overload the system, lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. A SSOs 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, they are considered SSOs.

Not Applicable

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

SCHEDULE OF COMPLIANCE (SOC):

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

Not Applicable

This permit does not contain a SOC.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

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

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

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

Not Applicable

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

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 total amount of pollutant that may be discharged into that stream without endangering its water quality.

Not Applicable

Wasteload allocations were not calculated.

WLA MODELING:

There are two 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 WQBEL must be used.

Not Applicable

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

WATER QUALITY STANDARDS:

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

WHOLE EFFLUENT TOXICITY (WET) TEST:

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

Not applicable :

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

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 to a 303(d) listed stream.

DRAFT

Part V – Effluent Limits Determination

Outfalls #002, 003, and 004 –

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	9	*		*	NO	SAME
BETX	mg/L	3	0.75		0.75	NO	SAME
BOD	mg/L	3	60		45	NO	SAME
COD	mg/L	3	120		90	NO	SAME
TSS	mg/L	3	80		60	NO	SAME
SETTLABLE SOLIDS	mg/L/hr	3	1.5		1.0	NO	SAME
TOTAL DISSOLVED SOLIDS	mg/L	9	*		*	NO	SAME
CONDUCTIVITY	UMHOS/CM	9	*		*	NO	SAME
CHLORIDE + SULFATES	µg/L	9	1000		*	NO	SAME
IRON, TOT. RECVBL	mg/L	9	*		*	NO	SAME
PH	SU	3	****		****	NO	SAME
CALCIUM	mg/L	9	*		*	NO	SAME
FLUORIDE	mg/L	9	*		*	NO	SAME
TOTAL HARDNESS	mg/L	9	*		*	NO	SAME
BARIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
BORON, TOT. RECVBL	µg/L	9	*		*	NO	SAME
CADMIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
CHROMIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
COBALT TOT. RECVBL	µg/L	9	*		*	NO	SAME
COPPER, TOT. RECVBL	µg/L	9	*		*	NO	SAME
SODIUM, TOT. RECVBL	mg/L	9	*		*	NO	SAME
AMMONIA AS N	mg/L	9	***		***	NO	SAME
NITRATE AND NITRITE AS N	mg/L	9	*		*	NO	SAME
PHOSPHOROUS, TOT. RECVBL	µg/L	9	*		*	NO	SAME
MERCURY, TOT. RECVBL	µg/L	9	*		*	NO	SAME
ARSENIC, TOT. RECVBL	µg/L	9	*		*	NO	SAME
LEAD, TOT. RECVBL	µg/L	9	*		*	NO	SAME
SELENIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
SILVER, TOT. RECVBL	µg/L	9	*		*	NO	SAME
MANGANESE, TOT. RECVBL	µg/L	9	*		*	NO	SAME
ZINC, TOT. RECVBL	µg/L	9	*		*	NO	SAME
ANTIMONY, TOT. RECVBL	µg/L	9	*		*	NO	SAME
BERYLLIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
NICKEL, TOT. RECVBL	mg/L	9	*		*	NO	SAME
SULFATE	µg/L	9	*		*	NO	SAME
THALLIUM, TOT. RECVBL	mg/L	9	*		*	NO	SAME
TOTAL ORGANIC CARBON	µg/L	9	*		*	NO	SAME
VANADIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
OIL AND GREASE	mg/L	3	15		10	NO	SAME
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	9	*		*	NO	SAME
BETX	mg/L	3	0.75		0.75	NO	SAME
BOD	mg/L	3	60		45	NO	SAME
COD	mg/L	3	120		90	NO	SAME
TSS	mg/L	3	80		60	NO	SAME
SETTLABLE SOLIDS	mg/L/hr	3	1.5		1.0	NO	SAME
TOTAL DISSOLVED SOLIDS	mg/L	9	*		*	NO	SAME
CONDUCTIVITY	UMHOS/CM	9	*		*	NO	SAME
CHLORIDE + SULFATES	µg/L	9	1000		*	NO	SAME
IRON, TOT. RECVBL	mg/L	9	*		*	NO	SAME
PH	SU	3	****		****	NO	SAME
CALCIUM	mg/L	9	*		*	NO	SAME
FLUORIDE	mg/L	9	*		*	NO	SAME
TOTAL HARDNESS	mg/L	9	*		*	NO	SAME
BARIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
BORON, TOT. RECVBL	µg/L	9	*		*	NO	SAME
CADMIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
CHROMIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
COBALT TOT. RECVBL	µg/L	9	*		*	NO	SAME
COPPER, TOT. RECVBL	µg/L	9	*		*	NO	SAME
SODIUM, TOT. RECVBL	mg/L	9	*		*	NO	SAME
AMMONIA AS N	mg/L	9	***		***	NO	SAME
NITRATE AND NITRITE AS N	mg/L	9	*		*	NO	SAME
PHOSPHOROUS, TOT. RECVBL	µg/L	9	*		*	NO	SAME
MERCURY, TOT. RECVBL	µg/L	9	*		*	NO	SAME
ARSENIC, TOT. RECVBL	µg/L	9	*		*	NO	SAME
LEAD, TOT. RECVBL	µg/L	9	*		*	NO	SAME
SELENIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
SILVER, TOT. RECVBL	µg/L	9	*		*	NO	SAME
MANGANESE, TOT. RECVBL	µg/L	9	*		*	NO	SAME
ZINC, TOT. RECVBL	µg/L	9	*		*	NO	SAME
ANTIMONY, TOT. RECVBL	µg/L	9	*		*	NO	SAME
BERYLLIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
NICKEL, TOT. RECVBL	mg/L	9	*		*	NO	SAME
SULFATE	µg/L	9	*		*	NO	SAME
THALLIUM, TOT. RECVBL	mg/L	9	*		*	NO	SAME
TOTAL ORGANIC CARBON	µg/L	9	*		*	NO	SAME
VANADIUM, TOT. RECVBL	µg/L	9	*		*	NO	SAME
OIL AND GREASE	mg/L	3	15		10	NO	SAME
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* - Monitoring requirement only.

*** The discharge shall not exceed the appropriate values in Table B 10 CSR 20, 7.031.

**** - # of colonies/100mL; the Monthly Average for Fecal Coliform is a geometric mean.

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 | 12. Antidegradation Review |

Derivation and Discussion of Limits

Outfall 002, 003, & 004:

- **BETX.** Criterion: equal to or less than 0.75 mg/L monthly average and daily maximum as stated in existing permit.
- **Biochemical Oxygen Demand (BOD₅).** Criterion: equal to or less than 45 mg/L monthly average, 60 mg/L daily maximum as stated in existing permit.
- **Chemical Oxygen Demand.** Criterion: equal to or less than 90 mg/L monthly average, 120 mg/L daily maximum as stated in existing permit
- **Total Suspended Solids.** Criterion: equal to or less than 60 mg/L monthly average, 80 mg/L daily maximum as stated in existing permit.
- **Settleable Solids.** Criterion: equal to or less than 1.0 mg/L/hr monthly average, 1.5 mg/L/hr daily maximum as stated in existing permit.
- **Chloride.** Criterion: equal to or less than 230 mg/L monthly average and daily maximum for protection of aquatic life per 10 CSR 20-7.031, Table A—Criteria for Designated Uses.
- **Sulfates.** Criterion: equal to or less than 250 mg/L monthly average and daily maximum for protection of drinking water supply per 10 CSR 20-7.031, Table A—Criteria for Designated Uses.
- **pH.** Criterion: between 6 – 9 standard units as stated in the existing permit.
- **Oil & Grease.** Criterion: 10 mg/L monthly average per 10 CSR 20-7.031, Table A (for protection of aquatic life). Maximum daily value is 1.5 times average monthly value.

Minimum Sampling and Reporting Frequency Requirements Sampling and reporting frequency requirements have been retained from previous state operating permit.

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:

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 is in process.

DATE OF FACT SHEET: OCTOBER 14, 2009

COMPLETED BY:

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