

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

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

Permit No. MO-0132870

Owner: Wayne Brown Enterprises, Inc.  
Address: 37890 E. Hwy 240, Gilliam, Mo 65330

Continuing Authority: Wayne Brown  
Address: 37890 E. Hwy 240, Gilliam, Mo 65330

Facility Name: Chocolate Soil Treatment #2  
Facility Address: 37890 E. Hwy 240, Gilliam, Mo 65330

Legal Description: NW ¼, NW ¼, Sec. 2, T51N, R19W, Saline County  
UTM Coordinates: X=503507, Y=4342754

Receiving Stream: Unnamed Tributary to Chocolate Creek (U)  
First Classified Stream and ID: Fish Creek (C)(783)  
USGS Basin & Sub-watershed No.: 10300102-0104

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 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.

November 1, 2012  
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

June 30, 2015  
Expiration Date

John Madros, Director, Water Protection Program

Outfall #001- Surface Treatment Cell- SIC #5541

This facility is a landfarm for the purpose of remediating soil contaminated with petroleum hydrocarbons from underground storage tanks regulated under Chapter 319, RSMo and/or aboveground storage tanks regulated under Chapter 414, RSMo. Petroleum hydrocarbon contaminated soils from anyone other than an exempt UST or AST outlined above, shall be sampled and analyzed to document the soil is not a hazardous waste in accordance with 40 CFR Part 261 prior to acceptance. The treatment cells are lined with a 12-mm impermeable liner to prevent groundwater contamination and are bermed to prevent the inflow of surface water. There is a secondary detention pond that retains all stormwater runoff from the site.

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
Outfall #001						
Flow	GPD	*		*	once/quarter***	24 hr. total
Settleable Solids	ml/L/hour	1.5		1.0	once/quarter***	grab
Total Suspended Solids (TSS)	mg/L	50		30	once/quarter***	grab
Chemical Oxygen Demand (COD)	mg/L	*		*	once/quarter***	grab
pH	SU	**		**	once/quarter***	grab
Total Nitrogen	mg/L	*		*	once/quarter***	grab
Total Phosphorus	mg/L	*		*	once/quarter ***	grab
Benzene	µg/L	*		*	once/quarter***	grab
Ethylbenzene	µg/L	*		*	once/quarter***	grab
Toluene	µg/L	*		*	once/quarter***	grab
Xylene	µg/L	*		*	once/quarter***	grab
Naphthalene	µg/L	*		*	once/quarter***	grab
Ethanol	µg/L	*		*	once/quarter***	grab
Total Petroleum Hydrocarbons (GRO, DRO, ORO)	mg/L	*		*	once/quarter***	grab
Oil & Grease	mg/L	15		10	once/quarter***	grab

MONITORING REPORTS SHALL BE SUBMITTED **QUARTERLY**; THE FIRST REPORT IS DUE JANUARY 28, 2013. 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 **Parts I & III** STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

- \* Monitoring requirement only.
- \*\* pH is measured in pH units and is not to be averaged. The pH is limited to 6.5-9.0 pH units.
- \*\*\* See table below for quarterly sampling.

<b>Minimum Sampling Requirements</b>			
Quarter	Months	Effluent Parameters	Report is Due
First	January, February, March	Sample at least once during any month of the quarter	April 28 <sup>th</sup>
Second	April, May, June	Sample at least once during any month of the quarter	July 28 <sup>th</sup>
Third	July, August, September	Sample at least once during any month of the quarter	October 28 <sup>th</sup>
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 <sup>th</sup>

### **C. SPECIAL CONDITIONS**

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

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

2. All outfalls must be clearly marked in the field.

3. 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.

4. Report as no-discharge when a discharge does not occur during the report period.

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

6. Water Quality Standards

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

7. Only soils contaminated with gasoline, diesel fuel, fuel oil, kerosene, or aviation fuel, and having a TPH concentration of 10,000 ppm dry weight or less, may be placed in a treatment cell under this permit. Soils contaminated with used oil, as defined in 10 CSR 25-11.279 incorporating 40 CFR 279.1, shall not be land farmed under this permit.

**C. SPECIAL CONDITIONS (continued)**

8. This permit does not authorize the discharge of waters other than stormwaters.
9. Prior to removal of remediated soils or in-place landfarm cell closure, soils must be properly sampled for all appropriate constituents of concern. Any soils proposed for removal must be managed in accordance with the Missouri Department of Natural Resources Publication "Beneficial Use of Petroleum Contaminated Soil" (PUB002177). Soil with analytical results containing no detectable petroleum contamination is considered "clean fill" and may be used without restrictions. Any soil with analytical results that are below Missouri Risk-based Corrective Action Process for Storage Tanks Table 3-1 Default Target Levels (DTLs) for petroleum constituents are considered minimally above detection limits but below applicable DTLs may not be placed in contact with groundwater, and must be capped and remain capped with at least one foot of clean fill material, asphalt, or concrete. Soil with analytical results greater than MRBCA Default Target Levels for Petroleum Constituents are considered as having moderate residual contamination and beneficial use of these soils is allowed only with a written site-specific approved by SWMP. Site specific beneficial reuse requires the written submittal of a proposal addressing the regulatory requirements of 10 CSR 80-2.020(9)(B). Any surficial land application of soils containing detectable levels of petroleum contamination must be approved by the Solid Waste Management Program (SWMP) as a legitimate beneficial use. The in-place closure of completed landfarm cells falls under the jurisdiction of the SWMP and must be approved prior to termination of permit MO-0132870.
10. Remediated soil may not be placed in contact with groundwater or surface water.
11. Soils removed and transported to a permitted solid waste disposal facility are not subject to SPECIAL CONDITION 9 above.
12. The berms of storage basins shall be mowed and kept free of any trees, muskrat dens, or other potential sources of damage to the berms.
13. Soil samples shall be one composite sample per 100 cubic yards of soil and composed of soil from no more than 4 separate locations, and collected from a depth no less than 12 inches.
14. Surface Treatment Cell Requirements and Specifications
  - (a) Minimum vertical depth from the bottom of a treatment cell to the seasonal high water table shall be at least five feet.
  - (b) The treatment cell floor shall be constructed with a 12-mm liner and be surrounded by a two foot berm to contain contaminated soils and exclude water run-on.
  - (c) Contaminated soils shall be spread within the treatment cell to a depth greater than 18 inches but less than 24 inches to allow tilling without compromising the integrity of the plastic liner.
  - (d) Treatment cells shall not contain greater than 2,500 cubic yards of petroleum contaminated soil from the on-site facility only.
  - (e) The permittee shall maintain a log on site which documents the soil being placed in a treatment cell. This log shall detail the source, amount, and contamination level of the soil to be added.
  - (f) The treatment cell shall be maintained as such that storm water runoff from the cell is collected in a retention basin that has one outfall. The retention basin shall have a liner that meets standard engineering specifications (as per 10 CSR 20-8) and shall be sized to retain the volume of water resulting from a 10-year 24 hour storm event. The basin provides for settling of suspended material, and adequate retention time to allow for testing water and treatment as needed to meet permit effluent limitations before discharging.
  - (g) Stockpiled soils shall be placed on and covered with 12-mm or greater plastic unless soil is under roof and not exposed to storm water.

**Missouri Department of Natural Resources**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0132870**  
**CHOCOLATE SOIL TREATMENT #2**

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 an Industrial Facility.

**Part I – Facility Information**

Facility Type: IND  
 Facility SIC Code(s): 5541

Facility Description:

The facility is a landfarm. It has a surface treatment cell to remediate soil that had been contaminated with petroleum hydrocarbons (gasoline and diesel) from underground storage tanks regulated under chapter 319, RSMo and/or aboveground storage tanks regulated under chapter 414, RSMo. Fertilizer is introduced into the cell to facilitate the remediation process. The duration of the remediation process depends on the type of soil being treated. Contaminated clayey soils stay in the cell a lot longer than sandy soils. For a period of time, the facility plants crops on the soil to determine if the soil is fully remediated. The crops only serve as indicators; if the plants die off in the process, then longer treatment time is needed. This process is done in order to give the facility an economical sign as to when the soil is ready to be tested. The facility uses or recycles the soil to build terraces around the landfarm. This soil remediation treatment cell is protected from storm water run on by diversion berms, as noted on the August 25, 2008 facility inspection. The landfarm has a catch basin with cattails planted to absorb excess rain water.

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

- Yes; (please provide simple description or reference appropriate location in the Fact Sheet).  
 - No.

Application Date: 02/29/2012  
 Expiration Date: 11/16/2011  
 Last Inspection: 08/25/2008 In Compliance ; Non-Compliance

**OUTFALL(S) TABLE: Outfall #001- Landfarm – SIC #5441**

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	0.0001	BMP	IND	2.1

Outfall #001- Surface Treatment Cell- SIC #5541

Surface treatment cell for remediation of soil contaminated with petroleum hydrocarbons. No water is received in this outfall other than direct rainfall.

Design Flow is 2,000 gallons per month.

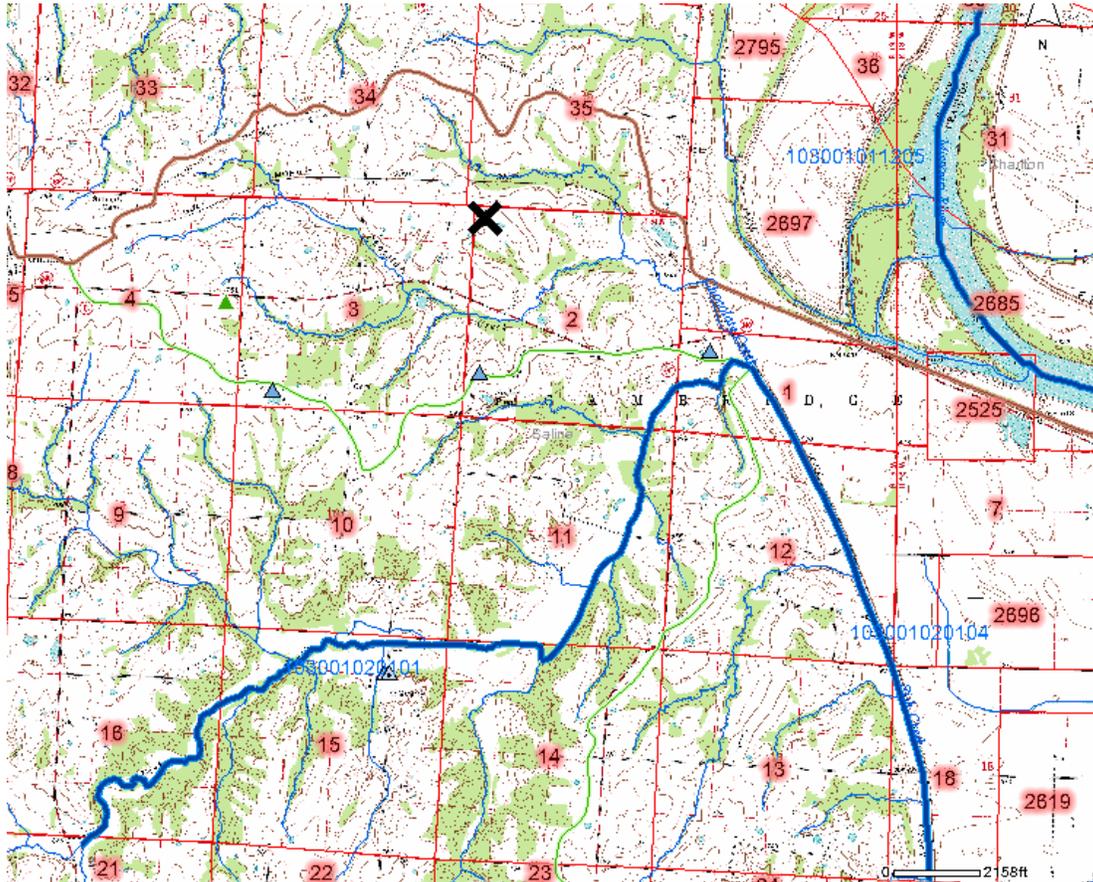
Legal Description: NW ¼, NW ¼, Sec. 2, T51N, R19W, Saline County

UTM Coordinates: X=503507, Y=4342754

Receiving Stream: Tributary to Chocolate Creek (U)

First Classified Stream and ID: Fish Creek (C)(783)

USGS Basin & Sub-watershed No.: 10300102-0104



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

Fish Creek (C)(783) has no impairment on record.

Comments:

Chocolate Soil Treatment #2's five-year DMR showed the facility reported "No Discharge" over the course of the permit period. During the August 25, 2010 facility inspection, no erosion of the basin's berms was observed; the water in the detention basin was clear and no sheen; and no petroleum odor noted.

The BTEX requirement from previous permit has been changed to monitor the concentration of individual constituents to Benzene, Toluene, Ethylbenzene, and Xylene. Also, since the facility uses fertilizers to enhance the soil treatment, constituents of fertilizer such as N and P are required to be monitored during discharge.

**Part II – Operator Certification Requirements**

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

**Part III – Receiving Stream Information**

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

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

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

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

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	12-DIGIT HUC**	EDU***
Tributary to Chocolate Creek	U	n/a	General Criteria	10300102-0104	Ozark/Moreau/Loutre
Fish Creek	C	783	LWW, AQL, WBC-B	10300102-0104	Ozark/Moreau/Loutre

\* - 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).

\*\* - Hydrological Unit Code

\*\*\* - Ecological Drainage Unit

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

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

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

**ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

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

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

**ANTI-BACKSLIDING:**

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

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

**ANTIDegradation:**

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(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.

**BIOSOLIDS & SEWAGE SLUDGE:**

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address:

<http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

Not applicable;

This condition is not applicable to the permittee for this 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 (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals.

Not Applicable;

Influent monitoring is not being required to determine percent removal.

**SANITARY SEWER OVERFLOWS (SSO) AND INFLOW AND INFILTRATION (I&I):**

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

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

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

**SCHEDULE OF COMPLIANCE (SOC):**

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

Not Applicable;

This permit does not contain a SOC.

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

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

In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], 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.

**40 CFR 122.41(M) - BYPASSES:**

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

Not Applicable;

This facility does not bypass.

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

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

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

Not Applicable;  
This facility does not discharge to a 303(d) listed stream.

**Part V – Effluent Limits Determination**

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit

**EFFLUENT LIMITATIONS TABLE: OUTFALL #001**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	NO	*
SETTLABLE SOLIDS	ML/L/HR	9	1.5		1.0	NO	1.5/10
TOTAL SUSPENDED SOLIDS (TSS)	MG/L	9	50		30	NO	50/30
CHEMICAL OXYGEN DEMAND (COD)	MG/L	9	*		*	NEW	***
PH	SU	1	**		**	YES	6.0-9.0
TOTAL N	MG/L	9	*		*	NEW	***
TOTAL P	MG/L	9	*		*	NEW	***
ETHYLBENZENE	µG/L	13	*		*	NEW	***
BENZENE	µG/L	1,3	*		*	NEW	***
TOLUENE	µG/L	9	*		*	NEW	***
XYLENE	µG/L	9	*		*	NEW	***
NAPHTHALENE	µG/L	9	*		*	NEW	***
ETHANOL	µG/L	9	*		*	NEW	***
TOTAL PETROLEUM HYDROCARBONS (GRO, DRO, ORO)	MG/L	9	*		*	YES	10/10
OIL & GREASE	MG/L	1,3	15		10	YES	15/15

\* Monitoring requirement only.  
\*\* pH is measured in pH units and is not to be averaged. The pH is limited to 6.5-9.0 pH units  
\*\*\* Parameter not previously established in previous state operating permit.

**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. Antidegradation Review                |                                    |

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

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Settleable Solids.** 1.5 ml/L/hr. daily maximum and 1.0 ml/L/hr. monthly average. Best Professional Judgment used to set these limits. These limits have been found to be protective of water quality at similar industrial stormwater facilities across the state.
- **Total Suspended Solids (TSS).** Retained from previous permit.
- **Chemical Oxygen Demand (COD).** Monitoring only. Dissolved Oxygen WQS [10 CSR 20-7.031(4)(J)].
- **pH.** In accordance with [10 CSR 20-7.031(4)(E)], pH shall be maintained in the range from six and one-half to nine (6.5-9.0) standard units.
- **Total N.** Monitoring requirement only. 10 CSR 20-7.031(N).
- **Total P.** Monitoring requirement only. 10 CSR 20-7.031(N).
- **Ethylbenzene.** Monitoring requirement only. This pollutant is known to be present in connection with petroleum remediation.
- **Benzene.** Monitoring requirement only. This pollutant is known to be present in connection with petroleum remediation.
- **Toluene.** Monitoring requirement only. This pollutant is known to be present in connection with petroleum remediation.
- **Xylene (total).** Monitoring requirement only. This pollutant is known to be present in connection with petroleum remediation.
- **Naphthalene.** Monitoring requirement only. This pollutant is known to be present in connection with petroleum remediation.
- **Ethanol.** Monitoring requirement only. This pollutant is known to be present in connection with petroleum remediation.
- **Total Petroleum Hydrocarbons (GRO, DRO, ORO).** Monitoring requirement only. A surrogate for pollutants of concern associated with petroleum storage.
- **Oil & Grease.** In accordance with [10 CSR 20-7.031 (Table A)], the conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

**Part VI – Finding of Affordability**

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

Not Applicable;

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

## **Part VII – 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.

### **PERMIT SYNCHRONIZATION**

The Missouri Department of Natural Resources is transitioning from the traditional methods with which Missouri's water resources have been managed to a Watershed Based Management (WBM) approach. The WBM approach will manage watersheds on the eight-digit Hydrological Unit Code (HUC8) scale. As permitting and permit synchronization is a key aspect of successful implementation of a Watershed Management Plan (WMP), the same HUC8 groups that will move through the WBM cycle will have their permit expirations and issuances synchronized in the same fiscal year. The typical five-year term of the permit issuances aligns with the proposed five-year WBM cycle and the two processes will be intimately tied together.

The immediate goals of the permit synchronization include the following:

- ✚ The administrative and technical streamlining of Water Protection Program and Regional Office activities such as permitting, inspections, and water quality monitoring.
- ✚ Providing the basis for future watershed permitting.
- ✚ Beginning to further examine Missouri's water resources on a watershed basis.

This permit will expire on **June 30, 2015** in order to meet the permit synchronization goals.

### **PUBLIC NOTICE:**

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

The Public Notice period for this operating permit was from July 20, 2012 to August 20, 2012, 2012. 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: 28 JUNE 2012**

### **COMPLETED BY:**

**JOY JOHNSON, ENVIRONMENTAL SPECIALIST III**  
**NPDES PERMITS UNIT**  
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