

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-0004910

Owner: Norfolk Southern Railway Company
Address: 1200 Peachtree Street, N.E., Box 13, Atlanta, GA 30309-0013

Continuing Authority: Same as above
Address: Same as above

Facility Name: Norfolk Southern Railway Company – North Kansas City Yard
Facility Address: 1900 Nodaway Street, North Kansas City, MO 64116

Legal Description: SW¹/₄, NW¹/₄, Sec. 13, T50N, R33W, Clay County
UTM Coordinates: X= 365875, Y= 4334067

Receiving Stream: Unnamed tributary to Rock Creek (U)
First Classified Stream and ID: Missouri River (P) (0356)
USGS Basin & Sub-watershed No.: 10300101-0301

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 - Industrial, Railcar and Locomotive maintenance / fueling area – SIC #4011
Two sedimentation basins / oil skimmer / stormwater runoff.
Design flow is 58,000 gallons per day.
Actual flow is dependent upon stormwater.

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 Sections 640.013, 621.250, and 644.051.6 of the Law.

January 1, 2015
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

June 30, 2019
Expiration Date

John Madras, Director, Water Protection Program

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL #001	TABLE A-1. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					
	EFFLUENT PARAMETER(S) (NOTE 1, PAGE 4)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Precipitation	inches	*	-	-	once/day	total measured
Flow	MGD	*	-	-	once/quarter****	24 hr. estimate
Chemical Oxygen Demand	mg/L	**	-	-	once/quarter****	grab
Total Suspended Solids	mg/L	**	-	-	once/quarter****	grab
Settleable Solids	mL/L/hr	**	-	-	once/quarter****	grab
pH – Units	SU	***	-	-	once/quarter****	grab
Oil & Grease	mg/L	**	-	-	once/quarter****	grab
Total Petroleum Hydrocarbon – Diesel Range Organics	mg/L	**	-	-	once/quarter****	grab
Total Petroleum Hydrocarbon – Gasoline Range Organics	mg/L	**	-	-	once/quarter****	grab
Total Petroleum Hydrocarbon – Oil Range Organics	mg/L	**	-	-	once/quarter****	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2015. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Monitoring requirement with a benchmark. See Special Condition #10.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- **** See table below for quarterly sampling.

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

Note 1 - All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a precipitation event does not occur within the reporting period, report as **no discharge**. The total amount of precipitation should be noted from the event from which the samples were collected.

OUTFALL #001	TABLE A-2. WHOLE EFFLUENT TOXICITY FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					
	EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS
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 on Effective Date and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Acute Whole Effluent Toxicity	TU _a	*			once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2016</u> .						

* Monitoring requirement only.

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated August 1, 2014 and hereby incorporated as though fully set forth herein.

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. Water Quality Standards
 - (a) To the extent required by law, 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;

C. SPECIAL CONDITIONS cont'd

- (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.

4. 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 by the Director in accordance with 40 CFR 122.44(f).
- (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.

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

6. Reporting of Non-Detects:

- (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
- (b) The permittee shall not report a sample result as "Non-Detect" without also reporting the detection limit of the test. Reporting as "Non Detect" without also including the detection limit will be considered failure to report, which is a violation of this permit.
- (c) The permittee shall provide the "Non-Detect" sample result using the less than sign and the minimum detection limit (e.g. <10).
- (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for that parameter.
- (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.

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

8. Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 et. seq.) and the use of such pesticides shall be in a manner consistent with its label.

9. The permittee shall implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must be prepared and implemented upon permit issuance. The SWPPP must be kept on-site and should not be sent to the department unless specifically requested. The SWPPP must be reviewed and updated, if needed, every five (5) years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document:

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.

The SWPPP must include the following:

- a. A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter stormwater. The BMPs at the facility should be designed to meet this value during rainfall event up to the 10 year, 24 hour rain event.
- b. The SWPPP must include a schedule for once per month site inspections and brief written reports. The inspection report must include weather information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Any corrective measure that necessitates major construction may also need a construction permit. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to department personnel upon request.
- c. A provision for designating an individual to be responsible for environmental matters.
- d. A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.

C. SPECIAL CONDITIONS cont'd

10. This permit stipulates pollutant benchmarks applicable to your discharge. The benchmarks do not constitute direct numeric effluent limitations; therefore, a benchmark exceedance alone is not a permit violation. Benchmark monitoring and visual inspections shall be used to determine the overall effectiveness of SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark concentration you must review your SWPPP and your BMPs to determine what improvements or additional controls are needed to reduce that pollutant in your stormwater discharge(s). Failure to improve BMPs and achieve compliance with the benchmarks is a permit violation.

<i>Outfall #001</i>		
PARAMETER	BENCHMARK	
	Value	Unit
Chemical Oxygen Demand	120	mg/L
Total Suspended Solids	100	mg/L
Settleable Solids	1.5	mL/L/hr
Oil & Grease	15	mg/L
Total Petroleum Hydrocarbon – Diesel Range Organics	10	mg/L
Total Petroleum Hydrocarbon – Gasoline Range Organics	10	mg/L
Total Petroleum Hydrocarbon – Oil Range Organics	10	mg/L

Any time a benchmark exceedance occurs a Corrective Action Report (CAR) must be completed. A CAR is a document that records the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and available to the department upon request. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility must contact the department if a benchmark value cannot be achieved. Failure to take corrective action to address a benchmark exceedance and failure to make tangible progress towards achieving the benchmarks is a permit violation.

11. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
- Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water from these substances.
 - Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
 - Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
12. The purpose of the SWPPP and the BMPs listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.
13. Before releasing water that has accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of a sheen. If the presence of hydrocarbons is indicated, this water must be tested for Total Petroleum Hydrocarbons (TPH). The suggested analytical method for testing TPH is non-Halogenated Organic by Gas Chromatography method 8015 (also known as OA1 and OA2). However, if the permittee so desires to use other approved testing methods (i.e. EPA 1664), they may do so. If the concentration for TPH exceeds 10mg/L, the water shall be taken to a WWTP for treatment.
14. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the SWPPP and made available to the department upon request.

C. SPECIAL CONDITIONS cont'd

15. Acute Whole Effluent Toxicity (WET) tests shall be conducted as follows:

SUMMARY OF ACUTE WET TESTING FOR THIS PERMIT					
OUTFALL	AEC	Acute Toxic Unit (TU _a)	FREQUENCY	SAMPLE TYPE	MONTH
001	100%	*	once/year	grab	any

*Monitoring only

Dilution Series						
100%	50%	25%	12.5%	6.25%	(Control) 100% upstream, if available	(Control) 100% Lab Water, also called synthetic water

a) Freshwater Species and Test Methods

i. Species and short-term test methods for estimating the acute toxicity of NPDES effluents are found in the fifth edition of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA/821/R-02/012, 2002; Table IA, 40 CFR Part 136). The permittee shall concurrently conduct 48-hour static non-renewal toxicity tests with the following vertebrate species:

- The fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0).

And the following invertebrate species:

- The daphnid, *Ceriodaphnia dubia* (Acute Toxicity Test Method 2002.0).

ii. Chemical and physical analysis of an upstream control sample and effluent sample shall occur immediately upon being received by the laboratory, prior to any manipulation of the effluent sample beyond preservation methods consistent with federal guidelines for WET testing that are required to stabilize the sample during shipping. Where upstream receiving water is not available, synthetic laboratory control water may be used.

iii. Test conditions must meet all test acceptability criteria required by the EPA Method used in the analysis.

iv. Any and all chemical or physical analysis of the effluent sample performed in conjunction with the WET test shall be performed at the 100% Effluent concentration in addition to analysis performed upon any other effluent concentration.

v. All chemical analyses shall be performed and results shall be recorded in the appropriate field of the report form. The parameters for chemical analysis include Temperature (°C), pH (SU), Conductivity (µmohs/cm), Dissolved Oxygen (mg/L), Total Residual Chlorine (mg/L), Un-ionized Ammonia (mg/L), Total Alkalinity (mg/L), and Total Hardness (mg/L).

b) Reporting of Acute Toxicity Monitoring Results

i. WET test results shall be submitted to the Kansas City Regional Office, or by eDMR, with the permittee's Discharge Monitoring Reports annually by January 28th of each year. The submittal shall include:

1. A full laboratory report for all toxicity testing.
2. Copies of chain-of-custody forms.
3. The WET form provided by the Department upon permit issuance.

ii. The report must include a quantification of acute toxic units (TU_a = 100/LC₅₀) reported according to the test methods manual chapter on report preparation and test review. The Lethal Concentration, 50 Percent (LC₅₀) is the toxic or effluent concentration that would cause death in 50 percent of the test organisms over a specified period of time.

c) Permit Reopener for Acute Toxicity

In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include effluent limitations or permit conditions to address acute toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to acute toxicity.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0004910
NORFOLK SOUTHERN RAILWAY COMPANY – NORTH KANSAS CITY YARD

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: Industrial, Railcar and Locomotive maintenance / fueling area
Facility SIC Code(s): 4011

Facility Description:

Two sedimentation basins / oil skimmer / stormwater runoff.
Design flow is dependent upon stormwater runoff.

Petroleum products are stored on site in aboveground storage tanks (ASTs) and drums. ASTs and drums are equipped with secondary containment. Drums and additional materials are stored under rood to minimize exposure to stormwater. A wastewater treatment system is used to treat runoff from areas of industrial activity before discharging to the sanitary sewer system. A retention basin and oil/water separator are used to treat stormwater runoff from the remaining areas of the facility.

The previous permit list the design of the facility at 58,000 gallons per day.

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

- No.

Application Date: 11/22/2013
Expiration Date: 04/23/2014
Last Inspection: 09/20/2012 In Compliance ; Non-Compliance

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE
#001	Dependent upon stormwater	Primary and Best Management Practices	Stormwater

Facility Performance History & Comments:

The most recent site inspection to determine compliance with the permit was conducted on September 20, 2012. The facility was found to be in compliance during the time of the inspection.

Several Record Reviews conducted between 2010 and 2014 revealed violations by the permittee. The department issued Letters of Warning (LOW) for missing data on the Discharge Monitoring Reports (DMRs) in 2010 and for exceeding effluent limitations in 2011 and 2014.

Part II. Receiving Stream Information

Receiving Water Body's Water Quality

There are no streams surveys noted in the department's database for either the receiving stream or the first classified stream. The Missouri River (0356) is on the 2012 Missouri 303(d) List of impaired waters for *E. coli* from multiple point and non-point sources. No Total Maximum Daily Load (TMDL) allocation has been developed for this pollutant. However, a TMDL has been developed for chlordane and polychlorinated biphenyls (PCBs). Since chlordane and PCBs have been banned, no effluent limitations will be included in this permit for either pollutant.

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.

As per Missouri's Stormwater Regulations [10 CSR 20.6.200(6)(B)2.], the department shall establish effluent limits as necessary to protect waters of the state. Effluent limitations for stormwater are established using best professional judgment based on the category and designated uses of the receiving stream.

- Missouri or Mississippi River:
- Lake or Reservoir:
- Losing:
- Metropolitan No-Discharge:
- Special Stream:
- Subsurface Water:
- All Other Waters:

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 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:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	DISTANCE TO CLASSIFIED SEGMENT	12-DIGIT HUC**
#001	Unnamed tributary to Rock Creek	U	-	GEN	0.65	10300101-0301
	Rock Creek	U	-	GEN		
	Missouri River	P	0356	AQL, DWS, GEN, IND, IRR, LWW, SCR, WBC-B		

* - 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), General Criteria (GEN). ** - Hydrologic Unit Code

RECEIVING STREAM(S) LOW-FLOW VALUES:

OUTFALL	RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
		1Q10	7Q10	30Q10
#001	Unnamed tributary to Rock Creek (U)	0.0	0.0	0.0

MIXING CONSIDERATIONS

Mixing Zone: Not Allowed [10 CSR 20-7.031(5)(A)4.B.(I)(a)].
Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(5)(A)4.B.(I)(b)].

RECEIVING STREAM MONITORING REQUIREMENTS:

No receiving water monitoring requirements recommended at this time. The previous monitoring requirements have been removed from the permit. Please see Part IV of the factsheet for further explanation.

Part III, 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.

- New facility, backsliding does not apply.

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

- Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.

- Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

- The Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).

Some of the previous permit limits were established using best professional judgment by the previous permit writer. However, in accordance with current stormwater permitting practices and utilization of benchmark values, best professional judgment has been used to remove some of the effluent limitations set for maximum daily limits (MDL) and all of the average monthly limits (AML). Stormwater events are acute occurrences that result in the greatest concentrations of pollutants being discharged in the first part of the runoff. This first flush can best be represented by a grab sample within the first hours of runoff. Additionally, stormwater events are highly variable. Recording an AML is not representative of the nature of these discharges. Many of these parameters that require just a MDL monitoring only requirement will now have a benchmark value associated with that monitoring only requirement. The following pollutants no longer have effluent limitations, but will have associated benchmark values.

<i>Outfall #001</i>		
PARAMETER	BENCHMARK	
	Value	Unit
Chemical Oxygen Demand	120	mg/L
Total Suspended Solids	100	mg/L
Settleable Solids	1.5	mL/L/hr
Oil & Grease	15	mg/L
Total Petroleum Hydrocarbon – Diesel Range Organics	10	mg/L
Total Petroleum Hydrocarbon – Gasoline Range Organics	10	mg/L
Total Petroleum Hydrocarbon – Oil Range Organics	10	mg/L

Additionally, the permit writer determined that many of the parameters listed in the permit provided the same information to the permittee and the Department. In order to reduce these duplicative sampling and analysis requirements, the permit writer used best professional judgment to remove many of the parameters that were related to oil, gasoline and diesel.

There will be no changes to industrial activities onsite or the composition of the stormwater discharge as a result of this renewal. The benchmark concentrations and required corrective actions are protective of the applicable water quality standards.

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.

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://extension.missouri.edu/main/DisplayCategory.aspx?C=74>, 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.

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.

INDUSTRIAL SLUDGE:

Industrial sludge is solids, semi-solids, or liquid residue generated during the treatment of industrial process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and a material derived from industrial sludge.

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

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.

Applicable; A 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 plan.

SPILL REPORTING:

Per 10 CSR 24-3.010, any emergency involving a hazardous substance must be reported to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the Noncompliance Reporting requirement found in Standard Conditions Part I.

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.

Applicable;

Under the federal Clean Water Act (CWA) §101(a)(3), requiring WET testing is reasonably appropriate for site-specific Missouri State Operating Permits for discharges to waters of the state issued under the National Pollutant Discharge Elimination System (NPDES). WET testing is also required by 40 CFR 122.44(d)(1). WET testing ensures that the provisions in the 10 CSR 20-6.010(8)(A)7. and the Water Quality Standards 10 CSR 20-7.031(4)(D),(F),(G),(I)2.A & B are being met. Under [10 CSR 20-6.010(8)(A)4], the Department may require other terms and conditions that it deems necessary to assure compliance with the Clean Water Act and related regulations of the Missouri Clean Water Commission. In addition the following MCWL apply: §§644.051.3 requires the Department to set permit conditions that comply with the MCWL and CWA; 644.051.4 specifically references toxicity as an item we must consider in writing permits (along with water quality-based effluent limits, pretreatment, etc...); and 644.051.5 is the basic authority to require testing conditions. WET test will be required by all facilities meeting the following criteria:

- Facility is a designated Major.
- Facility continuously or routinely exceeds its design flow.
- Facility that exceeds its design population equivalent (PE) for BOD₅ whether or not its design flow is being exceeded.
- Facility (whether primarily domestic or 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 for toxic substances (other than NH₃)
- Facility is a municipality with a Design Flow ≥ 22,500 gpd.
- Other – the facility failed a WET test in 2011. In the event of a failure, the facility must pass 3 consecutive WET tests prior to considering removal of this requirement.

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

Applicable; Missouri River (P) is listed on the 2012 Missouri 303(d) List for *E. coli*.

– It is unknown at this time if the facility is a source of the above listed pollutant(s) or considered to contribute to the impairment of Missouri River (P). Once a TMDL is developed, the permit may be modified to include WLAs from the TMDL.

Applicable; Missouri River (P) has a TMDL for chlordane and PCBs.

– This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of Missouri River (P).

Part IV. Effluent Limits Determination

Outfall #001 – Main Facility Outfall

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.

Due to the nature of the discharges from these outfalls being stormwater, only a maximum daily limit (MDL) or monitoring requirement will be implemented for many of the parameters listed below. Stormwater events are acute occurrences that result in the greatest concentrations of pollutants being discharged in the first part of the runoff. This first flush can best be represented by a grab sample within the first hours of runoff. Additionally, stormwater events are highly variable. Recording an average monthly limit (AML) is not representative of the nature of these discharges. Many of these parameters that require just a MDL monitoring only requirement will now have a benchmark value associated with that monitoring only requirement. These benchmark values will be listed under the individual discussion and derivation of each parameter containing such a value.

Benchmarks

Benchmark concentrations are **not** effluent limitations; benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective action(s) may be necessary to comply with the technology based effluent limitations (TBEL). Failure to take corrective action is a violation of the permit. Benchmark exceedance alone is not a permit violation.

The benchmarks listed in the derivation discussion below have been determined to be feasible, affordable and protective of water quality. These benchmark values are consistent with other stormwater permits including the EPA MSGP. The facility will be required to monitor for all these parameters and if the benchmarks are exceeded at all in the following permit cycle, then the permit writer will use best professional judgment to determine if effluent limitations will be necessary to protect water quality.

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	Basis for Limits	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
PRECIPITATION	INCHES	6	*			NO	*
FLOW	GPD	1	*		*	NO	*/*
BOD ₅	MG/L	6	*****		*****	YES	45/30
COD	MG/L	6	**		*****	YES	120/60
TSS	MG/L	6	**		*****	YES	*/*
SETTLABLE SOLIDS	ML/L/HR	6	**		*****	YES	1.5/1.0
pH	SU	1, 3	6.5-9.0		*****	NO	6.5-9.0
OIL & GREASE (MG/L)	MG/L	1, 3	**		*****	YES	15/10
TOTAL PETROLEUM HYDROCARBON	MG/L	6	*****		*****	YES	10/10
TOTAL PETROLEUM HYDROCARBONS – DIESEL RANGE ORGANICS (TPH-DRO)	MG/L	6	**			YES	****
TOTAL PETROLEUM HYDROCARBONS – GASOLINE RANGE ORGANICS (TPH-GRO)	MG/L	6	**			YES	****
TOTAL PETROLEUM HYDROCARBONS – OIL RANGE ORGANICS (TPH-ORO)	MG/L	6	**			YES	****
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)	MG/L	6	*****		*****	YES	*/*
PHENOL	MG/L	6	*****		*****	YES	0.35/0.35
SPECIFIC CONDUCTIVITY	µmhos/cm	6	*****		*****	YES	*/*
TOTAL PHOSPHORUS	MG/L	6	*****		*****	YES	*/*
TOTAL KJELDAHL NITROGEN	MG/L	6	*****		*****	YES	*/*
NITRITE + NITRATE NITROGEN	MG/L	6	*****		*****	YES	*/*
BENZO (A) ANTHRACINE	µg/L	6	*****		*****	YES	0.15/0.15
BENZO (A) PYRENE	µg/L	6	*****		*****	YES	0.15/0.15
BENZO (K) FLUORANTHENE	µg/L	6	*****		*****	YES	0.15/0.15
CHRYSENE	µg/L	6	*****		*****	YES	0.15/0.15
INDENO (1, 2, 3-CD) PYRENE	µg/L	6	*****		*****	YES	0.15/0.15
ARSENIC, TOTAL RECOVERABLE	µg/L	6	*****		*****	YES	*/*
LEAD, TOTAL RECOVERABLE	µg/L	6	*****		*****	YES	*/*
TOTAL TOXIC ORGANICS	mg/L	6	*****		*****	YES	*/*
WHOLE EFFLUENT TOXICITY (WET) TEST	TUa	6	****			YES	PASS/FAIL

* - Monitoring requirement only

** - Monitoring with associated benchmark

*** - For DO the Daily Maximum is a Daily Minimum and the Monthly Average is a Monthly Average Minimum.

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

***** - Parameter being removed from permit.

Basis for Limitations Codes:

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

OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

- **Precipitation.** Monitoring only requirement. Measuring the amount of rainfall during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality.
- **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.
- **Biochemical Oxygen Demand (BOD₅).** Parameter removed from permit. BOD₅ is an indicator of oxygen demand associated with domestic wastewater. Because the discharge is stormwater only, BOD₅ is not suitable for monitoring. Additionally, the permittee is required to monitoring for COD, which captures all organic and inorganic dissolved oxygen demands. The Discharge Monitoring Reports (DMRs) support this decision, with results ranging from 2.6 - 2.8 mg/L.

- **Chemical Oxygen Demand (COD)**. Effluent limitations have been removed and replaced with monitoring only associated with a benchmark value. There is no water quality standard for COD; however, increased oxygen demand may impact instream water quality. COD is also a valuable indicator parameter. COD monitoring allows the permittee to identify increases in COD that may indicate materials/chemicals coming into contact with stormwater that cause an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs. Additionally, a benchmark value will be implemented for this parameter. The benchmark value will be set at 120 mg/L. This value falls within the range of values implemented in other permits that have similar industrial activities and the Environmental Protection Agency's (EPA's) *Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity* (MSGP). This value is achievable based on the DMRs, which show results ranging from 24.4 - 72 mg/L.
- **Total Suspended Solids (TSS)**. It is the permit writer's best professional judgment to continue the monitoring only requirement but include a benchmark value for this parameter. There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS that may indicate uncontrolled materials leaving the site. Additionally, a benchmark value will be implemented for this parameter. The benchmark value will be set at 100 mg/L. This value falls within the range of values implemented in other permits that have similar industrial activities and the EPA's MSGP. This value is achievable based on the DMRs, which show results ranging from 7 - 113 mg/L.
- **Settleable Solids**. It is the permit writer's best professional judgment to remove effluent limitations and replace with monitoring only with consideration to a benchmark value. There is no water quality standard for Settleable Solids; however, sediment discharges can negatively impact aquatic life habitat. Settleable Solids is also a valuable indicator parameter. Monitoring allows the permittee to identify increases in solids that may indicate uncontrolled materials leaving the site. Additionally, a benchmark value will be implemented for this parameter. The benchmark value will be set at 1.5 mL/L/hr. This value is achievable based on the DMRs, which show values ranging from 0.2 – 1.0 mL/L/hr.
- **pH** – 6.5-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are not protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. No mixing zone is allowed due to the classification of the receiving stream, therefore the water quality standard must be met at the outfall.
- **Oil & Grease**. Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum. However, it is the permit writer's best professional judgment to implement a benchmark value will be implanted at 15 mg/L. This value is achievable based on the DMRs, which show values ranging from 2 - 7.7 mg/L.
- **Total Petroleum Hydrocarbon (TPH)**. The permit writer has used best professional judgment to remove this parameter from the permit. The Department's Environmental Services Program (ESP) lab does not test for this parameter any longer. TPH has been split into more specific ranges for analysis, which has replaced this parameter. Please see TPH – Diesel Range Organics, TPH – Gasoline Range Organics and TPH – Oil Range Organics for further explanation. Additionally, benchmark values will be implemented for each range. All of the DMR sample results are well below the final effluent limitation of 10 mg/L, which will be the benchmark value for each range.
- **Total Petroleum Hydrocarbon – Diesel Range Organics (TPH-DRO)**. This benchmark has been established at 10mg/L of TPH-DRO.
- **Total Petroleum Hydrocarbon – Gasoline Range Organics (TPH-GRO)**. This benchmark has been established at 10mg/L of TPH-GRO.
- **Total Petroleum Hydrocarbon – Oil Range Organics (TPH-ORO)**. This benchmark has been established at 10mg/L of TPH-ORO.
- **Polycyclic Aromatic Hydrocarbons (PAH)**. Parameter removed from permit. This parameter will detect oil and gas spills or leaks in the discharge. However, several other parameters are being implemented that are also indicators of these oil or gas. Therefore, it is the permit writer's best professional judgment to remove duplication from the permit by removing this parameter. This decision is supported by the DMRs, which show results below detection limit for every test of this parameter.
- **Phenol**. Parameter removed from permit. This parameter will detect oil and gas spills or leaks in the discharge. However, several other parameters are being implemented that are also indicators of these oil or gas. Therefore, it is the permit writer's best professional judgment to remove duplication from the permit by removing this parameter. This decision is supported by the DMRs, which show four results of 0.05 mg/L and four results below detection limit.

- **Specific Conductivity**. Parameter removed from permit. There is no water quality standard for specific conductivity; however, this parameter is an indicator of solids in the wastewater. Several other parameters are being implemented that are also indicators concentrations of solids throughout the water column. Therefore, it is the permit writer's best professional judgment to remove duplication from the permit by removing this parameter.
- **Total Phosphorus**. Parameter removed from permit. This parameter was placed in the permit two cycles prior to this renewal. The following regulation was addressed as justification for implementing monitoring: 10 CSR 20-6.200(2)(C)1E(III). This regulation addresses testing requirements for permit application associated with industrial stormwater and does not require monitoring in the permit itself. This facility does not have reasonable potential to cause any impairment to the receiving stream with high phosphorus loading. For these reasons, it is the permit writer's best professional judgment to remove this parameter from the permit. This decision is supported by the DMRs, which show three results ranging from 0.1 – 0.24 mg/L and two results below detection limit.
- **Total Kjeldahl Nitrogen**. Parameter removed from permit. This parameter was placed in the permit two cycles prior to this renewal. The following regulation was addressed as justification for implementing monitoring: 10 CSR 20-6.200(2)(C)1E(III). This regulation addresses testing requirements for permit application associated with industrial stormwater and does not require monitoring in the permit itself. This facility does not have reasonable potential to cause any impairment to the receiving stream with high phosphorus loading. For these reasons, it is the permit writer's best professional judgment to remove this parameter from the permit. This decision is supported by the DMRs, which show results ranging from 0.34 – 1 mg/L.
- **Nitrite + Nitrate Nitrogen**. Parameter removed from permit. This parameter was placed in the permit two cycles prior to this renewal. The following regulation was addressed as justification for implementing monitoring: 10 CSR 20-6.200(2)(C)1E(III). This regulation addresses testing requirements for permit application associated with industrial stormwater and does not require monitoring in the permit itself. This facility does not have reasonable potential to cause any impairment to the receiving stream with high phosphorus loading. For these reasons, it is the permit writer's best professional judgment to remove this parameter from the permit. This decision is supported by the DMRs, which show four results ranging from 0.27 – 1.4 mg/L and one result below detection limit.
- **Benzo (a) anthracene**. Parameter removed from permit. This parameter is a specific PAH, which has been removed from the permit as well. PAH's will detect oil and gas spills or leaks in the discharge. However, several other parameters are being implemented that are also indicators of these oil or gas. Therefore, it is the permit writer's best professional judgment to remove duplication from the permit by removing this parameter. This decision is supported by the DMRs, which show results below detection limit for every test of this parameter.
- **Benzo(a)pyrene**. Parameter removed from permit. This parameter is a specific PAH, which has been removed from the permit as well. PAH's will detect oil and gas spills or leaks in the discharge. However, several other parameters are being implemented that are also indicators of these oil or gas. Therefore, it is the permit writer's best professional judgment to remove duplication from the permit by removing this parameter. This decision is supported by the DMRs, which show results below detection limit for every test of this parameter..
- **Benzo(k)fluoranthene**. Parameter removed from permit. This parameter is a specific PAH, which has been removed from the permit as well. PAH's will detect oil and gas spills or leaks in the discharge. However, several other parameters are being implemented that are also indicators of these oil or gas. Therefore, it is the permit writer's best professional judgment to remove duplication from the permit by removing this parameter. This decision is supported by the DMRs, which show results below detection limit for every test of this parameter.
- **Chrysene**. Parameter removed from permit. This parameter is a specific PAH, which has been removed from the permit as well. PAH's will detect oil and gas spills or leaks in the discharge. However, several other parameters are being implemented that are also indicators of these oil or gas. Therefore, it is the permit writer's best professional judgment to remove duplication from the permit by removing this parameter. This decision is supported by the DMRs, which show results below detection limit for every test of this parameter.
- **Indeno (1,2,3-cd) pyrene**. Parameter removed from permit. This parameter is a specific PAH, which has been removed from the permit as well. PAH's will detect oil and gas spills or leaks in the discharge. However, several other parameters are being implemented that are also indicators of these oil or gas. Therefore, it is the permit writer's best professional judgment to remove duplication from the permit by removing this parameter. This decision is supported by the DMRs, which show results below detection limit for every test of this parameter.

- **Metals**

Effluent limitations for total recoverable metals were developed using methods and procedures outlined in the “The Metals Translator: Guidance For Calculating A Total Recoverable Permit Limit From A Dissolved Criterion” (EPA 823-B-96-007). General warm-water fishery criteria apply and a water hardness of 193 for stormwater is used in the conversion below.

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed.

METAL	CONVERSION FACTORS	
	ACUTE	CHRONIC
Arsenic	1	1
Lead	0.695	0.695

Conversion factors for Cd and Pb are hardness dependent. Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 193 mg/L. N/A = not applicable.

Arsenic, Total Recoverable. Protection of Aquatic Life Chronic Criteria = 20.0 µg/L, Acute Criteria = N/A.

Chronic = $20/1 = 20 \mu\text{g/L}$

The previous permit established monitoring only requirements to determine if the facility has the reasonable potential to violate water quality standards. The DMR results show that this facility does not have reasonable potential to exceed water quality standards for this parameter. The DMRs show two results ranging from 5 – 10 µg/L and two results below detection limit. Therefore, it is the permit writer’s best professional judgment to remove this parameter from the permit.

Lead, Total Recoverable. Protection of Aquatic Life Chronic Criteria = 7.35 µg/L, Acute Criteria = 188.47 µg/L.

Chronic = $5.1/0.695 = 7.35 \mu\text{g/L}$

Acute = $131/0.695 = 188.47 \mu\text{g/L}$

The previous permit established monitoring only requirements to determine if the facility has the reasonable potential to violate water quality standards. The DMR results show that this facility does have reasonable potential to exceed chronic criteria for this parameter. The DMRs show three results ranging from 3 – 9.5 µg/L and one result below detection limit. These results show that this facility does not have reasonable potential to exceed acute criteria. If a benchmark value were to be added to this permit, it would be set at the acute criteria of 188 µg/L. The performance history shows that this facility is capable of achieving this benchmark value by over one order of magnitude. Therefore, it is the permit writer’s best professional judgment to remove this parameter from the permit.

- **Total Toxic Organics.** Parameter removed from permit. It is unclear in the previous permit why the permittee was required to test for the 108 parameters listed in the previous permit as total toxic organics. Many of the parameters listed appear to be constituents of oil, gasoline or diesel. This may be the reason this testing was required; to determine if any fuel or lubricant spills have occurred. However, several other parameters are being implemented that are also indicators of these oil, gasoline or diesel. Therefore, it is the permit writer’s best professional judgment to remove duplication from the permit by removing this parameter.

- **Acute WET Test.** Monitoring requirement only. Monitoring is required to determine if reasonable potential exists for this facility’s discharge to exceed water quality standards. The facility failed a WET test in 2011 and are required to complete and pass 3 consecutive WET tests before removal of this requirement can be considered.

Acute Allowable Effluent Concentrations (AECs) for facilities that discharge to unclassified, Class C, Class P (with default Mixing Considerations), or Lakes [10 CSR 20-7.031(4)(A)4.B.(IV)(b)] are 100%, 50%, 25%, 12.5%, & 6.25%.

• **Minimum Sampling and Reporting Frequency Requirements.**

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Precipitation	once/day	once/quarter
Flow	once/quarter	once/quarter
COD	once/quarter	once/quarter
TSS	once/quarter	once/quarter
Settleable Solids	once/quarter	once/quarter
pH	once/quarter	once/quarter
Oil & Grease	once/quarter	once/quarter
TPH - DRO	once/quarter	once/quarter
TPH - GRO	once/quarter	once/quarter
TPH - ORO	once/quarter	once/quarter
WET Test	once/year	once/year

Sampling Frequency Justification:

Sampling and Reporting Frequency was increased from once per year to once per quarter. In order to ensure proper stormwater control measures are being taken, and the BMPs are working properly, the frequency on monitoring must be increased to at least once per quarter. This is consistent with other stormwater permits issued in the State of Missouri.

Precipitation must be measured on a daily basis. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of how the existing stormwater control measures may be affected by that volume of stormwater runoff.

WET Test Sampling Frequency Justification WET Testing schedules and intervals are established in accordance with the Department's Permit Manual; Section 5.2 *Effluent Limits / WET Testing for Compliance Bio-monitoring*. It is recommended that WET testing be conducted during the period of lowest stream flow.

Acute Whole Effluent Toxicity

- No less than **ONCE/YEAR:**
 - Facility is designated as a Major facility or has a design flow \geq 1.0 MGD.
 - Facility continuously or routinely exceeds their design flow.
 - Facility exceeds its design population equivalent (PE) for BOD₅ whether or not its design flow is being exceeded.
 - Facility has Water Quality-based effluent limitations for toxic substances (other than NH₃).
 - Facility failed previous WET tests in the past 5 years.

• **Sampling Type Justification Choose one delete the rest**

Sampling Type was retained from the previous permit. Due to the nature of the discharge being stormwater, grab samples will provide representative sampling during a storm event.

Instream Sampling – Mouth of Rock Creek (U)

The instream sampling requirements for this facility have been removed from the permit. The previous permits established instream sampling at a location downstream from the discharge just before Rock Creek (U) enters the Missouri River (P). The reason for requiring this sampling is unclear. No upstream sampling was required, upstream of the confluence of the unnamed tributary and Rock Creek, so no data could be compared to determine what impact the effluent may have on the Rock Creek. Additionally, the location chosen for instream sampling is located at the mouth of Rock Creek. The stream characteristics at this location are greatly influenced by the Missouri River and will not be representative of any impacts the discharge may have on Rock Creek. There does not appear to be an environmental benefit to sampling at this location. Therefore, it is the permit writer's best professional judgment to remove instream monitoring from this permit.

Part V. Administrative Requirements

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

PERMIT SYNCHRONIZATION:

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than three years old, that data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit.

PUBLIC NOTICE:

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

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

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

- The Public Notice period for this operating permit began on October 3, 2014 and ended on November 3, 2014. No comments were received during the Public Notice period.

DATE OF FACT SHEET: AUGUST 13, 2014

COMPLETED BY:

**LOGAN COLE, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
(573)751-5827
logan.cole@dnr.mo.gov**



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

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

Part I – General Conditions

Section A – Sampling, Monitoring, and Recording

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

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

Section B – Reporting Requirements

1. **Planned Changes.**
 - a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1);
 - iii. The alteration or addition results in a significant change in the permittee’s sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
 - iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.
2. **Non-compliance Reporting.**
 - a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



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

Section C – Bypass/Upset Requirements

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

Section D – Administrative Requirements

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



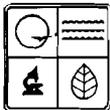
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- imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second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



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



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
**FORM A - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT
 UNDER MISSOURI CLEAN WATER LAW**

AP17039 C12523

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED
11/2/13	ESB

Note ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:

An operating permit and antidegradation review public notice

A construction permit following an appropriate operating permit and antidegradation review public notice

A construction permit and concurrent operating permit and antidegradation review public notice

A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)

An operating permit for a new or unpermitted facility Construction Permit # _____

An operating permit renewal: permit # MO- 0004910 Expiration Date 4/23/2014

An operating permit modification: permit # MO- _____ Reason: _____

1.1 Is the appropriate fee included with the application? (See instructions for appropriate fee) YES NO

2. FACILITY

NAME		TELEPHONE WITH AREA CODE	
Norfolk Southern Railway Company - North Kansas City Yard		(816) 346-2055	
ADDRESS (PHYSICAL)		FAX (816) 346-3022	
1900 Nodaway Street	CITY	STATE	ZIP CODE
	North Kansas City	MO	64116

3. OWNER

NAME		E-MAIL ADDRESS		TELEPHONE WITH AREA CODE	
Norfolk Southern Railway Company				(404) 582-4239	
ADDRESS (MAILING)		CITY		FAX (678) 512-5472	
1200 Peachtree Street, N.E., Box 13		Atlanta			
		STATE	ZIP CODE		
		GA	30309-0013		

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

4. CONTINUING AUTHORITY

NAME		TELEPHONE WITH AREA CODE	
Norfolk Southern Railway Company		(404) 582-4239	
ADDRESS (MAILING)		FAX (678) 512-5472	
1200 Peachtree Street, N.E., Box 13			
		STATE	ZIP CODE
		GA	30309-0013

5. OPERATOR

NAME		CERTIFICATE NUMBER		TELEPHONE WITH AREA CODE	
Rantel L. Lee, Sr.		NA		(816) 346-2011	
ADDRESS (MAILING)		CITY		FAX (816) 346-3022	
1900 Nodaway Street		North Kansas City			
		STATE	ZIP CODE		
		MO	64116		

6. FACILITY CONTACT

NAME		TITLE		TELEPHONE WITH AREA CODE	
W. Bryan Salley		Engineer Environmental Operations		(314) 679-1853	
				FAX (314) 946-1759	

7. ADDITIONAL FACILITY INFORMATION

7.1 Legal Description of Outfalls. (Attach additional sheets if necessary.)

001 SW ¼ NW ¼ Sec 18 T 50N R 32W Clay County

UTM Coordinates Easting (X): _____ Northing (Y): _____

For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

002 _____ ¼ _____ ¼ Sec _____ T _____ R _____ County

UTM Coordinates Easting (X): _____ Northing (Y): _____

003 _____ ¼ _____ ¼ Sec _____ T _____ R _____ County

UTM Coordinates Easting (X): _____ Northing (Y): _____

004 _____ ¼ _____ ¼ Sec _____ T _____ R _____ County

UTM Coordinates Easting (X): _____ Northing (Y): _____

7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.

001 - SIC 4011 and NAICS 482111 002 - SIC _____ and NAICS _____

003 - SIC _____ and NAICS _____ 004 - SIC _____ and NAICS _____

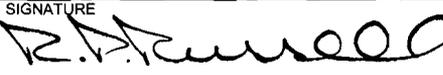
8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION
 (Complete all forms that are applicable.)

- A. Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? YES NO
 If yes, complete Form C (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).
- B. Is your facility considered a "Primary Industry" under EPA guidelines: YES NO
 If yes, complete Forms C and D.
- C. Is application for storm water discharges only? YES NO
 If yes, complete EPA Form 2F.
- D. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.
- E. Is wastewater land applied? If yes, complete Form I. YES NO
- F. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? YES NO
 If yes, complete Form R.

9. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions.
 (PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE)

NAME City of North Kansas City			
ADDRESS City of North Kansas City	CITY North Kansas City	STATE MO	ZIP CODE 64116

10. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law to the Missouri Clean Water Commission.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) R.P. Russell, System Director Environmental Protection	TELEPHONE WITH AREA CODE (404) 582-4456
SIGNATURE 	DATE SIGNED 11/13/13

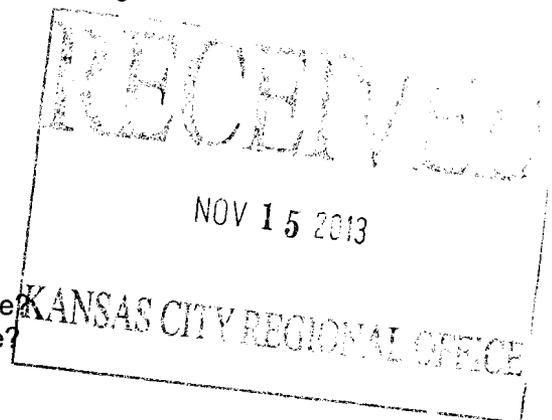
MO 780-1479 (01-09)

BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.

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

HAVE YOU INCLUDED:

- Appropriate Fees?
- Map at 1" = 2000' scale?
- Signature?
- Form C, if applicable?
- Form D, if applicable?
- Form 2F, if applicable?
- Form I (Irrigation), if applicable?
- Form R (Sludge), if applicable?



Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
001	~5 acres	~18 acres			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

Petroleum products are stored on site in aboveground storage tanks (ASTs) and drums. ASTs and drums are equipped with secondary containment. Drums and additional materials are stored under roof to minimize exposure to storm water. A wastewater treatment system is used to treat runoff from areas of industrial activity before discharging to the sanitary sewer system. A retention basin and oil/water separator are used to treat storm water runoff from the remaining areas of the Facility. The facility-specific Spill Prevention, Control, and Countermeasure (SPCC) Plan is used to help personnel understand the importance of storm water management and pollution reduction.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
All	Structural: Dikes, berms, swales, ditches, and underground conveyances direct storm water runoff to a retention basin and OWS. Recovered oil is removed for proper disposal by a licensed contractor on an as-needed basis. Non-Structural: Spill Prevention, Control, and Countermeasure Plan; personnel training; good housekeeping; routine inspections.	1-M, 1-U 4-A, 5-Q

V. Nonstormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name and Official Title (type or print) R.P. Russell, System Director Environmental Protection	Signature 	Date Signed 11/13/13
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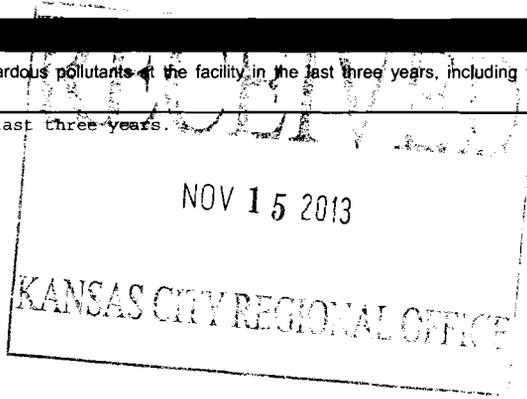
B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Facility outfalls were visually inspected in August 2013 for any non-storm water discharges. No discharges were observed.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

There have been no significant leaks or spills at the Facility during the last three years.



VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

Yes (list all such pollutants below)

No (go to Section IX)

NA

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

Yes (list all such pollutants below)

No (go to Section IX)

Acute whole effluent toxicity (WET) testing is conducted on an annual basis. Samples collected on 9/16/13 yielded 100% survival of both test species.

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

No (go to Section X)

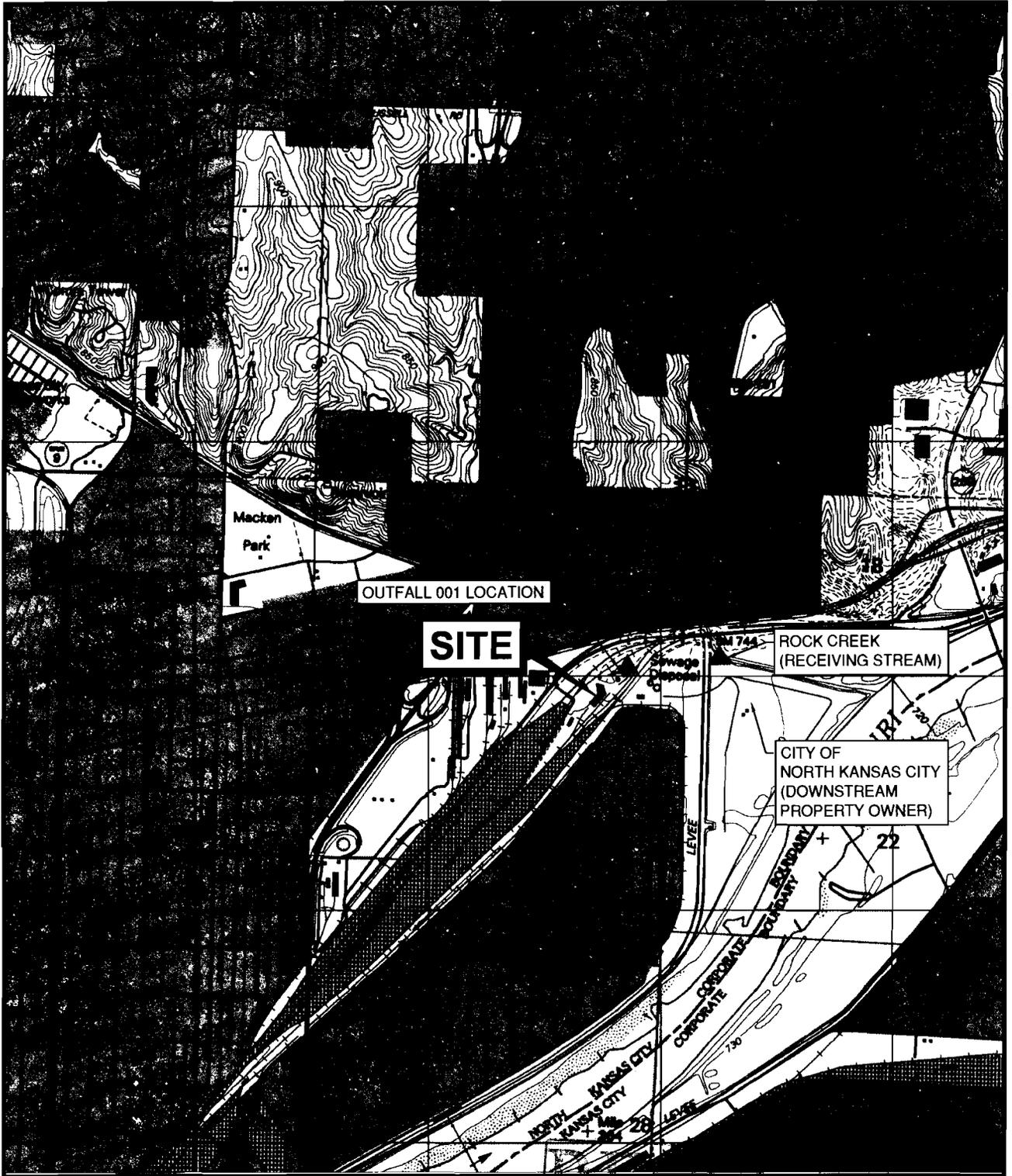
A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Pace Analytical Services, Inc.	9608 Loiret Boulevard Lenexa, KS 66219	(913) 599-5665	All pollutants required by existing NPDES permit.



X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (Type Or Print) R.P. Russell, System Director Environmental Protection	B. Area Code and Phone No. (404) 582-4456
C. Signature <i>R.P. Russell</i>	D. Date Signed 11/13/13



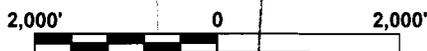
USGS 7.5 NORTH KANSAS CITY, MO.-KS. QUADRANGLE



Norfolk Southern Railway Company
North Kansas City Yard

NOV 15 2013

NOV 15 2013



SCALE 1:24,000



Topographic Site Location Map

MISSOURI
QUADRANGLE-LOCATION

NS1789/170
10/07/2013
Bluefield, Virginia

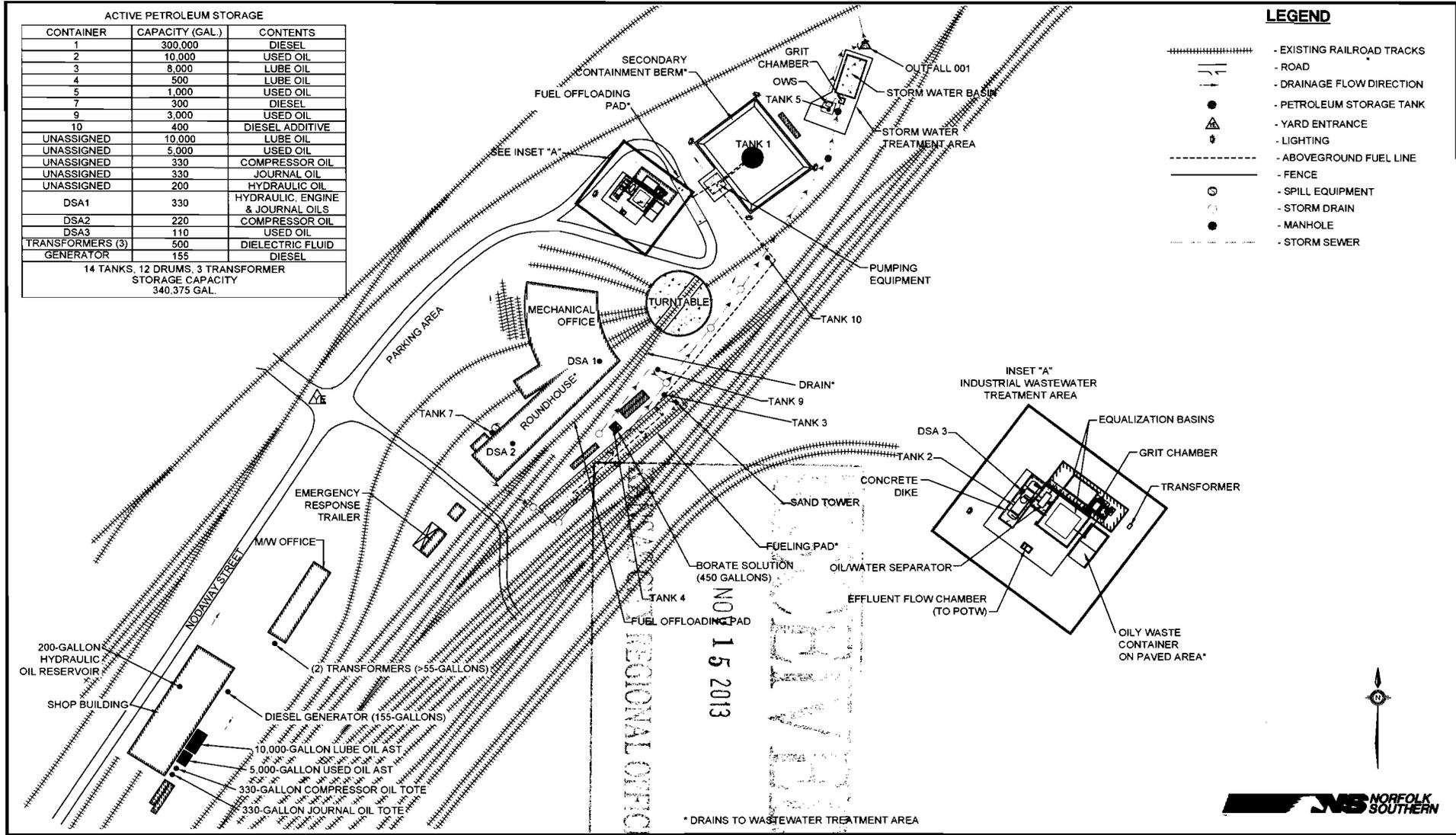
FIGURE 1

ACTIVE PETROLEUM STORAGE

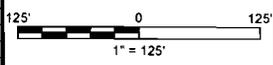
CONTAINER	CAPACITY (GAL.)	CONTENTS
1	300,000	DIESEL
2	10,000	USED OIL
3	8,000	LUBE OIL
4	500	LUBE OIL
5	1,000	USED OIL
7	300	DIESEL
9	3,000	USED OIL
10	400	DIESEL ADDITIVE
UNASSIGNED	10,000	LUBE OIL
UNASSIGNED	5,000	USED OIL
UNASSIGNED	330	COMPRESSOR OIL
UNASSIGNED	330	JOURNAL OIL
UNASSIGNED	200	HYDRAULIC OIL
DSA1	330	HYDRAULIC ENGINE & JOURNAL OILS
DSA2	220	COMPRESSOR OIL
DSA3	110	USED OIL
TRANSFORMERS (3)	500	DIELECTRIC FLUID
GENERATOR	155	DIESEL
14 TANKS, 12 DRUMS, 3 TRANSFORMER STORAGE CAPACITY 340,375 GAL.		

LEGEND

- ===== - EXISTING RAILROAD TRACKS
- — — — — - ROAD
- — — — — - DRAINAGE FLOW DIRECTION
- - PETROLEUM STORAGE TANK
- ▲ - YARD ENTRANCE
- ⚡ - LIGHTING
- - - - - - ABOVEGROUND FUEL LINE
- — — — — - FENCE
- ⊙ - SPILL EQUIPMENT
- — — — — - STORM DRAIN
- - MANHOLE
- - - - - - STORM SEWER



DESIGNED	MN	NO	DATE	REVISION
DRAWN	JRR			
CHECKED	MN			
DATE			10/28/2013	
SCALE			1"=125'	
FILE NO			KANSAS	
PROJECT NO			NS178931	
OFFICE LOC			BLUEFIELD	



NORFOLK SOUTHERN RAILWAY COMPANY
 NORTH KANSAS CITY YARD
 NORTH KANSAS CITY, MISSOURI

SITE MAP

Figure

2

