

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

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

Permit No. MO-0132837

Owner: S.H. Smith & Company, Inc. (Smith & Company)  
Address: P.O. Box 72, Poplar Bluff, MO. 63902

Continuing Authority: Same as above  
Address: Same as above

Facility Name: Smith & Company Landfarm  
Facility Address: County Road 236, Advanced, MO 63730

Legal Description: See Page Two (2)  
UTM Coordinates: See Page Two (2)

Receiving Stream: See Page Two (2)  
First Classified Stream and ID: See Page Two (2)  
USGS Basin & Sub-watershed No.: See Page Two (2)

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

**FACILITY DESCRIPTION**

Outfall #001 - See Page Two (2)  
Permitted Feature #002-#007 - See Page Two (2)  
Permitted Feature #S1- See Page Three (3)

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.

November 1, 2015  
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

September 30, 2020  
Expiration Date

John Madras, Director, Water Protection Program

**FACILITY DESCRIPTION (continued):**

Outfall #001 – Landfarm-SIC#8999

Stormwater detention basin/sedimentation  
Surface treatment cell for landfarming soil contaminated with petroleum hydrocarbons  
Design flow is 120,000 gallons per day.  
Actual flow is dependent on precipitation.

Legal Description: NW¼, NW¼, Sec. 4, T27N, R10E, Stoddard County  
UTM Coordinates: 769231/4101911  
Receiving Stream: Unnamed Tributary to Wolf Creek (U)  
First Classified Stream and ID: Wolf Creek (C) (3077)  
USGS Basin &Sub-watershed No: (08020204-0204)

Permitted Feature #002-(MW01)

Monitoring Groundwater below the Landfarm.

Legal Description: NW¼, NW¼, Sec. 4, T27N, R10E, Stoddard County  
UTM Coordinates: 769261/4101965  
Receiving Stream: Unnamed Tributary to Wolf Creek (U)  
First Classified Stream and ID: Wolf Creek (C) (3077)  
USGS Basin &Sub-watershed No: (08020204-0204)

Permitted Feature #003-(MW02)

Monitoring Groundwater below the Landfarm.

Legal Description: NW¼, NW¼, Sec. 4, T27N, R10E, Stoddard County  
UTM Coordinates : 769223/4101982  
Receiving Stream: Unnamed Tributary to Wolf Creek (U)  
First Classified Stream and ID: Wolf Creek (C) (3077)  
USGS Basin &Sub-watershed No: (08020204-0204)

Permitted Feature #004-(MW03)

Monitoring Groundwater below the Landfarm.

Legal Description: NW¼, NW¼, Sec. 4, T27N, R10E, Stoddard County  
UTM Coordinates: 769265/4101986  
Receiving Stream: Unnamed Tributary to Wolf Creek (U)  
First Classified Stream and ID: Wolf Creek (C) (3077)  
USGS Basin &Sub-watershed No: (08020204-0204)

Permitted Feature #005-(MW04)

Monitoring Groundwater below the Landfarm.

Legal Description: NW¼, NW¼, Sec. 4, T27N, R10E, Stoddard County  
UTM Coordinates: 769229/4101970  
Receiving Stream: Unnamed Tributary to Wolf Creek (U)  
First Classified Stream and ID: Wolf Creek (C) (3077)  
USGS Basin &Sub-watershed No: (08020204-0204)

Permitted Feature #006-(MW05)

Monitoring Groundwater below the Landfarm.

Legal Description: NW¼, NW¼, Sec. 4, T27N, R10E, Stoddard County  
UTM Coordinates: 769226/4102047  
Receiving Stream: Unnamed Tributary to Wolf Creek (U)  
First Classified Stream and ID: Wolf Creek (C) (3077)  
USGS Basin &Sub-watershed No: (08020204-0204)

Permitted Feature #007-(MW06)

Monitoring Groundwater below the Landfarm.

Legal Description: NW¼, NW¼, Sec. 4, T27N, R10E, Stoddard County  
UTM Coordinates : 769223/4102087  
Receiving Stream: Unnamed Tributary to Wolf Creek (U)  
First Classified Stream and ID: Wolf Creek (C) (3077)  
USGS Basin &Sub-watershed No: (08020204-0204)

**FACILITY DESCRIPTION (continued):**

Permitted Feature #S1- Instream monitoring

Sample to be taken approximately 5 yards above confluence of effluent with Unnamed Tributary to Wolf Creek.

Legal Description:	NW¼, NW¼, Sec. 4, T27N, R10E, Stoddard County
UTM Coordinates:	769231/4101911
Receiving Stream:	Unnamed Tributary to Wolf Creek (U)
First Classified Stream and ID:	Wolf Creek (C) (3077)
USGS Basin &Sub-watershed No:	(08020204-0204)

<b>OUTFALL #001</b>	<b>TABLE A-1. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>	PAGE NUMBER 4 of 9
		PERMIT NUMBER MO-0132837

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 **November 1, 2015**, and remain in effect through expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETER(S)***	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	once/month	24 hr. estimate
Chemical Oxygen Demand <sub>5</sub>	mg/L	*		*	once/month	grab
Settleable Solids	ml/L/hr	1.5		1.0	once/month	grab
Total Suspended Solids	mg/L	50		30	once/month	grab
Total Petroleum Hydrocarbon(DRO)	mg/L	10		10	once/month	grab
Total Petroleum Hydrocarbon(GRO)	mg/L	10		10	once/month	grab
Total Petroleum Hydrocarbon(ORO)	mg/L	10		10	once/month	grab
pH – Units	SU	****		****	once/month	grab
Benzene	µg/L	5.0		5.0	once/month	grab
Toluene	µg/L	1000		1000	once/month	grab
Ethylbenzene	µg/L	320		320	once/month	grab
Xylene	µg/L	10,000		10,000	once/month	grab
Lead, Total Recoverable	µg/L	*		*	once/month	grab
Oil & Grease	mg/L	15		10	once/month	grab
Methyl Tertiary Butyl Ether (MTBE) (Note 1)	mg/L	0.02		0.02	once/month	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JANUARY 28, 2016. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

<b>OUTFALL #001</b>	<b>TABLE A-2. WHOLE EFFLUENT TOXICITY FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>	
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The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **November 1, 2015**, and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Acute Whole Effluent Toxicity	TU <sub>a</sub>	*			once/year	composite**

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE MAY 28, 2016.

Permitted Features #002-007 & #S1	TABLE A-3. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS				PAGE NUMBER 5 of 9	
					PERMIT NUMBER MO-0132837	
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 <b>November 1, 2015</b> , and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETER(S) Permitted features #002-007	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Depth to Groundwater	Feet	*		*	once/month	measured
Total Petroleum Hydrocarbon(DRO)	mg/L	*		*	once/quarter*****	grab
Total Petroleum Hydrocarbon(GRO)	mg/L	*		*	once/quarter*****	grab
Total Petroleum Hydrocarbon(ORO)	mg/L	*		*	once/quarter*****	grab
Benzene	mg/L	*		*	once/quarter*****	grab
Methyl Tertiary Butyl Ether (MTBE) (Note 1)	mg/L	0.02		0.02	once/quarter*****	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2016</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
EFFLUENT PARAMETER(S) Permitted Feature #S1	UNITS	DAILY MINIMUM	WEEKLY AVERAGE MINIMUM	MONTHLY AVERAGE MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Total Petroleum Hydrocarbon(DRO)	mg/L	*		*	once/month	grab
Total Petroleum Hydrocarbon(GRO)	mg/L	*		*	once/month	grab
Total Petroleum Hydrocarbon(ORO)	mg/L	*		*	once/month	grab
Benzene	mg/L	*		*	once/month	grab
Methyl Tertiary Butyl Ether (MTBE)	mg/L	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2016</u> .						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* A composite sample made up from a minimum of four grab samples collected within a 24 hour period with a minimum of two hours between each grab sample.
- \*\*\* 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**.
- \*\*\*\* 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 <sup>th</sup>
Second	April, May, June	Sample at least once during any month of the quarter	July 28 <sup>th</sup>
Third	July, August, September	Sample at least once during any month of the quarter	October 28 <sup>th</sup>
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 <sup>th</sup>

## B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated November 1, 2013, 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;
    - (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.

C. SPECIAL CONDITIONS (continued)

5. Report as no-discharge when a discharge does not occur during the report period.
6. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).
7. 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.
  - b. The SWPPP must include a schedule for twice per month site inspections and brief written reports. The inspections must include observation and evaluation 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.
8. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
- a. 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.
  - b. Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
  - c. 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.
  - d. Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
  - e. 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.
9. 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.
10. 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.
11. Only soils contaminated with gasoline, diesel fuel, fuel oil, kerosene, or aviation fuel, and having a TPH concentration of 10,000 ppm dry weight or less, may be placed in a treatment cell under this permit. Soils contaminated with used oil, as defined in 10 CSR 25-11.279 incorporating 40 CFR 279.1, shall not be landfarmed under this permit

C. SPECIAL CONDITIONS (continued)

12. Soil will be managed in accordance with the October 2013 version of the Missouri Risk-Based Corrective Action for Underground Storage Tanks Technical Guidance document. Soil must be sampled and may be removed if it complies with the Tier 1 Risk Based Target Levels (RBTLs) for both subsurface and surficial soils for residential use, including the RBTLs pertaining to contaminants leaching from soil to groundwater. The permittee shall submit sample analysis along with the proposed end use to the Southeast Regional Office for approval prior to removal.
13. Remediated soil may not be placed in contact with groundwater or surface water. Permittee must provide sediment and erosion control to the entire facility, including any remediated soils that are placed on site. This could include the use of seeding, mulching, straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits. The entrance to the cell may remain without vegetation or mulch so long as solids are not allowed to erode offsite
14. Soil samples shall be one composite sample per 100 cubic yards of soil and composed of soil from no more than 4 separate locations, and collected from a depth no less than 12 inches
15. Surface Treatment Cell Requirements and Specifications
  - (a) Minimum vertical depth from the bottom of a treatment cell to the seasonal high water table shall be at least five feet.
  - (b) The treatment cell floor shall be surrounded by a two foot berm to contain contaminated soils and exclude water runoff.
  - (c) Contaminated soil shall be spread within the treatment cell to a depth >18 but <24 inches to allow tilling without compromising the integrity of the plastic liner.
  - (d) Treatment cells shall not contain >2500 cubic yards of contaminated soil. Contaminated soil from more than one facility may be placed in the treatment cell if soils are kept separate. The permittee shall submit written notification to the Water Protection Program to document that additional soil is being placed in a treatment cell. This notification shall detail the source, amount, and contamination level of the soil to be added.
  - (e) The treatment cell shall be constructed such that storm water runoff from the cell is collected in a retention basin that has one outfall. The retention basin shall have a liner that meets standard engineering specifications (as per 10 CSR 20-8) and shall be sized to retain the volume of water resulting from a 25-year 24 hour storm event. The basin provides for settling of suspended material, and adequate retention time to allow for testing water and treatment as needed to meet permit effluent limitations before discharging.
16. Stockpiled soils shall be placed on 12 ml or greater plastic unless soil is under roof and not exposed to storm water. The permittee shall enact whatever steps are necessary to prevent the plastic from being blown off by normal weather. In the event of severe weather, permittee shall inspect the cover and correct any damage two days.
17. The 30 ml plastic liner installed below the treatment cell shall be excavated and inspected at least once every 10 years. The inspection shall include removal of a sample specimen of the liner. The liner shall be examined by an independent laboratory and tested to verify its integrity. The current liner shall be installed in October, 2001. The permittee shall notify the department at least 30 days before liner excavation.
18. The facility shall be inspected biweekly by permittee and a brief written report prepared. The inspections must include observation and evaluation of any stockpiled soil to ensure that it remains covered, and observation of the sedimentation basin & landfarm cell to insure that accumulated water does not overflow the berms. A log of these biweekly inspection reports shall be maintained for up to three years and made available to the department upon request.
19. Large volumes of solid waste are not permitted in the landfarm cell. A *de minimis* amount of plastic is permissible, but should be removed when noted during the weekly inspections. When soil is loaded from a stockpile to be brought to the landfarm, the plastic cover on top of the pile must be removed before loading.
20. At least one (1) warning sign shall be placed on each side of the facility enclosure in such positions as to be clearly visible from all directions of approach. A sign shall be placed on each gate. Minimum wording shall be SOIL TREATMENT FACILITY—KEEP OUT. Signs shall be made of durable materials with characters at least two inches (2") high and shall be securely fastened to the fence, equipment or other suitable locations

C. SPECIAL CONDITIONS (continued)

21. 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 <sub>a</sub> )	FREQUENCY	SAMPLE TYPE	MONTH
001	100%	*	once/year	24 hr. composite	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) Monitoring Frequency

The permittee shall conduct annual acute toxicity tests by grab sample. Each calendar year during any month, the permittee shall collect an effluent sample and concurrently conduct two toxicity tests using a fish and an invertebrate species. Acute toxicity test samples shall be collected for each outfall listed in the summary above.

b) 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 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).

c) Reporting of Acute Toxicity Monitoring Results

i. WET test results shall be submitted to Southeast Regional Office with the permittee's Discharge Monitoring Reports, or by eDMR, annually by January 28, 2015. 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<sub>a</sub> = 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.

d) 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  
 SMITH & COMPANY LANDFARM  
 MO-0132837**

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  
 Facility SIC Code(s): 8999

**Facility Description:**

A landfarm is a facility designed to clean up soil contaminated with petroleum products. This facility is limited to receiving soil contaminated with gasoline, diesel fuel, fuel oil, kerosene, or aviation fuel. Soil is cleaned by placing the soil in a shallow layer and allowing soil microbes to break down the petroleum. The soil is occasionally plowed, and nutrients may be added to speed the decomposition process. Before the soil is removed, it is tested to demonstrate that it meets State standards. Soil that does not meet standards can also be removed and taken to a landfill. Stormwater run-off is contained in a basin, tested, and if it meets permitted effluent limitations for Outfall #001 it is released.

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

- No.

Application Date: 02/22/12  
 Expiration Date: 06/28/12  
 Last Inspection: 12/8/11 In Compliance ; Non-Compliance

**OUTFALL(S) TABLE:**

PERMITTED FEATURES	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE
#001	0.186	*BMP	Industrial – Stormwater runoff
#002 - #007	NA	NA	Monitoring Wells
#S1	NA	NA	In-stream monitoring

\*- BMP means Best Management Practices

**Facility Performance History & Comments:**

TSS had effluent violation in December of 2008 (122 mg/L); pH had effluent violation in March of 2008 (4.6). Oil & Grease value was 13 mg/L in May of 2008 exceeding its monthly average. This facility was previously authorized by a statewide general permit (MOR401256), but that general permit has been discontinued due to lack of participation from other facilities. The facility must now obtain a site specific permit.

**Part II – Receiving Stream Information**

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

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

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

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

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	DISTANCE TO CLASSIFIED SEGMENT	12-DIGIT HUC**
Unnamed Tributary to Wolf Creek	U	NA	NA	1.5 miles	08020204-0204
Wolf Creek	C	3077	LWW, AQL & SCR		

\* - 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). \*\* - Hydrologic Unit Code

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

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Unnamed Tributary to Wolf Creek	0.0	0.0	0.0
Wolf Creek	0.0	0.0	0.1

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

**RECEIVING STREAM MONITORING REQUIREMENTS:**

**Outfall S1** – Instream monitoring for Total Petroleum Hydrocarbon (DRO), Total Petroleum Hydrocarbon (GRO) and Total Petroleum Hydrocarbon (ORO). Sample to be taken approximately 5 yards above confluence of effluent with Unnamed Tributary to Wolf Creek.

Legal Description: NW¼, NW¼, Sec. 4, T27N, R10E, Stoddard County.  
UTM Coordinates: 769231/4101911  
Receiving Stream: Unnamed Tributary to Wolf Creek (U)  
First Classified Stream and ID: Wolf Creek (C) (3077)  
USGS Basin &Sub-watershed No: (08020204-0204)

### **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.

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

#### **ANTIDegradation:**

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)], the Department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- Renewal no degradation proposed and no further review necessary.

#### **BIOSOLIDS & SEWAGE SLUDGE:**

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address: <http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

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

#### **COMPLIANCE AND ENFORCEMENT:**

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

Not Applicable; The permittee/facility is not currently under Water Protection Program enforcement action.

#### **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.

#### **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.

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

Where C = downstream concentration  
Cs = upstream concentration  
Qs = upstream flow  
Ce = effluent concentration  
Qe = effluent flow

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

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

Number of Samples “n”:

Additionally, in accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance, which should be, at a minimum, be targeted to comply with the values dictated by the WLA. Therefore, it is recommended that the actual planned frequency of monitoring normally be used to determine the value of “n” for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for “n” must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is “n = 4” at a minimum. For Total Ammonia as Nitrogen, “n = 30” is used.

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(3)(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 (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 NH<sub>3</sub>)
- Facility is a municipality or domestic discharger with a Design Flow ≥ 22,500 gpd.
- Other – please justify.

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

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

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

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

## **Part 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.

#### **EFFLUENT LIMITATIONS TABLE: OUTFALL #001**

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	*		*	NO	SAME
COD	MG/L	*		*	NO	SAME
SETTLABLE SOLIDS	ML/L/HR	1.5		1.0	NO	SAME
TSS	MG/L	50		30	NO	SAME
TOTAL PETROLEUM HYDROCARBON (DRO)	MG/L	10		10	YES	TPH
TOTAL PETROLEUM HYDROCARBON (GRO)	MG/L	10		10	YES	TPH
TOTAL PETROLEUM HYDROCARBON (ORO)	MG/L	10		10	YES	TPH
pH	SU	6.5-9.0		6.5-9.0	YES	6.0-9.0
BENZENE	µg/L	5.0		5.0	NO	SAME
TOLUENE	µg/L	1000		1000	NO	SAME
ETHYLBENZENE	µg/L	320		320	NO	SAME
XYLENE	µg/L	10,000		10,000	NO	SAME
LEAD, TOTAL RECOVERABLE	µg/L	*		*	YES	NA
OIL & GREASE (MG/L)	MG/L	15		10	NO	SAME
Methyl Tertiary Butyl Ether (MTBE)	MG/L	0.02		0.02	NO	SAME
WHOLE EFFLUENT TOXICITY (WET) TEST	TU <sub>a</sub>	*			YES	PASS\FAIL

\* - Monitoring requirement only.

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

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD).** Monitoring only. Effluent limitation for this parameter was retained from the previous permit. The discharge Monitoring Reports for the last five years were ranging from 10 to 72 mg/L.
- **Settleable Solids** Retained from the previous permit. Best Professional Judgment used to set limits. These limits are consistent with other industrial stormwater facilities across the state. The discharge Monitoring Reports for the last five years were ranging from 0.05-0.2 ml/L/hr.
- **Total Suspended Solids (TSS).** These limits are achievable if the facility utilizes better implementation of best Management practices. Discharge Monitoring Reports for the last five years were ranging from 0.3 to 122 mg/L.
- **Total Petroleum Hydrocarbons.** This parameter has been broken down into TPH-ORO, TPH-GRO, and TPH-DRO to better characterize the group of petroleum hydrocarbons discharged in the stormwater. Effluent limitation of 10 mg/L has been established for TPH for the protection of aquatic life.
  - Total Petroleum Hydrocarbons -Oil Range Organics (ORO)
  - Total Petroleum Hydrocarbons -Gasoline Range Organics (GRO)
  - Total Petroleum Hydrocarbons -Diesel Range Organics (DRO)
- **pH.** In accordance with [10 CSR 20-7.031(4)(E)], pH shall be maintained in the range from 6.5-9.0 standard units.

- **Benzene** Protection of drinking water supplies; 0.005 mg/L 10 CSR 20-7.031 Table A. Discharge Monitoring Reports for the last five years were ranging from 0.001-0.005 mg/L.
- **Ethylbenzene** Protection of aquatic life; 0.320 mg/L 10 CSR 20-7.031 Table A. Discharge Monitoring Reports for the last five years were ranging from 0.001-0.005 mg/L.
- **Toulene** Protection of drinking water supplies; 1 mg/L 10 CSR 20-7.031 Table A. Discharge Monitoring Reports for the last five years were ranging from 0.001-0.005 mg/L.
- **Xylene** Protection of drinking water supplies; 10 mg/L 10 CSR 20-7.031 Table A Discharge Monitoring Reports for the last five years were ranging from 0.0025-0.005 mg/L.
- **Lead** was added as monitoring since older contaminated soil may have had leaded petroleum products.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum. The discharge Monitoring Reports for the last five years were ranging from 0.0327-13.0 mg/L.
- **MTBE** Effluent limits for protection of drinking water supplies. The Discharge Monitoring Reports for the last five years were ranging from 0.001-0.002 mg/L. It is a chemical compound that is linked to cancer.
- **Acute** Whole Effluent Toxicity. Monitoring requirement only. Monitoring is required to determine if reasonable potential exists for this facility's discharge to exceed water quality standards.

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

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 BOD<sub>5</sub> whether or not its design flow is being exceeded.
- Facility has Water Quality-based effluent limitations for toxic substances (other than NH<sub>3</sub>).

**EFFLUENT LIMITATIONS TABLE: PERMITTED FEATURES #002- #007**

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
DEPTH TO GROUNDWATER	FEET	*		*	NO	SAME
TOTAL PETROLEUM HYDROCARBON (DRO)	MG/L	*		*	YES	TPH
TOTAL PETROLEUM HYDROCARBON (GRO)	MG/L	*		*	YES	TPH
TOTAL PETROLEUM HYDROCARBON (ORO)	MG/L	*		*	YES	TPH
BENZENE	µg/L	*		*	YES	NA
Methyl Tertiary Butyl Ether (MTBE)	MG/L	0.02		0.02	NO	SAME

\* - Monitoring requirement only.

- **Depth to Groundwater;** Monitoring only to verify that the facility is greater than 5 feet above the seasonal high groundwater table. The depths for the last 5 years were ranging from 29.28- 38.83 feet.
- **Total Petroleum Hydrocarbons.** This parameter has been broken down into TPH-ORO, TPH-GRO, and TPH-DRO to better characterize the group of petroleum hydrocarbons discharged in the stormwater. Effluent limitation of 10 mg/L has been established for TPH for the protection of aquatic life.
  - Total Petroleum Hydrocarbons -Oil Range Organics (ORO)
  - Total Petroleum Hydrocarbons -Gasoline Range Organics (GRO)
  - Total Petroleum Hydrocarbons -Diesel Range Organics (DRO)

- **Benzene** Protection of drinking water supplies; 0.005 mg/L 10 CSR 20-7.031 Table A. Since the facility is already monitoring stormwater discharges from outfall #001 for benzene, it is the permit writer best professional judgment that the facility must also Monitor for Benzene at all Monitoring Wells.
- **MTBE** Effluent limits for protection of drinking water supplies. The discharge Monitoring Reports for the last five years were ranging from 0.001-0.002 mg/L. it is a chemical compound that is linked to cancer.

**EFFLUENT LIMITATIONS TABLE: PERMITTED FEATURE #S1**

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
TOTAL PETROLEUM HYDROCARBON (DRO)	MG/L	*		*	YES	TPH
TOTAL PETROLEUM HYDROCARBON (GRO)	MG/L	*		*	YES	TPH
TOTAL PETROLEUM HYDROCARBON (ORO)	MG/L	*		*	YES	TPH
BENZENE	µg/L	*		*	YES	NA
Methyl Tertiary Butyl Ether (MTBE)	MG/L	*		*	YES	NA

\* - Monitoring requirement only.

- **Total Petroleum Hydrocarbons.** This parameter has been broken down into TPH-ORO, TPH-GRO, and TPH-DRO to better characterize the group of petroleum hydrocarbons discharged in the stormwater. Effluent limitation of 10 mg/L has been established for TPH for the protection of aquatic life.
  - Total Petroleum Hydrocarbons -Oil Range Organics (ORO)
  - Total Petroleum Hydrocarbons -Gasoline Range Organics (GRO)
  - Total Petroleum Hydrocarbons -Diesel Range Organics (DRO)
- **Benzene** Protection of drinking water supplies; 0.005 mg/L 10 CSR 20-7.031 Table A. it is the permit writer best professional judgment that the facility must also monitor the receiving stream for Benzene.
- **MTBE** Effluent limits for protection of drinking water supplies. Was added to check the contamination level at the receiving stream, it is a chemical compound that is linked to cancer.

## **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 was from May 30, 2014 to June 30, 2014. No responses were received.

**DATE OF FACT SHEET:** JANUARY 15, 2014

### **COMPLETED BY:**

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STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION  
REVISED  
NOVEMBER 1, 2013

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. **Twenty-Four Hour 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.



STANDARD CONDITIONS FOR NPDES PERMITS  
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MISSOURI CLEAN WATER COMMISSION  
REVISED  
NOVEMBER 1, 2013

- 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. **Sanitary Sewer Overflow Reporting.** The following requirements solely reflect reporting obligations, and reporting does not necessarily reflect noncompliance, which may depend on the circumstances of the incident reported.
- a. **Twenty-Four Hour (24-Hour) Reporting.** The permittee or owner shall report any incident in which wastewater escapes the collection system such that it reaches waters of the state or it may pose an imminent or substantial endangerment to the health or welfare of persons. 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 incident. A written submission shall also be provided within five (5) business days of the time the permittee or owner becomes aware of the incident. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The five (5) day reports may be provided via the current electronic method approved by the Department.
  - b. **Incidents Reported via Discharge Monitoring Reports (DMRs).** The permittee or owner shall report any event in which wastewater escapes the collection system, which does not enter waters of the state and is not expected to pose an imminent or substantial endangerment to the health or welfare of persons, which occur typically during wet weather events. Relevant information shall be provided with the permittee's or owner's DMRs.
4. **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.
5. **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.
6. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, 4, and 7 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
7. **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.
8. **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 28<sup>th</sup> day of the month following the end of the reporting period.

## Section C – Bypass/Upset Requirements

1. **Definitions.**
  - a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility.
  - 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.
  - 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.



STANDARD CONDITIONS FOR NPDES PERMITS  
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MISSOURI CLEAN WATER COMMISSION  
REVISED  
NOVEMBER 1, 2013

## 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 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 permittees 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.



STANDARD CONDITIONS FOR NPDES PERMITS  
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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.
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.
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.

901 Vine Street  
P.O. Box 72  
Poplar Bluff, MO 63902  
Phone 573.785.9621  
Fax 573.785.2651

# SMITH & CO. ENGINEERS

February 17, 2012

Mr. Curt Gately  
Missouri Department of Natural Resources  
Water Protection Program  
P.O. Box 176  
Jefferson City, Missouri 65102-0176

Re: **Application for Permit Renewal**  
**S.H. Smith&Co. Landfarm**  
**Permit MO-0132837**  
**Advance, Missouri**

Dear Mr. Gately:

Enclosed are Forms A and C for the renewal of the site-specific permit for the above-referenced facility.

Please feel free to contact me at (573) 785-9621 if you have any questions or need any further information.

Sincerely,

**SMITH & CO.**  
ENGINEERS



Mike Walker  
Senior Geologist

Enclosures

CC: Mr. John Chronister – MDNR SEMO Regional Office

AP 10290

FEB 22 2012

NO FEE REQUIRED TO RENEW PERMIT 2/23/12



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

FOR AGENCY USE ONLY CHECK NUMBER NONE SENT DATE RECEIVED 2/23/12 FEE SUBMITTED

Handwritten marks and circled 'P' symbols

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- MO0132837 Expiration Date 6/28/2012 [ ] An operating permit modification: permit # MO- Reason:

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

2. FACILITY

NAME Smith & Company Landfarm TELEPHONE WITH AREA CODE (573) 785-9621 FAX (573) 785-2651 ADDRESS (PHYSICAL) CR 236 CITY ADVANCE STATE MO ZIP CODE 63730

3. OWNER

NAME S.H. Smith & Company, Inc. (Smith & Co.) E-MAIL ADDRESS mikew@shsmithco.c TELEPHONE WITH AREA CODE (573) 785-9621 FAX (573) 785-2651 ADDRESS (MAILING) PO Box 72 CITY Poplar Bluff STATE MO ZIP CODE 63902

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

4. CONTINUING AUTHORITY

NAME S.H. Smith & Company, Inc. (Smith & Co.) TELEPHONE WITH AREA CODE (573) 785-9621 FAX (573) 785-2651 ADDRESS (MAILING) PO Box 72 CITY Poplar Bluff STATE MO ZIP CODE 63902

5. OPERATOR

NAME CERTIFICATE NUMBER TELEPHONE WITH AREA CODE (573) 785-9621 FAX (573) 785-2651 ADDRESS (MAILING) CITY STATE ZIP CODE

6. FACILITY CONTACT

NAME Mike Walker TITLE Senior Geologist TELEPHONE WITH AREA CODE (573) 785-9621 FAX (573) 785-2651

7. ADDITIONAL FACILITY INFORMATION

7.1 Legal Description of Outfalls. (Attach additional sheets if necessary.) 001 NW 1/4 NW 1/4 Sec 4 T 27N R 10E Stodd County UTM Coordinates Easting (X): Northing (Y): For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83) 002 1/4 1/4 Sec T R County UTM Coordinates Easting (X): Northing (Y): 003 1/4 1/4 Sec T R County UTM Coordinates Easting (X): Northing (Y): 004 1/4 1/4 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 1799 and NAICS 23599 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 Edward Robertson Living Trust			
ADDRESS County Road 236	CITY Advance	STATE MO	ZIP CODE 63730

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) Stephen D. Hicks, PE Chief Operating Officer	TELEPHONE WITH AREA CODE (573) 785-9621
SIGNATURE 	DATE SIGNED 2-16-12

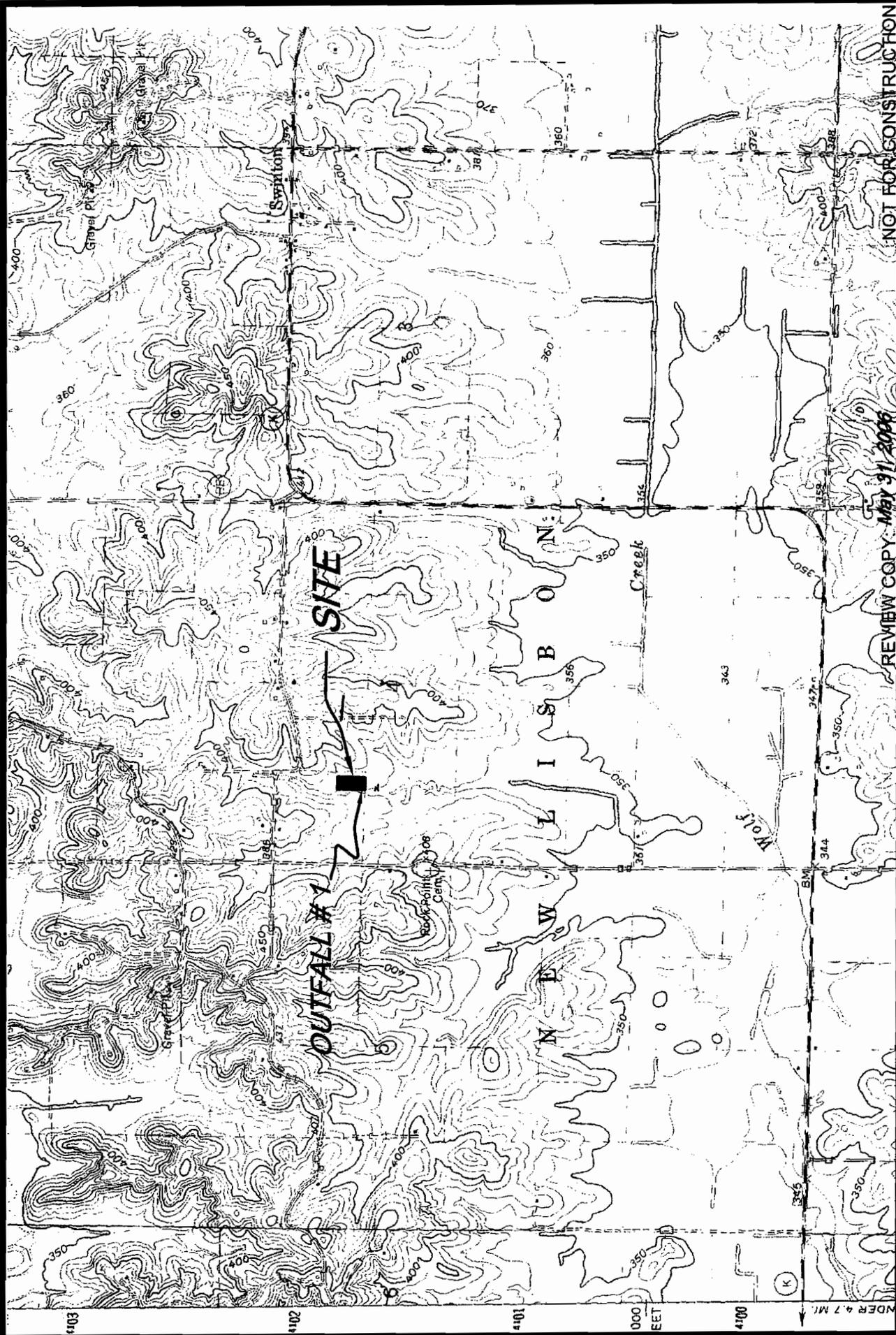
MO 780-1479 (01-09)

**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?



NOT FOR CONSTRUCTION

REVIEW COPY: May 31, 2006

DESIGNED BY: N/A  
 DRAWN BY: N/A  
 CHECKED BY: N/A  
 DRAWING FILE: 6-12501.DWG  
 JOB: N/A

DATE: N/A  
 DATE: N/A  
 DATE: N/A

0" = 1000' 2000'

THIS BAR WILL MEASURE 1"  
 WHEN PRINTED AT FULL SCALE.

SMITH & CO. LANDFARM  
 SWINTON, MISSOURI

SITE LOCATION

SHEET: 1

ENGINEERS

# SMITH & CO.

901 WME STREET, P.O. BOX 72  
 POPULAR BLUFF, MISSOURI 63002  
 (637) 765-8021 FAX: (637) 765-2851 WWW.SMITHCO.COM



FEB 22 2012



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH  
(SEE MAP FOR APPROPRIATE REGIONAL OFFICE)  
**FORM C - APPLICATION FOR DISCHARGE PERMIT - MANUFACTURING,  
COMMERCIAL, MINING AND SILVICULTURE OPERATIONS**

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

**NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS**

1.00 NAME OF FACILITY  
Smith & Company Landfarm

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER  
MO-0132837

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)  
A. FIRST 1799 B. SECOND \_\_\_\_\_  
C. THIRD \_\_\_\_\_ D. FOURTH \_\_\_\_\_

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.  
OUTFALL NUMBER (LIST) NW ¼ NW ¼ SEC 4 T27N R 10E Stoddard County  
\_\_\_\_\_  
\_\_\_\_\_

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER.  
OUTFALL NUMBER (LIST) #1 RECEIVING WATER Tributary of Wolf Creek  
\_\_\_\_\_  
\_\_\_\_\_

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS:  
Petroleum contaminated soil is remediated using surficial landfarming technique.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS, OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE)       NO (GO TO SECTION 2.50)

1. OUTFALL NUMBER <i>(list)</i>	2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i>	3. FREQUENCY		4. FLOW				C. DURATION <i>(in days)</i>
		A. DAYS PER WEEK <i>(specify average)</i>	B. MONTHS PER YEAR <i>(specify average)</i>	A. FLOW RATE <i>(in mgd)</i>		B. TOTAL VOLUME <i>(specify with units)</i>		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	4. LONG TERM DAILY	3. MAXIMUM AVERAGE	
#1	Stormwater Retention		4	.06/day		.12mg/quarter		1.5 day

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

YES (COMPLETE B.)       NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINE EXPRESSED IN TERMS OF PRODUCTION (OR OTHER MEASURE OF OPERATION)?

YES (COMPLETE C.)       NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

1. MAXIMUM QUANTITY			2. AFFECTED OUTFALLS <i>(list outfall numbers)</i>
A. QUANTITY PER DAY	B. UNITS OF MEASURE	C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i>	
N/A			

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.

YES (COMPLETE THE FOLLOWING TABLE)       NO (GO TO 3.00)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS	3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
			A. REQUIRED	B. PROJECTED
Weekly site visits	#2,3,4,5,6,7	-Visual inspection of facility	X	
Qtr. GW Sampling		-Guage wells monthly, sample quarterly	X	
Effluent Sampling	#1	-Collect effluent sample for discharge	X	
Ditch Sampling	S-1	-Collect receiving stream sample	X	

B. OPTIONAL: YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS WHICH MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR WHICH YOU PLAN. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.



3.10 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 THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.)  NO (GO TO 3.20)

Annual Wet Test- As required by permit.

3.20 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED 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 3.30)

A. NAME	B. ADDRESS	C. TELEPHONE (area code and number)	D. POLLUTANTS ANALYZED (list)
Teklab, Inc.	5445 Horseshoe Lake Rd Collinsville, IL 62234	(618) 344-1004	-Hexane Extractable Material -Lead -COD -Ph -TSS -Settleable Solids -TPH-DRO -TPH-ORO -EDB -EDC -Benzene -DIPE -Ethylbenzen -ETBE -MTBE -Naphthalene -TAME -TBA -Toluene -Xylenes

3.30 CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS APPLICATION AND ALL ATTACHMENTS AND THAT, BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) <b>Stephen D. Hicks, Chief Operating Officer</b>	TELEPHONE NUMBER (AREA CODE AND NUMBER) <b>(573) 785-9621</b>
SIGNATURE (SEE INSTRUCTIONS) 	DATE SIGNED <b>2-17-12</b>

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheets  
(use the same format) instead of completing these pages.  
SEE INSTRUCTIONS.

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)			
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVRG. VALUE		D. NO. OF ANAL-YSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANAL-YSES
	CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)					8.27	10/28/09		mg/L				
B. Chemical Oxygen Demand (COD)					8.83	10/28/09		mg/L				
C. Total Organic Carbon (TOC)					6.12mg	10/28/09	2.22 Kg	mg/L				2
D. Total Suspended Solids (TSS)					N/A	2/10/09		mg/L				
E. Ammonia (as N)								mg/L				
F. Flow								gallons/day				
G. Temperature (winter)	VALUE		VALUE		60			°C				
H. Temperature (summer)	VALUE		VALUE		310			°C				
I. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM				STANDARD UNITS				
	7.77:09	8.02:09										

PART B - Mark "X" in column 2-a for each pollutant you believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS				5. INTAKE (optional)			
	A. BE-LEVED PRE-SENT	B. BE-LEVED PRE-SENT	A. MAXIMUM DAILY VALUE	B. MAXIMUM 30 DAY VALUE	C. LONG TERM AVRG. VALUE	D. NO. OF ANAL-YSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE	B. NO. OF ANAL-YSES				
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate-Nitrite (as N)		X												

CONTINUED FROM FRONT

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE <i>(optional)</i>		B. NO. OF ANALYSES
	A. RECEIVED PRE-SENT	B. RECEIVED AB-SENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE <i>(if available)</i>		A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	(2) MASS	
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					
G. Nitrogen Total Organic (as N)		X									
H. Oil and Grease	X							5.00			2
I. Phosphorus (as P) Total (7723-14-0)											
<b>J. RADIOACTIVITY</b>											
(1) Alpha Total		Absent									
(2) Beta Total		"									
(3) Radium Total		"									
(4) Radium 226 Total		"									
K. Sulfate (as SO <sub>4</sub> ) (14808-79-8)		"									
L. Sulfide (as S)		"									
M. Sulfite (as SO <sub>3</sub> ) (14265-45-3)		"									
N. Surfactants		"									
O. Aluminum Total (7429-90-5)		"									
P. Barium Total (7440-39-3)		"									
Q. Boron Total (7440-42-8)		"									
R. Cobalt Total (7440-48-4)		"									
S. Iron total (7439-89-6)		"									
T. Magnesium Total (7439-95-4)		"									
U. Molybdenum Total (7439-98-7)		"									
V. Manganese Total (7439-96-5)		"									
W. Tin Total (7440-31-5)		"									
X. Titanium Total (7440-32-6)		"									

# SMITH & CO. LANDFARM WATER FLOW DIAGRAM

