

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),

Permit No. MO-0108766

Owner: Southern Star Central Gas Pipeline, Inc.
Address: 4700 Highway 56, Owensboro, KY 42301

Continuing Authority: Same as above
Address: Same as above

Facility Name: Southern Star Central Gas Pipeline, Inc. – Joplin/Saginaw Compressor Station
Facility Address: 6300 South Rangeline, Joplin, MO 64804

Legal Description: NE ¼, SE ¼, Sec. 36, T27N, R33W, Newton County
UTM Coordinates: X= 368230, Y= 4097685

Receiving Stream: No discharge to Waters of the State
First Classified Stream and ID: No discharge to Waters of the State
USGS Basin & Sub-watershed No.: 11070207-0805

is authorized to conduct irrigation of wastewater (groundwater/stormwater) at the facility described herein, in accordance with the irrigation limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Industrial Facility – Natural Gas Transmission, SIC #4922

Stormwater and groundwater infiltration is pumped from the compressor building and temporarily stored in a steel storage tank prior to irrigation on site. There is no process wastewater discharged from the site and no regulated stormwater discharged from the site.

This permit covers a non-discharging irrigation system. Should a discharge ever occur, it would likely discharge to a tributary to Thurman Creek, which flows into Thurman Creek (P) (3243) (303(d) List).

See page two for permitted feature specific descriptions.

This permit authorizes only wastewater (groundwater/stormwater) irrigation under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Sections 640.013, 621.250, and 644.051.6 of the Law.

January 1, 2018

Effective Date

December 31, 2022

Expiration Date

Handwritten signature of Edward B. Galbraith in blue ink.

Edward B. Galbraith, Director, Division of Environmental Quality

Handwritten signature of Chris Wieberg in blue ink.

Chris Wieberg, Director, Water Protection Program

Legal Description:	NE ¼, SE ¼, Sec. 36, T27N, R33W, Newton County
UTM Coordinates:	X = 368215, Y = 4097685
USGS Basin & Sub-watershed No.:	11070207-0805
Total Volume:	12,690 gallons
Estimated Average Rate Pumped from Building:	75 gallons per day

Legal Description:	NE ¼, SE ¼, Sec. 36, T27N, R33W, Newton County
UTM Coordinates:	X= 368235, Y= 4097676
USGS Basin & Sub-watershed No.:	11070207-0805
Application Rate Basis:	Hydraulic Loading
Crops and Vegetation:	Grass
Equipment Type:	Pressurized system pumping from a garden hose to a sprinkler.
Application Rates (rate per acre):	< 1 inch/hour; < 1 inch/day; < 1 inch/week; < 1 inch/year
Irrigation Volume (gallons per year):	48,000 at design loading (including 1-in-10 year flows)
Irrigation Areas (acres):	11.67 acres at design loading
Application Period (days per year):	300 (irrigation can occur 10 months of the year, if feasible)

PERMITTED FEATURE #001	TABLE A-1 MONITORING REQUIREMENTS					
The permittee is authorized to irrigate from permitted feature(s) with serial number(s) as specified in the application for this permit. The irrigation monitoring requirements shall become effective on January 1, 2018 and remain in effect until expiration of the permit. Irrigation rates and volumes shall be controlled, limited and monitored by the permittee as specified below:						
STORAGE TANK WASTEWATER PARAMETERS	UNITS	MONITORING REQUIREMENTS				
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Iron, Total Recoverable	µg/L	*			once/quarter ∞	grab
Oil & Grease	mg/L	*			once/quarter ∞	grab
pH ◇	SU	*			once/quarter ∞	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>APRIL 28, 2018</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

PERMITTED FEATURE #002	TABLE A-2 MONITORING REQUIREMENTS					
The permittee is authorized to irrigate from permitted feature(s) with serial number(s) as specified in the application for this permit. The irrigation monitoring requirements shall become effective on January 1, 2018 and remain in effect until expiration of the permit. Irrigation rates and volumes shall be controlled, limited and monitored by the permittee as specified below:						
IRRIGATION MONITORING PARAMETERS	UNITS	MONITORING REQUIREMENTS				
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Application Area	Acres	*			once/day §	measured
Application Rate	Inches/Acre	*			once/day §	measured
Irrigation Period	Hours	*			once/day §	measured
Volume Irrigated	Gallons	*			once/day §	measured
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE FEBRUARY 28, 2018. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

* Monitoring requirement only.

∞ Sample once per quarter during those quarters when irrigation will occur. If no irrigation occurs within a reporting period, report “no discharge”. See the table below for the quarterly sampling and reporting schedule.

MINIMUM QUARTERLY SAMPLING REQUIREMENTS			
QUARTER	MONTHS	QUARTERLY EFFLUENT PARAMETERS	REPORT IS DUE
First	January, February, March	Sample at least once during any month of the quarter	April 28 th
Second	April, May, June	Sample at least once during any month of the quarter	July 28 th
Third	July, August, September	Sample at least once during any month of the quarter	October 28 th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 th

§ Sample once per day during irrigation events. If no irrigation occurs within a monthly reporting period, report “no discharge”.

◇ The facility will report the minimum and maximum values. pH is not to be averaged.

B. STANDARD CONDITIONS

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

C. SPECIAL CONDITIONS

- This permit does not authorize the discharge of wastewater, except during emergency discharge conditions. Emergency discharges from either the storage tank or the pump from the compressor building are authorized under the Emergency Discharges condition below. Other materials, chemicals and substances not considered wastewater being treated and disposed of by the irrigation system are not authorized to be discharged regardless of weather conditions.
- Emergency Discharges
 - Monitoring. Any emergency discharge shall be monitored as required in 1(b) and 1(c). The facility shall submit test results, along with the number of days the storage tank or the pump from the compressor building has discharged during the month via the Electronic Discharge Monitoring Report (eDMR) Submission System by the 28th day of the month after the discharge ceases. Permittee shall monitor for the following constituents:

Constituent	Units
Effluent Flow	MGD
Iron, Total Recoverable	µg/L
pH – Units	SU
Oil & Grease	mg/L

Any authorized discharge shall be monitored and reported as required in 1(a) at least once during the discharge event.

- Authorized Discharges. An emergency discharge from wastewater storage structures may only occur if rainfall exceeds the 10-year 365-day rainfall event (chronic) or the 25-year 24-hour rainfall event (catastrophic). The facility shall make all reasonable attempts to prevent emergency discharges from occurring and shall cease the discharges as soon as possible. Design Storm Maps and Tables can be found at http://ag3.agebb.missouri.edu/design_storm/. For this facility:

Newton County	Data Collected: 07/06/2017
10-year 365-day rainfall event	54.6 inches
25-year 24-hour rainfall event	6.6 inches

C. SPECIAL CONDITIONS (CONTINUED)

- (c) Unauthorized Discharges. **Discharge for any other reason than what is stated in 1(b) of this Special Condition shall constitute a permit violation and shall be reported in accordance with Standard Conditions Part 1 Section B.2.b.** Unauthorized discharges are to be reported to the Southwest Regional Office during normal business hours or by using the online Sanitary Sewer Overflow/Facility Bypass Application located at: <http://dnr.mo.gov/modnrcag/> or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. Any unauthorized discharge shall be monitored and reported as required in 1(a) daily for five consecutive days beginning within six (6) hours of discovery. Sampling shall then occur once per week until the discharge ceases.
3. **Electronic Discharge Monitoring Report (eDMR) Submission System**
- (a) **Discharge Monitoring Reporting Requirements.** The permittee must electronically submit compliance monitoring data via the eDMR system. In regards to Standard Conditions Part I, Section B, #7, the eDMR system is currently the only Department approved reporting method for this permit.
- (b) **Programmatic Reporting Requirements.** The following reports (if required by this permit) must be electronically submitted as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data:
- (1) Wastewater Irrigation Annual Reports; and
 - (2) Any additional report required by the permit excluding bypass reporting.
- After such a system has been made available by the department, required data shall be directly input into the system by the next report due date.
- (c) **Other actions.** The following shall be submitted electronically after such a system has been made available by the department:
- (1) General Permit Applications/Notices of Intent to discharge (NOIs);
 - (2) Notices of Termination (NOTs);
 - (3) No Exposure Certifications (NOEs);
 - (4) Low Erosivity Waivers and Other Waivers from Stormwater Controls (LEWs); and
 - (5) Bypass reporting.
- (d) **Electronic Submissions.** To access the eDMR system, use the following link in your web browser: <https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx>.
- (e) **Waivers from Electronic Reporting.** The permittee must electronically submit compliance monitoring data and reports unless a waiver is granted by the department in compliance with 40 CFR Part 127. The permittee may obtain an electronic reporting waiver by first submitting an eDMR Waiver Request Form: <http://dnr.mo.gov/forms/780-2692-f.pdf>. The department will either approve or deny this electronic reporting waiver request within 120 calendar days. Only permittees with an approved waiver request may submit monitoring data and reports on paper to the Department for the period that the approved electronic reporting waiver is effective.
4. The permittee shall develop, maintain and implement an Operation and Maintenance (O&M) Manual that includes all necessary items to ensure the operation and integrity of the waste handling and land application systems, including key operating procedures, an aerial or topographic site map with the permitted features, land application fields, and irrigation buffer zones marked, and a brief summary of the operation of the facility. The O & M manual shall be made available to the operator and available to the department upon request. The O&M Manual shall be reviewed and updated at least every five years.
5. **Irrigation System**
- (a) This special condition does not apply to fertilizer products that are exempted under the Missouri Clean Water Law and regulations, 10 CSR 20-6.015(3)(B)8.
 - (b) If irrigation sites listed in this permit are also included as irrigation sites in another permit, the wastewater irrigation from other sources shall be included in the application rates in the facility description. Records of the amount and application rate of wastewater from other sources must be kept.
 - (c) **Public Access Restrictions.** This permit does not authorize application of wastewater to public use areas. The land application area must be clearly marked.
 - (d) No irrigation shall occur when the soil is frozen, snow covered, or saturated. There shall be no irrigation during a precipitation event or if a precipitation event that is likely to create runoff is forecasted to occur within 24 hours of a planned irrigation.
 - (e) Provisions shall be made for draining pipes, hoses and other equipment to prevent freezing.
 - (f) Irrigation shall occur only during daylight hours.
 - (g) Spray application equipment shall minimize the formation of aerosols.
 - (h) Irrigation equipment shall be visually inspected daily during irrigation to check for equipment malfunctions and leaks. The irrigation system shall be operated so as to provide uniform distribution of wastes over the entire irrigation area.

C. SPECIAL CONDITIONS (CONTINUED)

- (i) Irrigation fields shall be checked daily during irrigation for runoff. Sites that utilize spray irrigation shall monitor for the drifting of spray across property lines.
 - (j) Setback distances from sensitive features. There shall be no irrigation within:
 - (1) 300 feet of any well, sinkhole, losing stream, wetland, or cave entrance, water supply impoundment or stream intake;
 - (2) 150 feet of an occupied residence, public building, or public use area;
 - (3) 50 feet of gaining perennial or intermittent stream, public or privately owned pond or lake;
 - (4) 50 feet of property line or public road.
 - (k) Wastewater irrigation on slopes exceeding 10%, the hourly application rate shall not exceed one-half (1/2) the design sustained permeability and in no case shall exceed one-half (1/2) inch per hour.
 - (l) The application rate shall not exceed the design hydraulic loading rate listed in the facility description.
 - (m) Wastewater irrigation shall not exceed agronomic rates to ensure agricultural use of nutrients and prevent contamination of surface and groundwater. The agronomic rate is the amount of wastewater applied to a field to meet the fertilizer recommendation.
6. Record Keeping
- (a) A daily land application log shall be prepared and kept on file at the permittee office location for each irrigation site showing dates of application, weather condition (sunny, overcast, raining, below freezing etc...), soil moisture condition, application method.
 - (b) A record of monthly visual storage structure inspections shall be maintained.
 - (c) A record of irrigation equipment inspections as well as field perimeter inspections shall be maintained.
 - (d) All records and monitoring results shall be maintained for at least five years and shall be made available to the department upon request.
7. Annual Report on Irrigation Activity
- An annual report is required in addition to other reporting requirements under Section A of this permit. The annual report shall be submitted by January 28 of each year. The report shall include, but is not limited to, a summary of the following:
- (a) Record of maintenance and repairs during the year, average number of times per month the facility is checked to see if it is operating properly, and description of any unusual operating conditions encountered during the year.
 - (b) The number of days the storage structure discharged during the year, the discharge flow, reason the discharge occurred and effluent analysis performed.
 - (c) A summary for each field used for irrigation showing number of acres used, number of days application occurred and total amount of wastewater applied (gal. or tons/acre).
 - (d) Narrative summary of any problems or deficiencies identified, corrective action taken and improvements planned.
8. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to 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 contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit.
9. All permitted features must be clearly marked in the field.
10. Reporting of Non-Detects
- (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
 - (b) The permittee shall not report a sample result as “non-detect” without also reporting the detection limit of the test. Reporting as “non-detect” without also including the detection limit will be considered failure to report, which is a violation of this permit.
 - (c) The permittee shall report the “non-detect” result using the less than sign and the minimum detection limit (e.g. <10).
 - (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for that parameter.
 - (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
 - (f) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the “<MDL” shall be reported as indicated in item (C).
11. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0108766
SOUTHERN STAR CENTRAL GAS PIPELINE, INC. – JOPLIN/SAGINAW STATION

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. After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful.

As per [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.

Part I. FACILITY INFORMATION

Facility Type: Industrial
Facility SIC Code(s): 4922
Application Date: 06/27/2017
Expiration Date: 12/31/2017
Last Inspection: 06/11/2013 - in compliance

FACILITY DESCRIPTION:

Stormwater and groundwater infiltration is pumped from the compressor building and temporarily stored in a steel storage tank prior to irrigation on site.

PERMITTED FEATURES TABLE:

PERMITTED FEATURE	AVERAGE FLOW	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#001	75 gallons pumped from building per day	12,690 gallons storage capacity	Irrigation	Industrially exposed Groundwater and Stormwater
#002	48,000 gallons per year irrigated			

FACILITY PERFORMANCE HISTORY & COMMENTS:

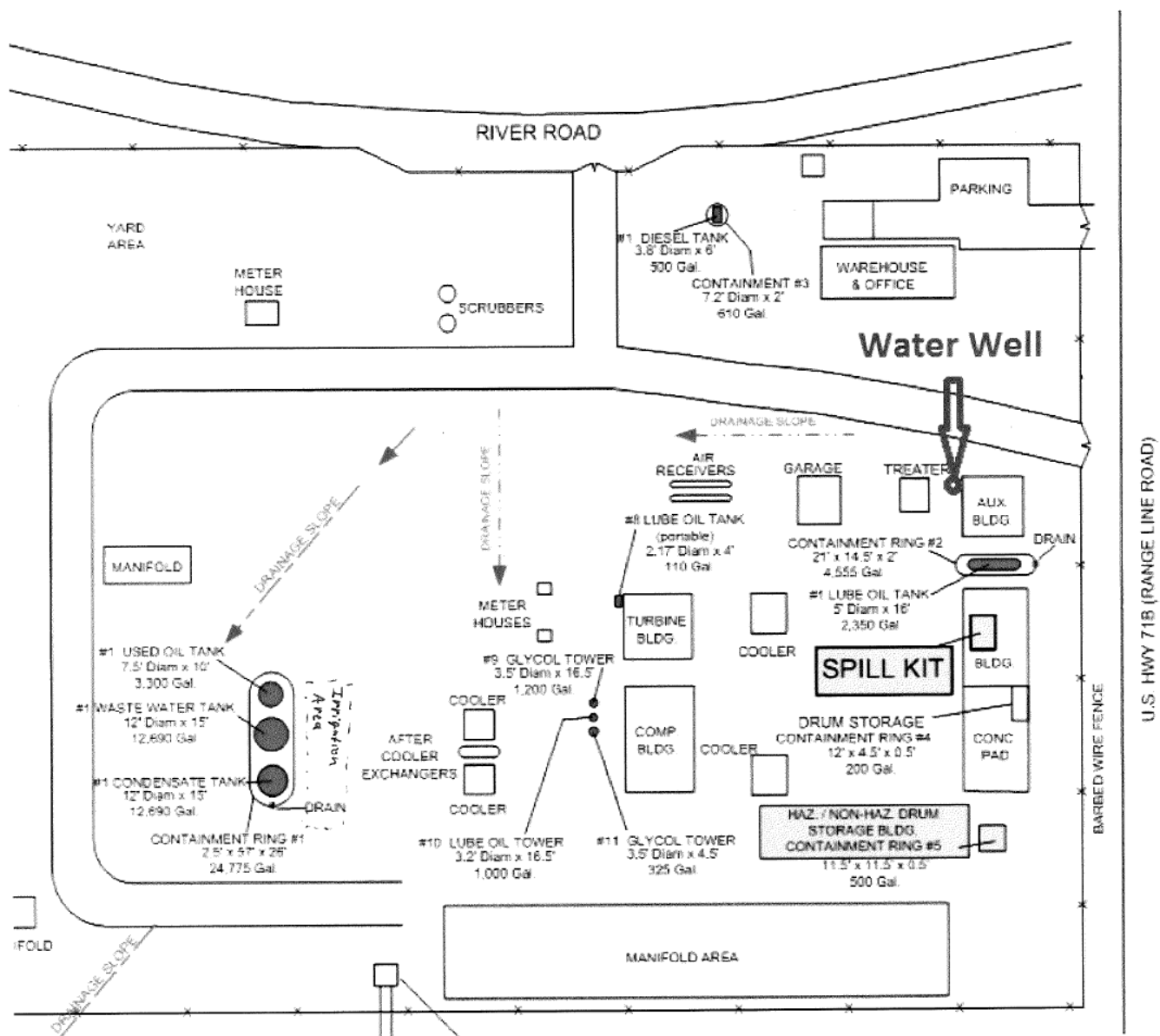
The most recent site inspection to determine compliance with MSOP MO-0108766 was conducted on June 11, 2013. The facility was found to be in compliance during the time of the inspection.

The most recent records review to determine compliance with MSOP MO-0108766 was conducted on June 21, 2016. The facility was found to be in non-compliance during the time of the records review. The database notes that the reason for the non-compliance determination was missing discharge monitoring reports. A Notice of Violation was issued for this non-compliance. The permittee appears to have taken the necessary corrective action to resolve the violation and was returned to compliance that same date.

FACILITY MAP:



WATER BALANCE DIAGRAM:



Part II. RECEIVING STREAM INFORMATION

RECEIVING WATER BODY'S WATER QUALITY:

The facility does not discharge to Waters of the State.

303(d) LIST:

Section 303(d) of the federal Clean Water Act requires each state identify waters 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 impaired waters not addressed by normal water pollution control programs. <http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm>

- ✓ Not applicable; this facility does not discharge to an impaired segment of a 303(d) listed stream. This facility does not discharge, and thus is not subject to any water quality limitations. For informational purposes, Thurman Creek, which is near the southern border of the property is on the 2016 303(d) List for *E. coli* from rural non-point sources. Additionally, Shoal Creek is on the 2016 303(d) List for zinc from mill tailings. These impairments do not impact permit conditions since the permittee operates a non-discharging system.

TOTAL MAXIMUM DAILY LOAD (TMDL):

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; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan or TMDL may be developed. The TMDL shall include the WLA calculation. <http://dnr.mo.gov/env/wpp/tmdl/>

✓ Not applicable; this facility is not associated with a TMDL.

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

✓ As per Missouri's Effluent Regulations [10 CSR 20-7.015(1)(B)], the waters of the state are divided into the following seven 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: ☐
Lake or Reservoir: ☐
Losing: ☐
Metropolitan No-Discharge: ☐
Special Stream: ☐
Subsurface Water: ☐
All Other Waters: ☒

RECEIVING STREAMS TABLE:

PERMITTED FEATURES	WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	DISTANCE TO SEGMENT (MILES)	12-DIGIT HUC
#001	Tributary to Thurman Creek	n/a	n/a	GEN	0.0	11070207-0805
#001	Thurman Creek	C	3960	HHP, IRR, LWW, SCR, WBC-B, WWH (AQL)	0.1	

n/a not applicable

WBID = Waterbody Identification: Missouri Use Designation Dataset 8-20-13 MUDD V1.0 data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip

* As per 10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1st classified receiving stream's beneficial water uses to be maintained are in the receiving stream table in accordance with [10 CSR 20-7.031(1)(C)].

Uses which may be found in the receiving streams table, above:

10 CSR 20-7.031(1)(C)1.:

AQL = Protection of aquatic life (Current narrative use(s) are defined to ensure the protection and propagation of fish shellfish and wildlife, which is further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses AQL effluent limitations in 10 CSR 20-7.031 Table A for all habitat designations unless otherwise specified.)

10 CSR 20-7.031(1)(C)2.: Recreation in and on the water

WBC = Whole Body Contact recreation where the entire body is capable of being submerged;

WBC-A = Whole body contact recreation supporting swimming uses and has public access;

WBC-B = Whole body contact recreation supporting swimming;

SCR = Secondary Contact Recreation (like fishing, wading, and boating).

10 CSR 20-7.031(1)(C)3. to 7.:

HHP (formerly HHF) = Human Health Protection as it relates to the consumption of fish;

IRR = Irrigation for use on crops utilized for human or livestock consumption;

LWW = Livestock and wildlife watering (Current narrative use is defined as LWP = Livestock and Wildlife Protection);

DWS = Drinking Water Supply;

IND = Industrial water supply

10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Table A currently does not have corresponding habitat use criteria for these defined uses)

WSA = Storm- and flood-water storage and attenuation; **WHP** = Habitat for resident and migratory wildlife species;

WRC = Recreational, cultural, educational, scientific, and natural aesthetic values and uses; **WHC** = Hydrologic cycle maintenance.

10 CSR 20-7.031(6): GRW = Groundwater

RECEIVING STREAM LOW-FLOW VALUES:

PERMITTED FEATURES	RECEIVING STREAM (C, P)	LOW-FLOW VALUES (CFS)		
		1Q10	7Q10	30Q10
All	Tributary to Thurman Creek	0.0	0.0	0.1

MIXING CONSIDERATIONS:

Mixing zone: not allowed [10 CSR 20-7.031(5)(A)4.B.(I)(a)].

Zone of initial dilution: not allowed [10 CSR 20-7.031(5)(A)4.B.(I)(b)].

RECEIVING STREAM MONITORING REQUIREMENTS:

No receiving water monitoring requirements are recommended at this time.

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:

Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] require a reissued permit to be as stringent as the previous permit with some exceptions. Backsliding (a less stringent permit limitation) is only allowed under certain conditions.

- ✓ Limitations in this operating permit for the reissuance conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
 - The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
 - The previous permit contained water quality-based effluent limitations for the protection of aquatic life for the following parameters: total recoverable iron, oil and grease, and pH. The permittee operates a non-discharging irrigation system. The wastewater is not discharged to waters of the state. Implementation of the water quality-based effluent limitations was unwarranted. These limits have been removed per the permit writer's best professional judgment.
 - The previous permit contained flow monitoring. The permittee operates a non-discharging irrigation system. The wastewater is not discharged to waters of the state. Flow is not an appropriate parameter to monitor for at this site. The irrigation activity will be monitored with appropriate parameters like rate and volume. This will sufficiently control the irrigation activity and prevent runoff from the site. Flow has been removed using permit writer's best professional judgment.
 - The previous permit contained several special conditions (narrative provisions) related to stormwater management. According to the Standard Industrial Classification (SIC) code provided by the permittee, the activity is not regulated under the state's stormwater regulations. For this reason, those conditions related to stormwater management and prevention of stormwater contamination have been removed from the permit. The following are those specific conditions removed.
 - All paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) shall be stored so that these materials are not exposed to stormwater. Spill prevention, control, and/or management shall be provided sufficient to prevent any spills of these pollutants from entering a water 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.
 - Good housekeeping practices shall be maintained on the site to keep solid waste from entry into waters of the state.
 - Permittee shall adhere to the following minimum Best Management Practices (BMPs):
 - Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water from these substances.
 - Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
 - Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
 - 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.
 - Before releasing water that has accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of a sheen. If the presence of hydrocarbons is indicated, this water must be tested for Total Petroleum Hydrocarbons (TPH). The suggested analytical method for testing TPH is non-Halogenated Organic by Gas

Chromatography method 8015 (also known as OA1 and OA2). However, if the permittee so desires to use other approved testing methods (i.e. EPA 1664), they may do so. If the concentration for TPH exceeds 10mg/L, the water shall be taken to a WWTP for treatment.

- The previous permit contained a specific set of prohibitions related to general criteria found in 10 CSR 20-7.031(4); however, there was no determination as to whether the discharges have reasonable potential to cause or contribute to excursion of those general water quality standards in the previous permit. Federal regulations 40 CFR 122.44(d)(1)(iii) requires that in instances where reasonable potential (RP) to cause or contribute to an exceedance of a water quality standard exists, a numeric limitation must be included in the permit. Rather than conducting the appropriate RP determination and establishing numeric effluent limitations for specific pollutant parameters, the previous permit simply placed the prohibitions in the permit. These conditions were removed from the permit. Appropriate reasonable potential determinations were conducted for each general criterion listed in 10 CSR 20-7.031(4) and effluent limitations were placed in the permit for those general criteria where it was determined the discharge had reasonable potential to cause or contribute to excursions of the general criteria. Specific effluent limitations were not included for those general criteria where it was determined that the discharges will not cause or contribute to excursions of general criteria. Removal of the prohibitions does not reduce the protections of the permit or allow for impairment of the receiving stream. The permit maintains sufficient effluent limitations, monitoring requirements and best management practices to protect water quality.
- The previous permit contained several special conditions (narrative provisions) that implemented other federal or state laws and regulations beyond the authority of the Clean Water Act and Missouri Clean Water Law. Since these conditions addressed issues already regulated by other entities, the conditions were removed. The following list shows those conditions.
- Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 et. seq.) and the use of such pesticides shall be in a manner consistent with its label.
- 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 and made available to the department upon request.

ANTIDegradation REVIEW:

For process water discharge with new, altered, or expanding discharges, the department is to document, by means of antidegradation review, if the use of a water body's available assimilative capacity is justified. In accordance with Missouri's water quality regulations for antidegradation [10 CSR 20-7.031(3)], degradation may be justified by documenting the socio-economic importance of a discharge after determining the necessity of the discharge. Facilities must submit the antidegradation review request to the department prior to establishing, altering, or expanding discharges. See <http://dnr.mo.gov/env/wpp/permits/antideg-implementation.htm>

- ✓ Not applicable; the facility has not submitted information proposing expanded or altered process water discharge; no further degradation proposed therefore no further review necessary.

For stormwater discharges with new, altered, or expanding discharges, the stormwater BMP chosen for the facility, through the antidegradation analysis performed by the facility, must be implemented and maintained at the facility. Failure to implement and maintain the chosen BMP alternative is a permit violation; see SWPPP.

- ✓ Not applicable; the facility does not have stormwater discharges or the stormwater outfalls onsite have no industrial exposure.

BENCHMARKS:

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer. Benchmarks require the facility to monitor, and if necessary, replace and update stormwater control measures. Benchmark concentrations are not effluent limitations. A benchmark exceedance, therefore, is not a permit violation; however, failure to take corrective action is a violation of the permit. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective actions may be necessary to comply with the limitations of the permit.

Because of the fleeting nature of stormwater discharges, the department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater discharges. The *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater only outfalls will generally only contain a maximum daily limit (MDL), benchmark, or monitoring requirement determined by the site specific conditions including the receiving water's current quality. While inspections of the stormwater BMPs occur monthly, facilities with no compliance issues are usually expected to sample stormwater quarterly.

Numeric benchmark values are based on water quality standards or other stormwater permits including guidance forming the basis of Environmental Protection Agency's (EPA's) *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* (MSGP). Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an

unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States.

✓ Not applicable; this facility does not have any stormwater outfalls.

BIOSOLIDS & SEWAGE SLUDGE:

Biosolids are solid materials resulting from domestic wastewater treatment meeting federal and state criteria for beneficial use (i.e. fertilizer). Sewage sludge is solid, semi-solid, 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 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: <http://extension.missouri.edu/main/DisplayCategory.aspx?C=74> (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.

EFFLUENT LIMITATION GUIDELINE:

Effluent Limitation Guidelines, or ELGs, are found at 40 CFR 400-499. These are limitations established by the EPA based on the SIC code and the type of work a facility is conducting. Most ELGs are for process wastewater and some address stormwater. All are technology based limitations which must be met by the applicable facility at all times.

✓ The facility does not have an associated ELG.

GROUNDWATER MONITORING:

Groundwater is a water of the state according to 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

✓ This facility is not required to monitor groundwater for the water protection program.

INDUSTRIAL SLUDGE:

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

✓ Not applicable; sludge is not generated at this facility.

LAND APPLICATION RATES:

In accordance with 10 CSR 20-8.020(15), wastewater and sludge must be land applied at either hydraulic loading rates, nitrogen loading rates, or trace elements loading rates.

Conversion Factors for laboratory testing results: [mg/L or mg/kg or ppm] x [conversion factor] = [pounds per Unit Volume]

Unit Volume	Conversion Factors
lbs./acre inch	0.226
lbs./1,000 gallons	0.0083
lbs./100 cubic feet	0.0062
lbs/ton (wet weight)	0.002

✓ Applicable; **Hydraulic Loading Rates** – wastewater shall be land applied at rates to allow for proper soil absorption and plant uptake. In no case, shall the hydraulic loading rate exceed the soil permeability rate, resulting in a discharge. Hydraulic loading rates must also consider nitrogen loading to the soils and crop. In accordance with 10 CSR 20-8.020(15)(F)7., wastewater application rates should not exceed a nitrogen application rate of 150 pounds total nitrogen per acre per year, and the applied wastewater should not exceed ten (10) mg/l of nitrate nitrogen as N.

NO-DISCHARGE LAND APPLICATION:

Land application of wastewater or sludge shall comply with the all applicable no-discharge requirements listed in 10 CSR 20-6.015 and all facility operations and maintenance requirements listed in 10 CSR 20-8.020(15). These requirements ensure appropriate operation of the no-discharge land application systems and prevent unauthorized and illicit discharges to waters of the state. Land applications by a contract hauler on fields that the permittee has a spreading agreement on are not required to be in this permit. A spreading agreement does not constitute the field being rented or leased by the permittee as they do not have any control over management of the field.

✓ Applicable; This permit authorizes operation of a no-discharge land application system to treat wastewater.

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 causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. If the permit writer determines 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 [40 CFR Part 122.44(d)(1)(iii)].

✓ Not applicable; an RPA was not conducted for this facility. This permit establishes permit limits and benchmarks for irrigation.

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, effluent limits, 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. SOC's are allowed under 40 CFR 122.47 providing certain conditions are met.

✓ Not applicable; this permit does not contain a SOC.

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. <http://dnr.mo.gov/env/esp/spillbill.htm>

STORMWATER PERMITTING:

A standard mass-balance equation cannot be calculated for stormwater from this facility because the stormwater flow and flow in the receiving stream cannot be determined for conditions on any given day. The amount of stormwater discharged from the facility will vary based on previous rainfall, soil saturation, humidity, detention time, BMPs, surface permeability, etc. Flow in the receiving stream will vary based on climatic conditions, size of watershed, amount of surfaces with reduced permeability (houses, parking lots, and the like) in the watershed, hydrogeology, topography, etc. Decreased permeability increases the flash of the stream.

It is likely sufficient rainfall to cause a discharge for four continuous days from a facility will also cause some significant amount of flow in the receiving stream. Chronic WQSs are based on a four-day exposure (except ammonia, which is based on a thirty day exposure). In the event a discharge does occur from this facility for four continuous days, some amount of flow will occur in the receiving stream. This flow will dilute stormwater discharges from a facility. For these reasons, most industrial stormwater facilities have limited potential to cause a violation of chronic water quality standards in the receiving stream.

Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute WQSs are based on a one hour of exposure, and must be protected at all times in unclassified streams, and within mixing zones of class P streams [10 CSR 20-7.031(4) and (5)(4)4.B.]. Therefore, industrial stormwater facilities with toxic contaminants do have the potential to cause a violation of acute WQSs if those toxic contaminants occur in sufficient amounts.

It is due to the items stated above staff are unable to perform statistical Reasonable Potential Analysis (RPA). However, staff will use their best professional judgment in determining if a facility has a potential to violate Missouri's Water Quality Standards.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k), Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when: 1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) Authorized under section 402(p) of the CWA for the control of stormwater discharges; 3) Numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the 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 waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater 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.

A SWPPP must be prepared by the permittee if the SIC code is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2). A SWPPP may be required of other facilities where stormwater has been identified as necessitating better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate stream pollution from stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the benchmark values or limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure assisting in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once the potential sources of stormwater pollution have been identified, a plan should be formulated to best control the amount of pollutant being released and discharged by each activity or source. This should include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed the facility will employ the control measures determined to be adequate to achieve the benchmark values discussed above. The facility will conduct monitoring and inspections of the BMPs to ensure they are working properly and re-evaluate any BMP not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the benchmark value, the BMP being employed is deficient in controlling stormwater pollution. Corrective action should be taken to repair, improve, or replace the failing BMP. This internal evaluation is required at least once per month but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established.

For new, altered, or expanded stormwater discharges, the SWPPP shall identify reasonable and effective BMPs while accounting for environmental impacts of varying control methods. The antidegradation analysis must document why no discharge or no exposure options are not feasible. The selection and documentation of appropriate control measures shall serve as an alternative analysis of technology and fulfill the requirements of antidegradation [10 CSR 20-7.031(3)]. For further guidance, consult the antidegradation implementation procedure (<http://dnr.mo.gov/env/wpp/docs/AIP050212.pdf>).

Alternative Analysis (AA) evaluation of the BMPs is a structured evaluation of BMPs that are reasonable and cost effective. The AA evaluation should include practices that are designed to be: 1) non-degrading; 2) less degrading; or 3) degrading water quality. The glossary of AIP defines these three terms. The chosen BMP will be the most reasonable and effective management strategy while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The AA evaluation must demonstrate why “no discharge” or “no exposure” is not a feasible alternative at the facility. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.031(3) Water Quality Standards and *Antidegradation Implementation Procedure* (AIP), Section II.B.

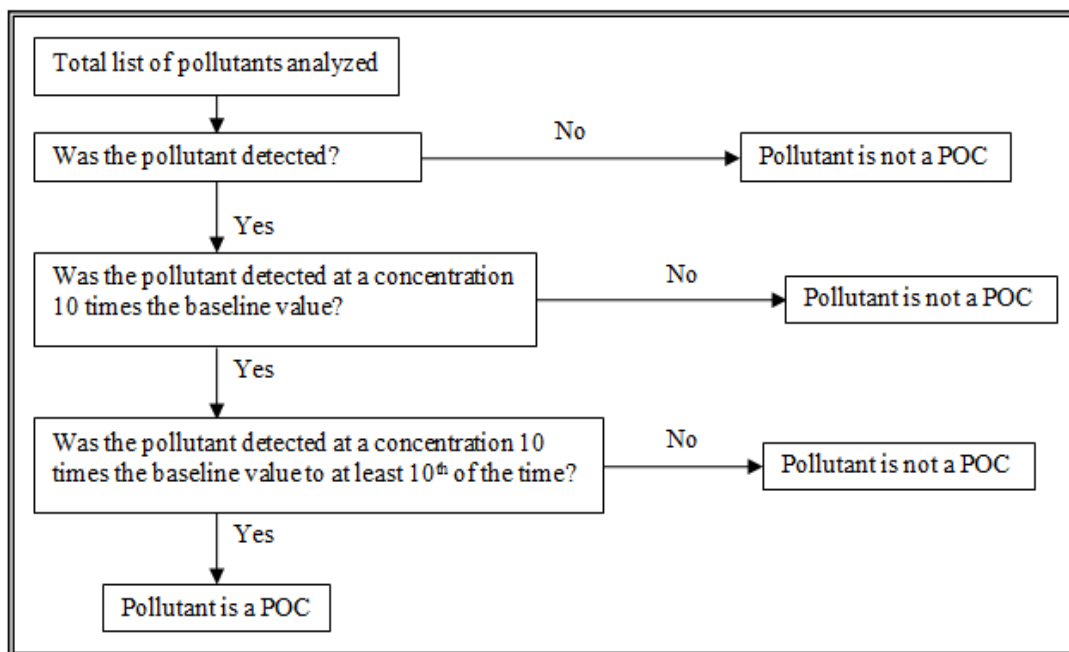
If parameter-specific numeric exceedances continue to occur and the permittee feels there are no practicable or cost-effective BMPs which will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the permittee can submit a request to re-evaluate the benchmark values. This request needs to include 1) a detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values; 2) financial data of the company and documentation of cost associated with BMPs for review and 3) the SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. This will allow the department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification; the application is found at: <http://dnr.mo.gov/forms/index.html>.
✓ Not applicable; at this time, the permittee is not required to develop and implement a SWPPP.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS (TBEL):

One of the major strategies of the Clean Water Act (CWA) in making “reasonable further progress toward the national goal of eliminating the discharge of all pollutants” is to require effluent limitations based on the capabilities of the technologies available to control those discharges. Technology-based effluent limitations (TBELs) aim to prevent pollution by requiring a minimum level of effluent quality attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. TBELs are developed independently of the potential impact of a discharge on the receiving water, which is addressed through water quality standards and water quality-based effluent limitations (WQBELs). The NPDES regulations at Title 40 of the Code of Federal Regulations (CFR) 125.3(a) require NPDES permit writers to develop technology-based treatment requirements, consistent with CWA § 301(b) and § 402(a)(1), represent the minimum level of control that must be imposed in a permit. The regulation also indicates that permit writers must include in permits additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. Regardless of the technology chosen to be the basis for limitations, the facility is not required to install the technology, only to meet the established TBEL.

Case-by-case TBELs are developed pursuant to CWA section 402(a)(1), which authorizes the administrator to issue a permit meeting either, 1) all applicable requirements developed under the authority of other sections of the CWA (e.g., technology-based treatment standards, water quality standards) or, 2) before taking the necessary implementing actions related to those requirements, “such conditions as the administrator determines are necessary to carry out the provisions of this Act.” The regulation at §125.3(c)(2) specifically cite this section of the CWA, stating technology-based treatment requirements may be imposed in a permit “on a case-by-case basis under section 402(a)(1) of the Act, to the extent that EPA-promulgated effluent limitations are inapplicable.” Further, §125.3(c)(3) indicates “where promulgated effluent limitations guidelines only apply to certain aspects of the discharger’s operation, or to certain pollutants, other aspects or activities are subject to regulation on a case-by-case basis to carry out the provisions of the act.” When establishing case-by-case effluent limitations using best professional judgment, the permit writer should cite in the fact sheet or statement of basis both the approach used to develop the limitations, discussed below, and how the limitations carry out the intent and requirements of the CWA and the NPDES regulations.

Baselines to determine contaminants of concern are found in the *Development Document for Effluent Limitations Guidelines and Standards for the Centralized Waste Treatment Industry – Final* (EPA 821-R-00-020; August 2000). The baselines represent the treatable concentration of model technology which would effectually treat a pollutant. Chapter 6 Table 6-1 directs the permit writer to multiply the baseline by ten to determine if the parameter is a pollutant of concern. The following table determines the parameters for which a TBEL must be considered; baseline values are retrieved from chapter six.



When developing TBELs for industrial facilities, the permit writer must consider all applicable technology standards and requirements for all pollutants discharged above baseline level. Without applicable effluent guidelines for the discharge or pollutant, permit writers must identify any needed TBELs on a case-by-case basis, in accordance with the statutory factors specified in CWA sections 301(b)(2) and 304(b). The site-specific TBELs reflect the BPJ of the permit writer, taking into account the same statutory factors EPA would use in promulgating a national effluent guideline regulation, but they are applied to the circumstances relating to the applicant. The permit writer also should identify whether state laws or regulations govern TBELs and might require more stringent performance standards than those required by federal regulations. In some cases, a single permit could have TBELs based on effluent guidelines, best professional judgment, state law, and WQBELs based on water quality standards.

For BPT requirements (all pollutants)

- The age of equipment and facilities involved*
- The process(es) employed*
- The engineering aspects of the application of various types of control techniques*
- Process changes*
- Non-water quality environmental impact including energy requirements*
- The total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application

For BCT requirements (conventional pollutants)

- All items in the BPT requirements indicated by an asterisk (*) above
- The reasonableness of the relationship between the costs of attaining a reduction in effluent and the derived effluent reduction benefits
- The comparison of the cost and level of reduction of such pollutants from the discharge of POTWs to the cost and level of reduction of such pollutants from a class or category of industrial sources

For BAT requirements (toxic and non-conventional pollutants)

- All items in the BPT requirements indicated by an asterisk (*) above
- The cost of achieving such effluent reduction

Best Practicable Control Technology Currently Available (BPT) is the first level of technology-based effluent controls for direct dischargers and it applies to all types of pollutants (conventional, nonconventional, and toxic). The Federal Water Pollution Control Act (FWPCA) amendments of 1972 require when EPA establishes BPT standards, it must consider the industry-wide cost of

implementing the technology in relation to the pollutant-reduction benefits. EPA also must consider the age of the equipment and facilities, the processes employed, process changes, engineering aspects of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the EPA Administrator deems appropriate [CWA §304(b)(1)(B)]. Traditionally, EPA establishes BPT effluent limitations on the basis of the average of the best performance of well-operated facilities in each industrial category or subcategory. Where existing performance is uniformly inadequate, BPT may reflect higher levels of control than currently in place in an industrial category if the agency determines the technology can be practically applied. See CWA sections 301(b)(1)(A) and 304(b)(1)(B). Because the EPA has not promulgated TBELs for the pollutants identified as POCs, the permit writer follows the same format to establish site-specific TBELs. Although the numerical effluent limitations and standards are based on specific processes or treatment technologies to control pollutant discharges, EPA does not require dischargers to use these technologies. Individual facilities may meet the numerical requirements using whatever types of treatment technologies, process changes, and waste management practices they choose.

For each parameter, group of parameters, or outfall treatment process, the facility will summarize the relevant factors below in facility-specific (or waste-stream specific) case-by-case TBEL development. The permittee will supply the required information to the department so a technology based effluent limitation can be applied in the permit if applicable.

✓ Not applicable; this facility does not discharge to waters of the state but conducted irrigation in a non-discharging manner.

VARIANCE:

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 permit is not drafted under premise of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the WLA is the amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs) are reviewed. If one limit does provide adequate protection for the receiving waters, then the other must be used.

✓ Not applicable; wasteload allocations were not calculated.

WLA MODELING:

Permittees may submit site specific studies to better determine the site specific wasteload allocations applied in permits.

✓ 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(4), 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 to determine discharges from the facility cause toxicity to aquatic life by itself, in combination with, or through synergistic responses, when mixed with receiving stream water.

✓ Not applicable; at this time, the permittee is not required to conduct WET testing for this facility.

Part IV. EFFLUENT LIMITS DETERMINATION

Effluent limitations derived and established in the below effluent limitations table are based on current operations of the facility. Effluent means both process water and stormwater. Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. 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.

GENERAL CRITERIA CONSIDERATIONS:

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants which have been determined to cause, have the reasonable potential to cause, or to contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The rule further states pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above a narrative criterion within an applicable State water quality standard, the permit shall contain a numeric effluent limitation to protect that narrative criterion. The previous permit included the narrative criteria as specific prohibitions placed upon the discharge. These prohibitions were included in the permit absent any discussion of the discharge's reasonable potential to cause or contribute to an excursion of the criterion. In order to comply with this regulation, the

permit writer has completed a reasonable potential determination on whether the discharge has reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). These specific requirements are listed below followed by derivation and discussion (the lettering matches that of the rule itself, under 10 CSR 20-7.031(4)). In instances where reasonable potential exists, the permit includes numeric limitations to address the reasonable potential. In instances where reasonable potential does not exist the permit includes monitoring of the discharges potential to impact the receiving stream's narrative criteria. Finally, all of the previous permit narrative criteria prohibitions have been removed from the permit given they are addressed by numeric limits where reasonable potential exists. It should also be noted that Section 644.076.1, RSMo as well as Section D – Administrative Requirements of Standard Conditions Part I of this permit state that it shall be unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri that is 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.

- (A) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.
- The facility does not discharge. The irrigation system is limited by hydraulic loading. Since the permittee has stated they operate within the parameters of the irrigation system, which contain low rates of irrigation, there is no reasonable potential to discharge from the site. Since there is no discharge, there is no reasonable potential for the causation of the conditions listed in the general criterion.
- (B) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.
- The facility does not discharge. The irrigation system is limited by hydraulic loading. Since the permittee has stated they operate within the parameters of the irrigation system, which contain low rates of irrigation, there is no reasonable potential to discharge from the site. Since there is no discharge, there is no reasonable potential for the causation of the conditions listed in the general criterion.
- (C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.
- The facility does not discharge. The irrigation system is limited by hydraulic loading. Since the permittee has stated they operate within the parameters of the irrigation system, which contain low rates of irrigation, there is no reasonable potential to discharge from the site. Since there is no discharge, there is no reasonable potential for the causation of the conditions listed in the general criterion.
- (D) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life.
- The facility does not discharge. The irrigation system is limited by hydraulic loading. Since the permittee has stated they operate within the parameters of the irrigation system, which contain low rates of irrigation, there is no reasonable potential to discharge from the site. Since there is no discharge, there is no reasonable potential for the causation of the conditions listed in the general criterion.
- (E) There shall be no significant human health hazard from incidental contact with the water.
- The facility does not discharge. The irrigation system is limited by hydraulic loading. Since the permittee has stated they operate within the parameters of the irrigation system, which contain low rates of irrigation, there is no reasonable potential to discharge from the site. Since there is no discharge, there is no reasonable potential for the causation of the conditions listed in the general criterion.
- (F) There shall be no acute toxicity to livestock or wildlife watering.
- The facility does not discharge. The irrigation system is limited by hydraulic loading. Since the permittee has stated they operate within the parameters of the irrigation system, which contain low rates of irrigation, there is no reasonable potential to discharge from the site. Since there is no discharge, there is no reasonable potential for the causation of the conditions listed in the general criterion.
- (G) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community.
- The facility does not discharge. The irrigation system is limited by hydraulic loading. Since the permittee has stated they operate within the parameters of the irrigation system, which contain low rates of irrigation, there is no reasonable potential to discharge from the site. Since there is no discharge, there is no reasonable potential for the causation of the conditions listed in the general criterion.
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- (H) 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.
- There are no solid waste disposal activities or any operation that has reasonable potential to cause or contribute to the materials listed above being discharged through any outfall.

PERMITTED FEATURE #001 – STEEL STORAGE TANK

STORAGE TANK MONITORING TABLE:

PARAMETERS	UNIT	BASIS FOR LIMITS	DAILY MAX	MONTHLY AVG	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
WASTEWATER								
FLOW	MGD	6	REMOVED		*/*	REMOVED		
IRON, TOTAL RECOVERABLE	µg/L	6	*	REMOVED	1000/1000	ONCE/QUARTER	ONCE/QUARTER	GRAB
OIL & GREASE	MG/L	6	*	REMOVED	15/10	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH ‡	SU	6	*	REMOVED	6.5-9.0	ONCE/QUARTER	ONCE/QUARTER	GRAB
TPH-DRO	MG/L	6	REMOVED		10/10	ONCE/QUARTER	ONCE/QUARTER	GRAB
TPH-GRO	MG/L	6	REMOVED		10/10	ONCE/QUARTER	ONCE/QUARTER	GRAB
TPH-ORO	MG/L	6	REMOVED		10/10	ONCE/QUARTER	ONCE/QUARTER	GRAB
TSS	MG/L	6	REMOVED		100/100	ONCE/QUARTER	ONCE/QUARTER	GRAB

* Monitoring requirement only

‡ The facility will report the minimum and maximum pH values; pH is not to be averaged.

Basis for Limitations Codes:

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

DERIVATION AND DISCUSSION OF LIMITS:

Flow

This parameter has been removed. Since there is no discharge, there is no reason to monitor flow. The permittee will be required to monitor the storage tank volume to ensure the tank does not overflow. However, this is a narrative condition and does not require flow monitoring.

Iron, Total Recoverable

Monitoring only. Effluent limitations have been removed. The previous permit incorrectly placed water quality-based effluent limitations for the protection of aquatic life on the wastewater being irrigated. This is a non-discharging system. There is no need for implementation of water quality standards. Iron will continued to be monitored as a potential limiting pollutant to the irrigation system. The *U.S. Environmental Protection Agency Process Design Manual for Land Treatment of Municipal Wastewater* (EPA 625/R-06/016) recommends a maximum loading of 5 mg/L for iron. This is not domestic wastewater; however, the permittee can keep this value in mind as a potential threshold for iron loading.

Oil & Grease

Monitoring only. Effluent limitations removed. The previous permit incorrectly placed water quality-based effluent limitations for the protection of aquatic life on the wastewater being irrigated. This is a non-discharging system. There is no need for implementation of water quality standards. There is no indication on any specific maximum loading rates for this parameter found in the *U.S. Environmental Protection Agency Process Design Manual for Land Treatment of Municipal Wastewater* (EPA 625/R-06/016). However, since the stormwater and groundwater come into contact with compressor engine oil, monitoring will continue. Depending on the concentration of engine oil, rates of application may be altered to prevent clogging of the irrigation hose and sprinkler or to prevent buildup of oil on the irrigation field.

pH

Monitoring only. Effluent limitations removed. The previous permit incorrectly placed water quality-based effluent limitations for the protection of aquatic life on the wastewater being irrigated. This is a non-discharging system. There is no need for implementation of water quality standards. There is no indication on any specific maximum loading rates for this parameter found in the *U.S. Environmental Protection Agency Process Design Manual for Land Treatment of Municipal Wastewater* (EPA 625/R-06/016). However, since the stormwater and groundwater come into contact with compressor engine oil and ethylene glycol, monitoring will continue. Depending on the concentration of these substances, the pH can be altered beyond a range of 4-9 SU, which may impact irrigation rates and plant growth.

Total Petroleum Hydrocarbon – Diesel Range Organics, Gasoline Range Organics and Oil Range Organics

Parameters removed. There are no water quality standards or technology-based effluent limitations for these parameters. These were included as indicators of engine oil in the wastewater being irrigated. Oil and Grease is being used as an indicator of concentrations of engine oil in the wastewater. This is sufficient. Additionally, Oil and Grease has water quality standards from which to base future permitting decisions on, should the permittee alter operations and discharge wastewater to waters of the state. These TPH ranges are no longer necessary to monitor functionality of the irrigation system. The permit writer used best professional judgment to remove these parameters at this time.

Total Suspended Solids (TSS)

Parameter removed. The wastewater is not expected to have high concentrations of solids. Additionally, the irrigation system will not be impacted by the amount of solids loading onto the irrigation area. The other pollutants listed above are likely more limiting. Monitoring TSS for an irrigation system is not necessary at this time.

PERMITTED FEATURE #002 – IRRIGATION AREA

IRRIGATION MONITORING TABLE:

PARAMETERS	UNIT	BASIS FOR LIMITS	DAILY MAX	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
IRRIGATION							
APPLICATION AREA	ACRES	6	*	*	once/day	once/month	MEASURED
APPLICATION RATE	INCHES/ACRE	6	*	*	once/day	once/month	MEASURED
IRRIGATION PERIOD	HOURS	6	*	*	once/day	once/month	MEASURED
VOLUME IRRIGATED	GALLONS	6	*	*	once/day	once/month	MEASURED

* - Monitoring requirement only

Basis for Limitations Codes:

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

PERMITTED FEATURE #00# – DERIVATION AND DISCUSSION OF LIMITS:

WASTEWATER IRRIGATION:

Application Area

Monitoring requirement only. In order to determine compliance with 10 CSR 20-6.015 and 10 CSR 20-8.020(15), monitoring of application activity is required. Monitoring the area will allow the permittee to ensure compliance with setback distances and are prevents illicit discharges to waterbodies.

Application Rate

Monitoring requirement only. In order to determine compliance with 10 CSR 20-6.015 and 10 CSR 20-8.020(15), monitoring of application activity is required. Monitoring the rate will allow the permittee to ensure appropriate permeability and plant uptake is occurring and will prevent soil saturation that may result in runoff and illicit discharges to waterbodies. This will also prevent sludge buildup that may clog soils, which likewise will cause runoff and illicit discharges of wastewater to waterbodies.

Irrigation Period

Monitoring requirement only. In order to determine compliance with 10 CSR 20-6.015 and 10 CSR 20-8.020(15), monitoring of application activity is required. Monitoring the irrigation period will also ensure that soils to not get saturated and result in runoff and illicit discharges to waterbodies. This will also prevent sludge buildup that may clog soils, which likewise will cause runoff and illicit discharges of wastewater to waterbodies.

Volume Irrigated

Monitoring requirement only. In order to determine compliance with 10 CSR 20-6.015 and 10 CSR 20-8.020(15), monitoring of application activity is required. Monitoring the volume irrigated will allow the permittee to ensure over application does not occur and that hydraulic loading is maintained within design levels. This will also help prevent runoff and illicit discharges due to soil saturation. This will also prevent sludge buildup that may clog soils, which likewise will cause runoff and illicit discharges of wastewater to waterbodies.

Part V. SAMPLING AND REPORTING REQUIREMENTS:

Refer to each outfall's derivation and discussion of limits section to review individual sampling and reporting frequencies and sampling type. Additionally, see Standard Conditions Part I attached at the end of this permit and fully incorporated within.

ELECTRONIC DISCHARGE MONITORING REPORT (EDMR) SUBMISSION SYSTEM:

The U.S. Environmental Protection Agency (EPA) promulgated a final rule on October 22, 2015, to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. This final rule requires regulated entities and state and federal regulators to use information technology to electronically report data required by the National Pollutant Discharge Elimination System (NPDES) permit program instead of filing paper reports. To comply with the federal rule, the Department is requiring all permittees to begin submitting discharge monitoring data and reports online.

Per 40 CFR 127.15 and 127.24, permitted facilities may request a temporary waiver for up to 5 years or a permanent waiver from electronic reporting from the Department. To obtain an electronic reporting waiver, a permittee must first submit an eDMR Waiver Request Form: <http://dnr.mo.gov/forms/780-2692-f.pdf>. A request must be made for each facility. If more than one facility is owned or operated by a single entity, then the entity must submit a separate request for each facility based on its specific circumstances. An approved waiver is non-transferable.

The Department must review and notify the facility within 120 calendar days of receipt if the waiver request has been approved or rejected [40 CFR 124.27(a)]. During the Department review period as well as after a waiver is granted, the facility must continue submitting a hard-copy of any reports required by their permit. The Department will enter data submitted in hard-copy from those facilities allowed to do so and electronically submit the data to the EPA on behalf of the facility.

- ✓ The permittee/facility is currently using the eDMR data reporting system.

SAMPLING FREQUENCY JUSTIFICATION:

Sampling and reporting frequency was altered from previous permit. The permittee will only be required to sample the wastewater being irrigated once per quarter instead of once prior to each irrigation event. Additionally, the permittee will now be required to report the irrigation parameters monthly. This is a result of the new eDMR system as discussed above. In order for the eDMR system to function optimally, the reporting frequencies must match the sampling frequencies. The facility may sample more frequently if additional data is required to determine if best management operations and technology are performing as expected.

SAMPLING TYPE JUSTIFICATION:

Sampling type was continued from the previous permit. Grab samples are appropriate for the wastewater being irrigated. The permittee will have to pull the sample from the tank or the hose and grabs samples are representative. The irrigation activity parameters will remain measured sampling types.

SUFFICIENTLY SENSITIVE ANALYTICAL METHODS:

Please review Standard Conditions Part 1, section A, number 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 and/or 40 CFR 136 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 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 quantifies the pollutant below the level of the applicable water quality criterion 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 and or 40 CFR 136. These methods are also required for parameters listed as monitoring only, as the data collected may be used to determine if numeric limitations need to be established. A permittee is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive. 40 CFR 136 lists the approved methods accepted by the department. Table A at 10 CFR 20-7.031 shows water quality standards.

Part VI. ADMINISTRATIVE REQUIREMENTS

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

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. <http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf>. 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.

✓ *This permit will become synchronized by expiring the end of the fourth quarter, 2022.*

PUBLIC NOTICE:

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

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

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

☒ - The Public Notice period for this operating permit began on August 18, 2017 and ended on September 20, 2017. No comments were received during the Public Notice period.

DATE OF FACT SHEET: SEPTEMBER 20, 2017

COMPLETED BY:

LOGAN COLE, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
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STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

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

Part I – General Conditions

Section A – Sampling, Monitoring, and Recording

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

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

Section B – Reporting Requirements

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



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

Section C – Bypass/Upset Requirements

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

Section D – Administrative Requirements

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



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imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
 - d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.
2. **Duty to Reapply.**
- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
 - b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission

for applications to be submitted later than the expiration date of the existing permit.)

- c. A permittee with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
5. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
6. **Permit Actions.**
- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
 - i. Violations of any terms or conditions of this permit or the law;
 - ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
 - iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
 - iv. Any reason set forth in the Law or Regulations.
 - b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. **Permit Transfer.**
- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
 - b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
 - c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



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

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

Mr. Logan Cole
Missouri Dept. of Natural Resources
Water Protection Program
Operating Permit Section – Industrial Wastewater Unit
P.O. Box 176
Jefferson City, MO 65102

RECEIVED
JUN 27 2017
Water Protection Program

Mr. Cole,

Please find in this mailing the paperwork needed to re-write Permit MO-0108766. As we have discussed in email and phone conversation, I would like to remove the permit conditions and limitations for iron.

Per your last email, you had requested additional information as follows:

- Steel storage tank size (gallons)
- Average daily rate of groundwater/stormwater pumped from compressor building. Form I asks for average annual flows/irrigation volumes but daily pump outs provides a bit more detail on daily operations.
- Irrigation is conducted with a garden hose. Is that manually with someone spraying using head pressure or do you have a pressurized system pumping from a garden hose to a sprinkler?
- Provide a list of pollutants you believe would be in the water pumped from the compressor building. If you have analytical data from the past year for those pollutants, please submit those values as well.

The answers to your inquiries are as follows:

- ✓ The tank size is 12,690 gallons or 300 bbls. It is a carbon steel tank purchased from McDonald Tank and Equipment, serial number MM7406.
- ✓ The estimated average daily rate of groundwater/stormwater being pumped from the compressor building is 75 gallons/day.
- ✓ Irrigation is conducted with a pressurized system pumping from a garden hose to a sprinkler.
- ✓ The only 2 pollutants believed to be in the wastewater are engine oil and engine coolant (ethylene glycol and water mixture). The last analytical is included in this mailing.
- ✓ Also included in this mailing are the Form I, Form A, the requested maps in Form I and Form A, and check for \$450 to cover the fees associated with this permit change.

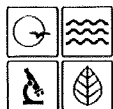
Best Regards,



Patrick Leis, SSCGP Environmental Specialist II

RECEIVED

JUN 27 2017



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
**FORM A – APPLICATION FOR NONDOMESTIC PERMIT UNDER MISSOURI
CLEAN WATER LAW**

FOR AGENCY USE ONLY

CHECK NUMBER

214726

DATE RECEIVED

FEE SUBMITTED

6-27-17

\$450.00

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

1. This application is for:
- ☐ An operating permit for a new or unpermitted facility:
Please indicate the original Construction Permit # _____
- ☐ An operating permit renewal:
Please indicate the permit # MO- _____ Expiration Date _____
- ☒ An operating permit modification:
Please indicate the permit # MO- 0108766 Modification Reason: Re-evaluate Land Application Req

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

2. FACILITY

NAME Southern Star Central Gas Pipeline, Inc- Joplin/Saginaw Compressor Station		TELEPHONE NUMBER WITH AREA CODE (417) 626-3401	
		FAX (417) 626-3430	
ADDRESS (PHYSICAL) 6300 South Rangeline	CITY Joplin	STATE MO	ZIP CODE 64804

3. OWNER

NAME Southern Star Central Gas Pipeline, Inc.		EMAIL ADDRESS patrick.leis@sscgp.com		TELEPHONE NUMBER WITH AREA CODE (316) 220-8656	
				FAX (316) 220-8666	
ADDRESS (MAILING) 4700 Highway 56	CITY Owensboro	STATE KY	ZIP CODE 42301		

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

4. CONTINUING AUTHORITY

NAME N/A		EMAIL ADDRESS		TELEPHONE NUMBER WITH AREA CODE	
				FAX	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE		

5. OPERATOR

NAME		CERTIFICATE NUMBER		TELEPHONE NUMBER WITH AREA CODE	
				FAX	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE		

6. FACILITY CONTACT

NAME Kirk Kaufmann		TITLE Manager, Region East		TELEPHONE NUMBER WITH AREA CODE (417) 626-3403	
		E-MAIL ADDRESS Kirk.F.Kaufmann@sscgp.com		FAX (417) 626-3430	

7. ADDITIONAL FACILITY INFORMATION

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

001 NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec 36 T 27N R 33W Newton County
UTM Coordinates Easting (X): _____ Northing (Y): _____
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)


002 _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ Sec _____ T _____ R _____ _____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

003 _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ Sec _____ T _____ R _____ _____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

004 _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ 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 4922 and NAICS 486210 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? If yes, complete Form C or 2F. (2F is the U.S. EPA's Application for Storm Water Discharges Associate with Industrial Activity.)	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
B.	Is application for storm water discharges only? If yes, complete Form C or 2F.	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
C.	Is your facility considered a "Primary Industry" under EPA guidelines? If yes, complete Forms C or 2F and D.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
D.	Is wastewater land applied? If yes, complete Form I.	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
E.	Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
F.	If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach any revision to your Nutrient Management Plan.		
F.	Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.		
9. ELECTRONIC DISCHARGE MONITORING REPORT (eDMR) SUBMISSION SYSTEM			
Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data. One of the following must be checked in order for this application to be considered complete. Please visit http://dnr.mo.gov/env/wpp/edmr.htm to access the Facility Participation Package.			
<input checked="" type="checkbox"/> - You have completed and submitted with this permit application the required documentation to participate in the eDMR system.			
<input type="checkbox"/> - You have previously submitted the required documentation to participate in the eDMR system and/or you are currently using the eDMR system.			
<input type="checkbox"/> - You have submitted a written request for a waiver from electronic reporting. See instructions for further information regarding waivers.			
10. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions. (PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).			
NAME Grant, Jack F. & Barbara			
ADDRESS 4032 Gateway Drive		CITY Jopin	STATE MO
		ZIP CODE 64804	
11. 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) Patrick Leis Environmental Specialist		TELEPHONE NUMBER WITH AREA CODE (316) 220-8656	
SIGNATURE 		DATE SIGNED 06/19/17	

MO 780-1479 (09-16)

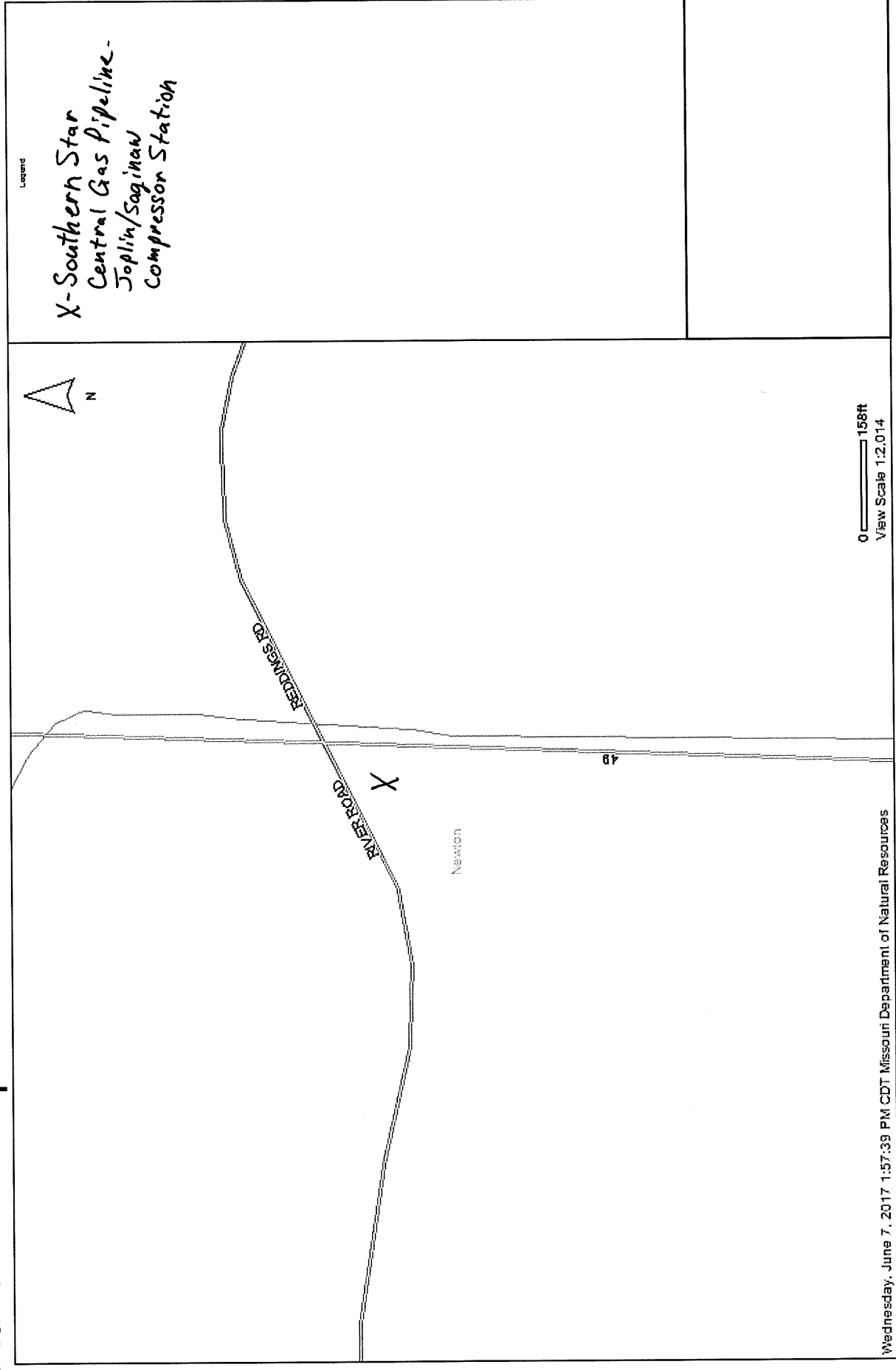
BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.

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

HAVE YOU INCLUDED:

- | | |
|--|---|
| <input type="checkbox"/> Appropriate Fees?
<input type="checkbox"/> Map at 1" = 2000' scale?
<input type="checkbox"/> Signature?
<input type="checkbox"/> Form C or 2F, if applicable?
<input type="checkbox"/> Form D, if applicable? | <input type="checkbox"/> Form I (Irrigation), if applicable?
<input type="checkbox"/> Form R (Sludge), if applicable?
<input type="checkbox"/> Revised Nutrient Management Plan, if applicable? |
|--|---|

Advanced Map Viewer



Missouri
Department of
Natural Resources

This timestamp indicates the date and time the map was generated. Data layers in the map are updated at a variety of intervals and may not reflect current conditions. Disclaimer: Although this map has been compiled by the Missouri Department of Natural Resources, no warranty, expressed or implied, is made by the department as to the accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility is assumed by the department in the use of these data or related materials.

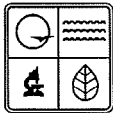
Google Maps



Imagery ©2017 Google, Map data ©2017 Google 500 ft

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JUN 27 2017



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
**FORM I – PERMIT APPLICATION FOR
OPERATION OF WASTEWATER IRRIGATION SYSTEMS**

FOR AGENCY USE ONLY

PERMIT NUMBER

MO -

DATE RECEIVED

INSTRUCTIONS: The following forms must be submitted with Form I: **FORM B or B2** for domestic wastewater.
FORM A for industrial wastewater.

1. FACILITY INFORMATION

1.1 Facility Name

Southern Star Central Gas Pipeline, Inc. - Joplin/Saginaw Station

1.2 Permit Number

MO- 0108766

1.3 Type of wastewater to be irrigated: ☐ Domestic ☐ Municipal ☐ State/National Park ☐ Seasonal business
☐ Municipal with Pretreatment Program or Significant Industrial Users ☒ Other (explain) Basement rain water

SIC Codes (list all that apply, in order of importance) 4922

1.4 Months when the business or enterprise will operate or generate wastewater:

☒ 12 months per year ☐ Part of year (list Months): ____

1.5 This system is designed for:

☐ No-discharge ☒ Partial irrigation when feasible and discharge rest of time.
☐ Irrigation during recreation season (April – October) and discharge during November – March.
☐ Other (explain) ____

1.6 List the Facility outfalls which will be applicable to the irrigation system.

Outfall Numbers: 1**2. STORAGE BASINS**2.1 Number of storage basins: 1

Type of basin: ☒ Steel ☐ Concrete ☐ Fiberglass ☐ Earthen
☐ Earthen with membrane liner

3. LAND APPLICATION SYSTEM3.1 Number of irrigation sites 1Total Acres 11.67Location: NE $\frac{1}{4}$, SE $\frac{1}{4}$, n/a $\frac{1}{4}$, Sec 36 T 27N R 33 Newton County 11.7 AcresLocation: ____ $\frac{1}{4}$, ____ $\frac{1}{4}$, ____ $\frac{1}{4}$, Sec ____ T ____ R ____ County ____ Acres

Attach pages as needed.

3.2 Attach a site map showing topography, storage basins, irrigation sites, property boundary, streams, wells, roads, dwellings, and other pertinent features.

3.3 Type of vegetation: ☐ Grass hay ☐ Pasture ☐ Timber ☐ Row crops ☒ Other (describe) grass

3.4 Wastewater flow (dry weather) gallons/day:

Average annual: 48000 Seasonal 12000 Off-season 0Months of seasonal flow: 6

3. LAND APPLICATION SYSTEM (continued)

3.5 Land Application rate per acre (design flow including 1 in 10 year stormwater flows):

Design: <1 inches/year <1 inches/hour <1 inches/day <1 inches/week

Actual: _____ inches/year _____ inches/hour _____ inches/day _____ inches/week

Total Irrigation per year (gallons): 48000 Design _____ Actual _____

Actual months used for Irrigation (check all that apply):

☐ Jan ☒ Feb ☒ Mar ☒ Apr ☒ May ☒ Jun ☒ Jul ☒ Aug ☒ Sep ☒ Oct ☒ Nov ☐ Dec

3.6 Land Application Rate is based on:

☐ Nutrient Management Plan (N&P)☒ Hydraulic Loading☐ Other (describe) _____3.7 Equipment type: ☐ Sprinklers ☐ Gated pipe ☐ Center pivot ☐ Traveling gun ☒ Other (describe) Garden HoseEquipment Flow Capacity: 1200 Gallons per hour 40 Total hours of operation per year3.8 **Public Use Areas.** Public access shall not be allowed to public use area irrigation sites when application is occurring. Method of Public Access Restriction:☒ Site is Fenced ☐ Wastewater disinfection prior to irrigation ☐ Site is not for public use☐ Other (describe): _____

3.9 Separation distance (in feet) from the outside edge of the wetted irrigation area to nearby down gradient features:

700 Permanent flowing stream n/a Losing Stream n/a Intermittent (wet weather) stream n/a Lake or pond200 Property boundary 985 Dwellings 410 Water supply well _____ Other (describe) _____

3.10 The facility must develop and retain an Operation and Maintenance (O&M) Plan for the irrigation system.

Date of O&M Plan: 02/25/2014**4. CERTIFICATION**

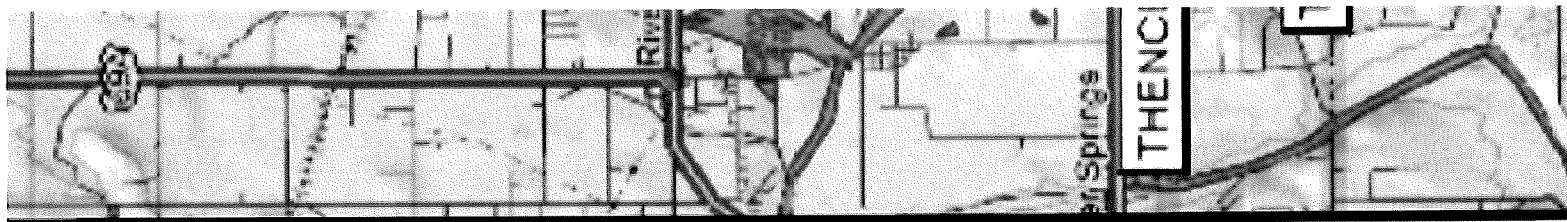
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment.

OWNER OR AUTHORIZED REPRESENTATIVE <u>Patrick Leis on behalf of SSCGP</u>	OFFICIAL TITLE <u>Environmental Specialist</u>
EMAIL ADDRESS <u>Patrick.leis@sscgpc.com</u>	TELEPHONE NUMBER WITH AREA CODE <u>(316) 220-8656</u>
SIGNATURE <u>Patrick Leis</u>	DATE SIGNED <u>06/19/17</u>

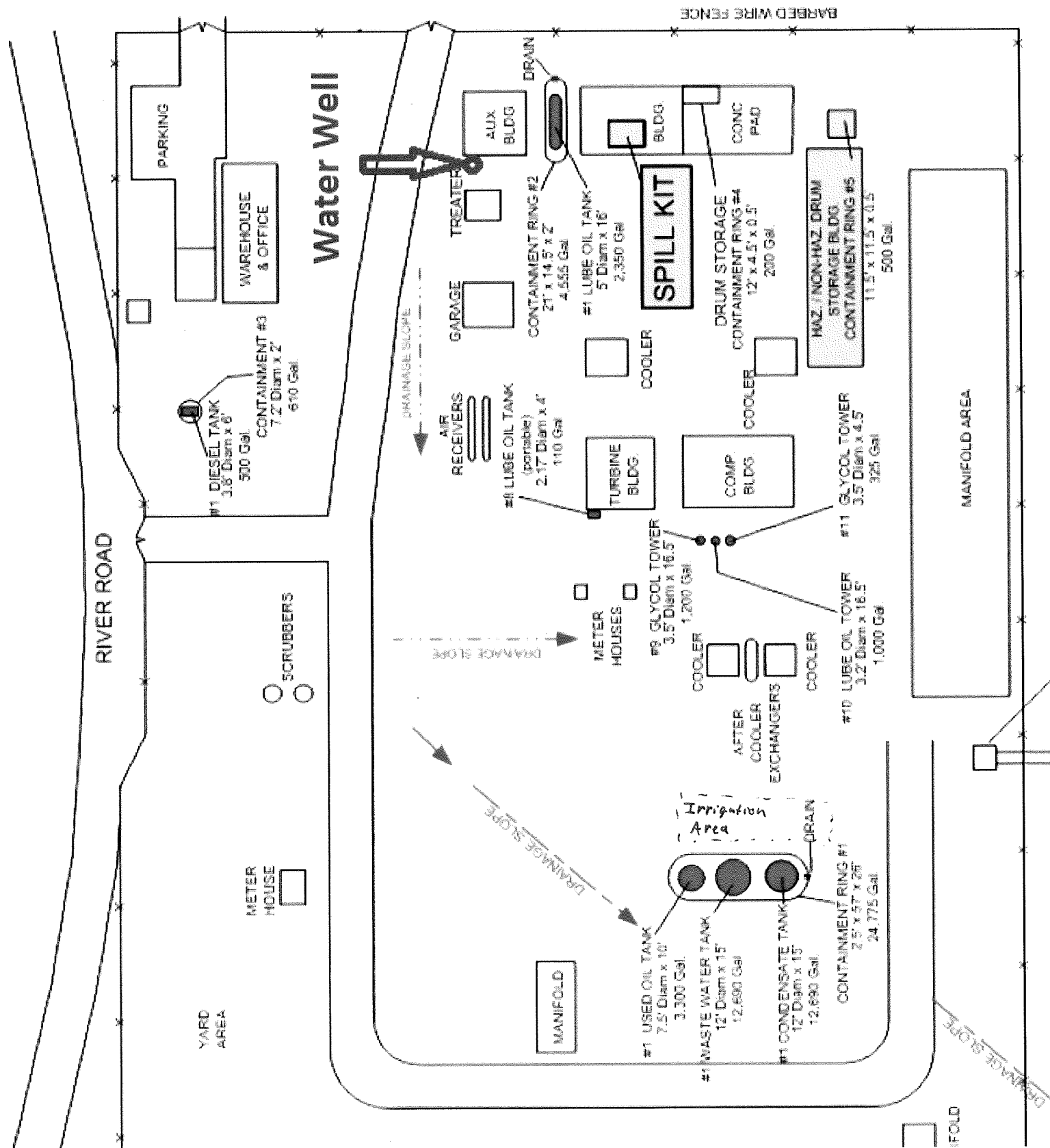
Google Maps



Imagery ©2017 Google, Map data ©2017 Google 100 ft



U.S. HWY 718 (RANGE LINE ROAD)



July 05, 2016

Southern Star Central Pipeline Inc.

Sample Delivery Group: L843605
Samples Received: 06/25/2016
Project Number:
Description: Joplin/Saginaw, MO Land Application WW
Site: JOPLIN, MO
Report To: Mr. Patrick Leis
PO Box 20010
Owensboro, KY 42301

Entire Report Reviewed By:



Terrie Fudge
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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ONE LAB. NATIONWIDE.



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¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



JOPLIN / SAG WW L843605-01 WW

Collected by
Allen Reed

Collected date/time
06/24/16 10:45

Received date/time
06/25/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 D-2011	WG884543	1	06/30/16 13:14	06/30/16 14:02	MMF
Metals (ICP) by Method 200.7	WG883795	1	06/28/16 17:43	06/29/16 01:40	LTB
Semi-Volatile Organic Compounds (GC) by Method 8015	WG883996	1	06/27/16 23:07	06/28/16 17:53	JM
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG884208	1	06/30/16 17:57	06/30/16 17:57	BMB
Wet Chemistry by Method 1664A	WG883975	1	06/28/16 06:52	06/28/16 12:13	SHG
Wet Chemistry by Method 350.1	WG884250	1	06/29/16 16:59	06/29/16 16:59	DR
Wet Chemistry by Method 4500H+ B-2011	WG886050	1	07/05/16 14:00	07/05/16 14:00	JJL
Wet Chemistry by Method 5210 B-2011	WG883409	1	06/25/16 13:43	06/30/16 07:55	ARM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Terrie Fudge
Technical Service Representative

Sample Handling and Receiving

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

ESC Sample ID
L843605-01

Project Sample ID
JOPLIN / SAG WW

Method
4500H+ B-2011

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Suspended Solids	38.0 ✓		2.50	1	06/30/2016 14:02	WG884543

Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Oil & Grease (Hexane Extr)	8.32 ✓		5.26	1	06/28/2016 12:13	WG883975

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.990		0.250	1	06/29/2016 16:59	WG884250

Wet Chemistry by Method 4500H+ B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
pH	6.85 ✓		1		07/05/2016 14:00	WG886050

Sample Narrative:

4500H+ B-2011 L843605-01 WG886050: 6.85 at 9.3C

Wet Chemistry by Method 5210 B-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
BOD	35.6		10.0	1	06/30/2016 07:55	WG883409

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Iron	13.1		0.100	1	06/29/2016 01:40	WG883795

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND ✓		0.100	1	06/30/2016 17:57	WG884208
(S) <i>o</i> , <i>a</i> , <i>a</i> -Trifluorotoluene(FID)	101		62.0-128		06/30/2016 17:57	WG884208

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.61 ✓		0.100	1	06/28/2016 17:53	WG883996
C28-C40 Oil Range	1.29 ✓		0.100	1	06/28/2016 17:53	WG883996
(S) <i>o</i> -Terphenyl	106		50.0-150		06/28/2016 17:53	WG883996

Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 Al

9 Sc

WG884543

Gravimetric Analysis by Method 2540 D-2011

QUALITY CONTROL SUMMARY

L843605-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3147374-1 06/30/16 14:02				
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Suspended Solids	U	0.350	2.50	2.50

L843404-02 Original Sample (OS) • Duplicate (DUP)

(OS) L843404-02 06/30/16 14:02 • (DUP) R3147374-4 06/30/16 14:02						
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%	%	%
Suspended Solids	2070	2030	1	1.95		5

L843608-01 Original Sample (OS) • Duplicate (DUP)

(OS) L843608-01 06/30/16 14:02 • (DUP) R3147374-5 06/30/16 14:02						
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%	%	%
Suspended Solids	220	210	1	4.65		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3147374-2 06/30/16 14:02 • (LCSD) R3147374-3 06/30/16 14:02									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD Limits
	mg/l	mg/l	mg/l	%	%	%	%	%	%
Suspended Solids	773	812	792	105	102	85.0-115		2.49	5

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Cp	Tc	Ss	Cn	Sr	Qc	Gl	Al	Sc
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WG883975

Wet Chemistry by Method 166.4A

QUALITY CONTROL SUMMARY

L843605-01

ONE LAB. NATIONWIDE



Method Blank (MB)

(MB) R3146271-1 06/28/16 12:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Oil & Grease (Hexane Extr)	U		1.16	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3146271-2 06/28/16 12:09 • (LCSD) R3146271-3 06/28/16 12:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Oil & Grease (Hexane Extr)	40.0	37.5	38.5	93.8	96.3	78.0-114			2.63	20

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WG884250

Wet Chemistry by Method 350.1

QUALITY CONTROL SUMMARY

L843605-01

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3146634-1 06/29/16 16:29					
MB Result		MB Qualifier		MB RDL	
mg/l		mg/l		mg/l	
Analyte					
Ammonia Nitrogen	U	0.038		0.250	

L843545-01 Original Sample (OS) • Duplicate (DUP)

(OS) L843545-01 06/29/16 16:36 • (DUP) R3146634-4 06/29/16 16:37					
Original Result		DUP Result		DUP RPD Limits	
mg/l		mg/l		%	
Analyte					
Ammonia Nitrogen	ND	0.000	1	0	20

L843613-06 Original Sample (OS) • Duplicate (DUP)

(OS) L843613-06 06/29/16 17:09 • (DUP) R3146634-6 06/29/16 17:11					
Original Result		DUP Result		DUP RPD Limits	
mg/l		mg/l		%	
Analyte					
Ammonia Nitrogen	ND	0.000	1	0	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3146634-2 06/29/16 16:31 • (LCSD) R3146634-3 06/29/16 16:32					
Spike Amount		LCS Result		Rec. Limits	
mg/l		mg/l		%	
Analyte					
Ammonia Nitrogen	7.50	7.43	7.57	99	101
				90-110	
				LCS Qualifier	RPD Limits
				%	%
				2	20

L843547-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L843547-01 06/29/16 16:39 • (MS) R3146634-5 06/29/16 16:40					
Spike Amount		Original Result		MS Rec.	
mg/l		mg/l		%	
Analyte					
Ammonia Nitrogen	10.0	ND	10.3	103	1
				90-110	
				Dilution	MS Qualifier
				%	%
				90-110	

L843811-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L843811-01 06/29/16 17:14 • (MS) R3146634-7 06/29/16 17:15 • (MSD) R3146634-8 06/29/16 17:17					
Spike Amount		Original Result		MSD Result	
mg/l		mg/l		mg/l	
Analyte					
Ammonia Nitrogen	10.0	ND	10.1	10.1	101
				101	101
				101	101
				MSD Rec.	MSD Rec.
				%	%
				101	101
				Dilution	Rec. Limits
				%	%
				90-110	
				MSD Qualifier	RPD Limits
				%	%
				0	20

WG886050

Wet Chemistry by Method 4500H+ B-2011

QUALITY CONTROL SUMMARY

L843605-01

ONE LAB. NATIONWIDE.

L843605-01 Original Sample (OS) • Duplicate (DUP)

(OS) L843605-01 07/05/16 14:00 • (DUP) WG886050-3 07/05/16 14:00

Analyte	Original Result		DUP Result		DUP RPD		DUP Qualifier		DUP RPD Limits	
	SU	%	SU	%	%		%		%	
pH	6.85		6.84		1		0.146		1	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) WG886050-1 07/05/16 14:00 • (LCSD) WG886050-2 07/05/16 14:00

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits	
	SU	%	SU	%	SU	%	%		%		%		%		%	%		%	%	
pH	6.12		6.07		6.08		99.2		99.3		98.4-102		0.165		0.165		1		1	

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WG883409

Wet Chemistry by Method 5210 B-2011

QUALITY CONTROL SUMMARY

L843605-01

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3146724-1 06/30/16 10:03

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
BOD	U		1	1.00

L843458-01 Original Sample (OS) • Duplicate (DUP)

(OS) L843458-01 06/30/16 07:44 • (DUP) R3146724-4 06/30/16 07:46

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
BOD	ND	0.000	1	0		30

Laboratory Control Sample (LCS)

(LCS) R3146724-2 06/30/16 07:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
BOD	198	196	99	84.6-115	

Laboratory Control Sample (LCS)

(LCS) R3146724-3 06/30/16 10:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
BOD	198	210	106	84.6-115	

WG883795

Metals (ICP) by Method 200.7

QUALITY CONTROL SUMMARY

L843605-01

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3146404-1 06/29/16 00:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Iron	U	0.0282	0.100	0.100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3146404-2 06/29/16 00:24 • (LCSD) R3146404-3 06/29/16 00:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Iron	10.0	10.0	10.0	100	100	85-115			0	20

L843445-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L843445-01 06/29/16 00:29 • (MS) R3146404-5 06/29/16 00:35 • (MSD) R3146404-6 06/29/16 00:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	10.0	1.01	11.1	11.0	101	100	1	70-130			1	20

L843458-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L843458-01 06/29/16 00:40 • (MS) R3146404-7 06/29/16 00:42 • (MSD) R3146404-8 06/29/16 00:45

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	10.0	ND	9.95	9.90	100	99	1	70-130			0	20

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Method Blank (MB)

(MB) R3147350-3 06/30/16 15:05

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U	0.0314	0.100	0.100
(S) <i>a,a</i> - α -Trifluorotoluene(FID)	100		62.0-128	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3147350-1 06/30/16 13:38 • (LCSD) R3147350-2 06/30/16 14:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.83	4.78	87.8	87.0	67.0-132			1.02	20
(S) <i>a,a</i> - α -Trifluorotoluene(FID)			99.4	98.9	98.9	62.0-128				

L843605-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L843605-01 06/30/16 17:57 • (MS) R3147350-4 06/30/16 16:30 • (MSD) R3147350-5 06/30/16 16:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	5.80	6.13	106	111	1	50.0-143			5.39	20
(S) <i>a,a</i> - α -Trifluorotoluene(FID)				99.8	99.8	99.8		62.0-128				

WG883996

Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY

L843605-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3146368-1 06/28/16 10:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
C10-C28 Diesel Range	U		0.0222	0.100
C28-C40 Oil Range	U		0.0118	0.100
(S) o-Terphenyl	90.6			50.0-150

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3146368-2 06/28/16 10:17 • (LCSD) R3146368-3 06/28/16 10:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	1.50	1.38	1.36	92.2	90.7	70.0-130			1.63	20
(S) o-Terphenyl				101	100	50.0-150				

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Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
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The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ AI⁹ Sc

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey-NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio-VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

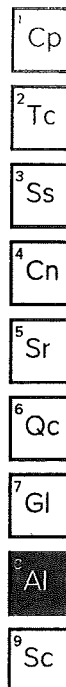
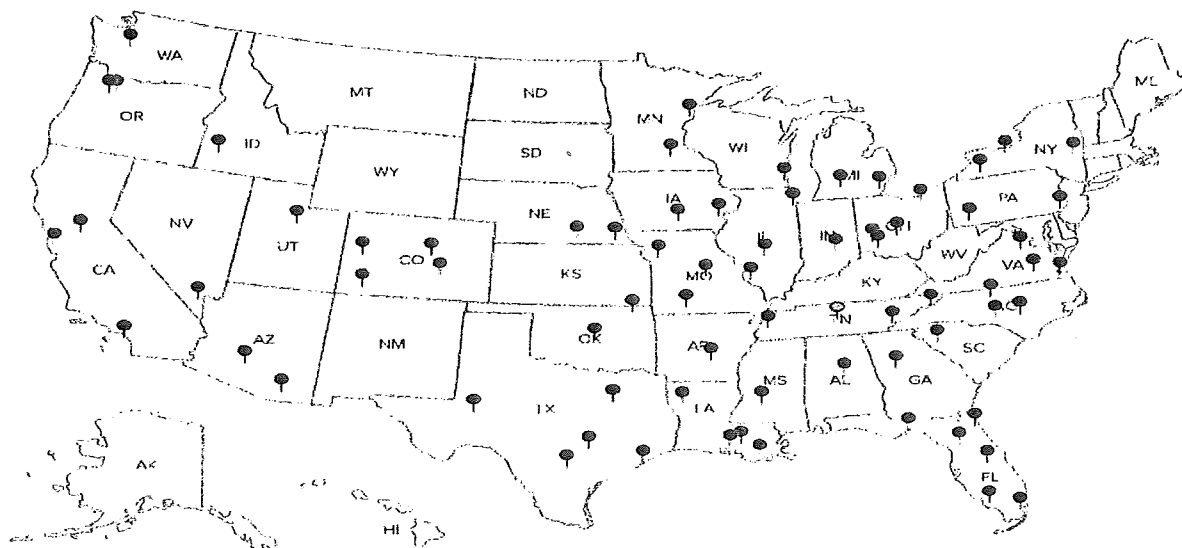
Third Party & Federal Accreditations

A2LA - ISO 17025	1461.01	AIHA	100789
A2LA - ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ¹⁴ Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Southern Star Central Pipeline Inc.

PO Box 20010
Owensboro, KY 42301

Billing Information:

Accounts Payable
PO Box 20010
Owensboro, KY 42304

Report to:

Mr. Patrick Leis

Email To: patrick.leis@sscgp.com;
blake.schroeder@sscgp.com

Project

Description: Joplin/Saginaw, MO Land Application WW

Client Project #

Phone: 270-852-4422
Fax: 270-852-5012

Collected by (print):

Allen Reed

Collected by (signature):

Allen Reed

Immediately
Packed on Ice N Y 4

Rush? (Lab MUST Be Notified)
___ Same Day200%
___ Next Day100%
___ Two Day50%
___ Three Day25%

Date Results Needed

Email? ___ No ___ Yes
FAX? ___ No ___ Yes

No. of

Cntrs

Sample ID

Joplin/Saginaw Station

Comp/Grab

Grab

Matrix *

WW

Depth

10A

Date

6/24/16 10:45

Time

10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

Relinquished by: (Signature)

Allen Reed

Relinquished by: (Signature)

Relinquished by: (Signature)

Date:

6/24/16

Date:

Date:

Time:

1:00pm

Time:

Time:

Received by: (Signature)

Allen Reed

Received by: (Signature)

Received for lab by: (Signature)

Time:

6:25/16

Time:

Time:

Temp: 3.2 °C

Bottles Received: 10+FB

Date:

6/25/16

Hold #

Condition:

(lab use only)

COC Seal Intact: Y N NA

pH Checked: 22

NCF:

Analysis / Container / Preservative

BOD 500mlHDPE-NOPres

DROOROLVI 40mlAmb-HCl-BT

FEICP 250mlHDPE-HNO3

GRO 40mlAmb HCl

NH3 125mlHDPE-NaTHIOH2S04

OGHEX 1L-Cl-Add HCl

TSS 1L-HDPE NOPres

Chain of Custody Page 1 of 1



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Fax: 615-758-5859



L# 743605

Ta E071

Account: SSTAROKY

Template: T97367

Prelogin: P554109

TSR: 064 - Terrie Fudge

PB: 5-24-16

Shipped Via: FedEx Ground

Rem./Contaminant Sample # (lab only)

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