

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

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

Permit No. MO-0004936

Owner: Ford Motor Company – Environmental Quality Office
Address: Fairlane Plaza North, Suite 800, 290 Town Center Drive, Dearborn, MI 48126

Continuing Authority: Ford Motor Company – Kansas City Assembly Plant
Address: 8121 East US Highway 69, Claycomo, MO 64119

Facility Name: Ford Motor Company – Kansas City Assembly Plant
Address: 8121 East US Highway 69, Claycomo, MO 64119

Legal Description: See Page Two
UTM Coordinates: See Page Two

Receiving Streams: Thornton Mill Creek (U)
Shoal Creek (P)

First Classified Stream and ID: Shoal Creek (P) (00396)
USGS Basin & Sub-watershed No.: (10300101 – 040001)

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

FACILITY DESCRIPTION

See Page Two

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

June 30, 2010
Effective Date

December 4, 2014
Modified Date

Sara Parker Pauley, Director, Department of Natural Resources

June 29, 2015
Expiration Date

John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (continued)

Outfall #001 – Industry – SIC #3711

Non-contact cooling water/stormwater runoff
Design flow is 2.69 MGD.

Legal Description: SE ¼, NE ¼, Sec.27, T51N, R32W, Clay County
UTM Coordinates: X = 372552, Y = 4340614
Receiving Stream: Shoal Creek (P)
First Classified Stream and ID: Shoal Creek (P) (0397)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #002 – Industry – SIC #3711

Non-contact cooling water/stormwater runoff
Design flow is 3.78 MGD.

Legal Description: NE ¼, NE ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 372340, Y = 4340772
Receiving Stream: Shoal Creek (P)
First Classified Stream and ID: Shoal Creek (P) (0397)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #003 – Industry – SIC #3711

Non-contact cooling water/stormwater runoff
Design flow is 3.3 MGD.

Legal Description: NE ¼, SE ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 372279, Y = 4340019
Receiving Stream: Thornton Mill Creek (U)
First Classified Stream and ID: Shoal Creek (P) (0396)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #004 – Industry – SIC #3711

Non-contact cooling water/stormwater runoff
Design flow is 1.72 MGD.

Legal Description: NW ¼, SW ¼, Sec 26, T51N, R32W, Clay County
UTM Coordinates: X = 372631, Y = 4340088
Receiving Stream: Thornton Mill Creek (U)
First Classified Stream and ID: Shoal Creek (P) (0396)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #006 – Industry – SIC #3711

Stormwater runoff
Design flow is 0.21 MGD

Legal Description: NE ¼, SE ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 372549, Y = 4340022
Receiving Stream: Thornton Mill Creek (U)
First Classified Stream and ID: Shoal Creek (P) (0396)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

FACILITY DESCRIPTION (continued)

Outfall #008 – Industry – SIC #3711

Stormwater runoff

Design flow is 2.95 MGD.

Legal Description: SW ¼, NW ¼, Sec 26, T51N, R32W, Clay County

UTM Coordinates: X = 372644, Y = 4340533

Receiving Stream: Tributary to Shoal Creek (P)

First Classified Stream and ID: Shoal Creek (P) (0396)

USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #011– Industry – SIC #3711

Stormwater runoff

Design flow is 2.95 MGD.

Legal Description: SW ¼, NW ¼, Sec 26, T51N, R32W, Clay County

UTM Coordinates: X = 371890, Y = 4341141

Receiving Stream: Shoal Creek (P)

First Classified Stream and ID: Shoal Creek (P) (0397)

USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #012 – Industry – SIC #3711

Non-contact cooling water/stormwater runoff

Design flow is 2.26 MGD.

Legal Description: NW ¼, SE ¼, Sec 27, T51N, R32W, Clay County

UTM Coordinates: X = 372138, Y = 4340103

Receiving Stream: Thornton Mill Creek (U)

First Classified Stream and ID: Shoal Creek (P) (0396)

USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #013 – Industry – SIC #3711

Non-contact cooling water/stormwater runoff

Design flow is 2.3 MGD.

Legal Description: NE ¼, SE ¼, Sec 27, T51N, R32W, Clay County

UTM Coordinates: X = 372395, Y = 4339927

Receiving Stream: Thornton Mill Creek (U)

First Classified Stream and ID: Shoal Creek (P) (0396)

USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #016 – Industry – SIC #3711

Non-contact cooling water/stormwater runoff

Design flow is 0.79 MGD.

Legal Description: NW ¼, SE ¼, Sec 27, T51N, R32W, Clay County

UTM Coordinates: X = 371967, Y = 4340208

Receiving Stream: Thornton Mill Creek (U)

First Classified Stream and ID: Shoal Creek (P) (0396)

USGS Basin & Sub-watershed No.: (10300101 – 0303)

FACILITY DESCRIPTION (continued)

Outfall #021 – Industry – SIC #3711

Non-contact cooling water/stormwater runoff
Design flow is 0.21 MGD.

Legal Description: NE ¼, SE ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 372554, Y = 4339989
Receiving Stream: Thornton Mill Creek (U)
First Classified Stream and ID: Shoal Creek (P) (0396)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #025 – Industry – SIC #3711

Stormwater runoff
Flow is dependent on rainfall

Legal Description: NW ¼, SE ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 372893, Y = 4340025
Receiving Stream: Thornton Mill Creek (U)
First Classified Stream and ID: Shoal Creek (P) (0396)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #026 – Industry – SIC #3711

Stormwater runoff – New vehicle parking lot, no industrial activity associated with this outfall.
Flow is dependent on rainfall

Legal Description: SW ¼, SW ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 372625, Y = 4339653
Receiving Stream: Unnamed Tributary to Shoal Creek
First Classified Stream and ID: Shoal Creek (P) (0396)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #027 – Industry – SIC #3711

Stormwater runoff
Flow is dependent on rainfall

Legal Description: NE ¼, NW ¼, Sec 26, T51N, R32W, Clay County
UTM Coordinates: X = 373337, Y = 4340637
Receiving Stream: Unnamed Tributary to Shoal Creek
First Classified Stream and ID: Shoal Creek (P) (0396)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

Outfall #028 – Industry – SIC #3711

Stormwater runoff
Flow is dependent on rainfall

Legal Description: SE ¼, NW ¼, Sec 26, T51N, R32W, Clay County
UTM Coordinates: X = 373337, Y = 4340637
Receiving Stream: Shoal Creek
First Classified Stream and ID: Shoal Creek (P) (0396)
USGS Basin & Sub-watershed No.: (10300101 – 0303)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 5 of 11

PERMIT NUMBER MO-0004936

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations are effective upon issuance of this modification and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE (Note 1)	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfalls #001, #002, #003, #004, #012, #013, and #021</u>						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
Temperature	°C	****		****	once/quarter**	grab
Oil & Grease	mg/L	15		10	once/quarter**	grab
<u>Outfall #006</u>						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
Oil & Grease	mg/L	15		10	once/quarter**	grab
Hardness	mg/L	*		*	once/quarter**	grab
Lead, Total Recoverable	µg/L	*		*	once/quarter**	grab
Chemical Oxygen Demand	mg/L	*		*	once/quarter**	grab
Precipitation (Note 2)	inches	*		*	once/day	grab
<u>Outfall #008</u>						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
Oil & Grease	mg/L	15		10	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE OCTOBER 28, 2013. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED August 1, 2014, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 6 of 11

PERMIT NUMBER MO-0004936

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations are effective upon issuance of this modification and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE (Note 1)	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #016</u>						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
Temperature	°C	****		****	once/quarter**	grab
Oil & Grease	mg/L	15		10	once/quarter**	grab
Hardness	mg/L	*		*	once/quarter**	grab
Copper, Total Recoverable	µg/L	26		13	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE OCTOBER 28, 2013. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED August 1, 2014, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 7 of 11	
					PERMIT NUMBER MO-0004936	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations are effective <u>December 4, 2014</u> , and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE (Note 1)	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #011, #025, #027, #028</u>						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
Oil & Grease	mg/L	15		10	once/quarter**	grab
Copper, Total Recoverable	µg/L	*			once/quarter**	grab
Iron, Total Recoverable	µg/L	*			once/quarter**	grab
Zinc, Total Recoverable	µg/L	*			once/quarter**	grab
Chemical Oxygen Demand	mg/L	*			once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE NEXT REPORT IS DUE <u>APRIL 28, 2015</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS						
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE (Note 2)	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>All Outfalls</u>						
Chemicals exposed to stormwater either currently or in the last three years. (Note 3)	mg/L	*		*	once/year in September	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2011</u> . 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 in any month when there is a discharge. See table below for quarterly sampling.

Sample discharge at least once for the months of:	Report is due:
January, February, March (1st Quarter)	April 28
April, May, June (2nd Quarter)	July 28
July, August, September (3rd Quarter)	October 28
October, November, December (4th Quarter)	January 28

- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- **** Effluent shall not raise or lower the temperature of the receiving stream more than 2.78°C and shall not cause or contribute to stream temperature in excess of 32.22°C.

Note 1 - Monthly average. The total mass or concentration of all daily discharges sampled during a calendar month divided by the number of daily discharges sampled or measured during that month.

Note 2 - Precipitation data may be obtained from the nearest rain gauge or weather monitoring station rather than at Outfall #006. Data need not be collected on a daily basis, but rather, may be obtained for the entire month once it has ended. Only the daily maximums and the monthly averages for each month should be reported but daily data should be kept on file for future reference.

Note 3 - The permittee shall collect one representative sample per specified outfall per year in September taken during a rainfall which exceeds 0.1 inches and results in a discharge. The samples shall be analyzed for chemicals listed in 40 CFR 122 Appendix D (attached) which are currently are or have been stored, disposed, loaded, unloaded, or treated outside in the last three years in open or unsecured containers or otherwise exposed to stormwater in the watershed of the outfall. A secure container shall be deemed to be a container with a lid that is securely closed and has no observable punctures, tears, or leaks.

Other soluble bulk materials that are not listed in 40 CFR 122 Appendix D that are exposed to stormwater must also be monitored. The Permittee shall submit a list of such materials with the annual report in October. Exempted from monitoring requirements are iron and aluminum, when stored outside in the form of solid steel and aluminum alloys, and gases. If the permittee has questions concerning which parameters to analyze, contact the Water Protection Program or the Kansas City Regional Office.

C. SPECIAL CONDITIONS

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

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

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

C. SPECIAL CONDITIONS (continued)

3. Changes in Discharges of Toxic Substances

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

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

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

5. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

6. The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be prepared within 30 days and implemented within 90 days of permit issuance. The SWPPP must be kept on-site and should not be sent to DNR unless specifically requested. The SWPPP must be reviewed and updated, if needed, every five (5) years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document:

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

The SWPPP must include the following:

- (a) A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter storm water. Minimum BMPs are listed in SPECIAL CONDITIONS #7 below.
- (b) The SWPPP must include a schedule for a twice per month site inspection with a brief written report. The inspections must include observation and evaluation of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Any corrective measure that necessitates major construction may also need a construction permit. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to DNR personnel upon request.
- (c) A provision for designating an individual to be responsible for environmental matters.

C. SPECIAL CONDITIONS (continued)

- (d) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of DNR.
7. Permittee shall adhere to the following minimum Best Management Practices:
- (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water from these substances.
 - (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMP's such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
 - (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
8. 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.
9. This permit does not authorize the discharge of process wastewater to waters of the state. All process wastewater must be discharged to a sanitary sewer collection system tributary to a permitted wastewater treatment facility. Any bypass of process wastewater is a violation and must be reported to the department within twenty-four hours.
10. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.
11. 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, accumulated waster must be treated to remove all hydrocarbons prior to release or pumped and hauled to an appropriate treatment facility. Records of the event, including the method of removal and disposal, must be maintained.
12. Substances, regulated by federal law under the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), that are transported, stored, or used for maintenance, cleaning or repair, shall be managed according to RCRA and CECRLA.
13. During tests of the fire suppression system or any other actions that require draining the system, water should not be drained to waters of the state, but rather should be drained to the POTW or irrigated in such a manner that it will not enter waters of the state. If it is unfeasible to prevent drainage to waters of the state, water must be tested, and treated if necessary, prior to release to ensure it is within the pH range of 6.5-9.0 SU and that it will not exceed Total Residual Chlorine water quality standards for the protection of aquatic life as listed in 10 CSR 20-7.031, Table A. The permittee must notify the Kansas City Regional Office prior to release of fire suppression water to waters of the state.

PERMIT TRANSFER

This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.

PERMIT RENEWAL REQUIREMENTS

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than six (6) months prior to the permit's expiration date. Failure to apply for renewal may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

TERMINATION

In order to terminate this permit, the permittee shall notify the department by submitting Form J, included with the State Operating Permit. The permittee shall complete Form J and mail it to the department at the address noted in the cover letter of this permit. Proper closure of any storage structure is required prior to permit termination. A closure plan shall be submitted to the department and approved prior to initiating closure activities.

DUTY OF COMPLIANCE

The permittee shall comply with all conditions of this permit. Any noncompliance with this permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

**Missouri Department of Natural Resources
Statement of Basis
For the Purpose of Modification
of
MO-0004936
Ford Motor Company – Kansas City Assembly Plant**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for an Industrial Facility.

Part I – Facility Information

Facility Type: Vehicle Assembly Plant
Facility SIC Code(s): 3711

Facility Description:

Industrial stormwater/non-contact cooling water

The Kansas City Assembly Plant builds light duty trucks and in 2014 will begin to build transit vans. Plant operations include body construction, painting and assembly operations. Process support operations include a powerhouse, raw material storage (tanks and containers), emission control systems, a wastewater pretreatment plant, warehouse storage, and shipping and receiving areas. During review of the initial draft modification, the facility indicated that no industrial activity occurs at Outfall 026, therefore at this time, no monitoring is required for Outfall 026.

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

- Yes; This modification incorporates new outfalls as a result of the Material Sortation Center being put into operation.

NEW OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE
#011*	Precipitation dependent	BMP	Stormwater
#025	Precipitation dependent	BMP	Stormwater
#027	Precipitation dependent	BMP	Stormwater
#028	Precipitation dependent	BMP	Stormwater

*#011 is an existing outfall that was not previously monitored due to no exposure, Ford asked that it be incorporated in this modification

Part II – Effluent Limits Determination

OUTFALL #011, #025, #027 & #028 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow**. In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Chemical Oxygen Demand (COD)**. Monitoring is included using the permit writer's best professional judgment. There is no water quality standard for COD; however, increased oxygen demand may impact instream water quality. COD is also a valuable indicator parameter. COD monitoring allows the permittee to identify increases in COD that may indicate materials/chemicals coming into contact with stormwater that cause an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs.
- **Settleable Solids**. Daily maximum of 1.5 mg/L and monthly average of 1.0 mg/L effluent limitations were established to be consistent with already established outfalls. Discharge of sediment may impact aquatic habitat in the receiving stream, it is also a valuable indicator parameter. Increases in settleable solids may indicate a need for maintenance or improvement of BMPs.
- **pH**. – Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged. No mixing zone is allowed due to the classification of the receiving stream, therefore the water quality standard must be met at the outfall.
- **Oil & Grease**. Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Copper, Total Recoverable**. Monitoring requirement only. This parameter has been detected in existing outfalls as well as on the modification application. Monitoring for this parameter is also consistent with other industrial stormwater permits covering similar activities. Monitoring is required to determine if reasonable potential exists for this facility's discharge to exceed water quality standards.
- **Zinc, Total Recoverable**. Monitoring requirement only. This parameter was detected in the modification application. Monitoring for this parameter is also consistent with other industrial stormwater permits covering similar activities. Monitoring is required to determine if reasonable potential exists for this facility's discharge to exceed water quality standards.
- **Iron, Total Recoverable**. Monitoring requirement only. No data is available for this parameter; however, it is identified as a pollutant of concern in EPA's Multi-Sector General Permit and Missouri's MO-R203000 general permit for metal fabrication facilities. Monitoring for this parameter is also consistent with other industrial stormwater permits covering similar activities. Monitoring is required to determine if reasonable potential exists for this facility's discharge to exceed water quality standards.

Part III – Administrative Requirements

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

PUBLIC NOTICE:

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

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

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

- The Public Notice period for this operating permit began on September 12, 2014 and ended on October 13, 2014. The permittee submitted comments during the Public Notice period. These comments and the Department's responses are summarized below.

1. The permittee requested the Department allow representative sampling for the outfalls being added to the permit. The Department did not grant this request.
2. The permittee requests that monitoring not be required for Outfall #026, as it is a vehicle parking lot. The Department removed monitoring requirements for Outfall #026 per 10 CSR 20-6.200(1)(B)2.

DATE OF FACT SHEET: 10/21/2014

COMPLETED BY:

AMANDA SAPPINGTON
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION – INDUSTRIAL UNIT
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Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0004936
FORD MOTOR COMPANY – KANSAS CITY ASSEMBLY PLANT

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for:

- Major
- Minor
- Industrial Facility
- Variance
- Master General Permit
- General Permit Covered Facility
- And/or permit with widespread public interest

Part I – Facility Information

Facility Type: Vehicle Assembly Plant
Facility SIC Code(s): 3711

Facility Description:
Industrial Stormwater/Non-contact cooling water

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

No

Application Date: 11/06/09
Expiration Date: 05/05/10

Last Inspection: 01/11/07 In Compliance

2011 Permit Modification

The Ford Motor Company – Kansas City Assembly Plant has requested a permit modification to allow time to attain compliance with the final effluent limitations for Total Residual Copper at Outfall #016. Upon investigation, the facility has determined that the source of Copper at Outfall #016 is an area of the roof that is stained with copper residue from a process that no longer occurs at the plant. The facility has been allowed a three year schedule of compliance in order to encapsulate the stained roof areas and to conduct sufficient sampling to conclude that the stormwater contamination source has been contained. The facility has also rased concern that the revised final limits for pH cannot be immediately complied with due to precipitation pH at the site being above 6.5. As such interim pH limits of 6.0 – 9.0 have been allowed for the facility to determine what course of action should be taken to comply with final limits. Interim copper and pH limits and a schedule of compliance were the only items that were addressed in this permit modification.

Outfall(s) Table:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#001	4.16	none	Non-contact cooling water/Stormwater	0
#002	5.85	none	Non-contact cooling water/Stormwater	0
#003	5.1	none	Non-contact cooling water/Stormwater	0.5
#004	2.66	none	Non-contact cooling water/Stormwater	0.3
#006	0.32	none	Stormwater	0.37
#008	4.56	none	Stormwater	0.1
#012	3.50	none	Non-contact cooling water/Stormwater	0.65
#013	3.56	none	Non-contact cooling water/Stormwater	0.5
#016	1.22	none	Non-contact cooling water/Stormwater	0.8
#021	0.32	none	Non-contact cooling water/Stormwater	0.36

Outfall #001 – Industry – SIC #3711

Legal Description: SE ¼, NE ¼, Sec.27, T51N, R32W, Clay County

UTM Coordinates: X = 372552, Y = 4340614

Receiving Stream: Shoal Creek (P)

First Classified Stream and ID: Shoal Creek (P) (00396)

USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives an average of 75,000 GPD of non-contact cooling water plus a precipitation-dependent volume of stormwater from the employee parking lot. During the previous permit cycle, permit effluent limitations for pH were exceeded once in 2006 and once in 2007.

Outfall #002 – Industry – SIC #3711

Legal Description: NE ¼, NE ¼, Sec 27, T51N, R32W, Clay County

UTM Coordinates: X = 372340, Y = 4340772

Receiving Stream: Shoal Creek (P)

First Classified Stream and ID: Shoal Creek (P) (00396)

USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives an average of 52,000 GPD of non-contact cooling water plus a precipitation-dependent volume of stormwater from a parking lot. During the previous permit cycle, permit effluent limitations for pH were exceeded once in 2006, once in 2007, and once in 2008.

Outfall #003 – Industry – SIC #3711

Legal Description: NE ¼, SE ¼, Sec 27, T51N, R32W, Clay County

UTM Coordinates: X = 372279, Y = 4340019

Receiving Stream: Thornton Mill Creek (U)

First Classified Stream and ID: Shoal Creek (P) (00396)

USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives an average of 70,000 GPD of non-contact cooling water plus a precipitation-dependent volume of stormwater from roof and road drains from the SUV body shop. There were no permit limit exceedances at this outfall during the previous permit cycle.

Outfall #004 – Industry – SIC #3711

Legal Description: NW ¼, SW ¼, Sec 26, T51N, R32W, Clay County

UTM Coordinates: X = 372631, Y = 4340088

Receiving Stream: Thornton Mill Creek (U)

First Classified Stream and ID: Shoal Creek (P) (00396)

USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives an average of 2,000 GPD of non-contact cooling water plus a precipitation-dependent volume of stormwater from a sorting and storage area for parts after painting. There were no permit limit exceedances at this outfall during the previous permit cycle.

Outfall #006 – Industry – SIC #3711

Legal Description: NE ¼, SE ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 372549, Y = 4340022
Receiving Stream: Thornton Mill Creek (U)
First Classified Stream and ID: Shoal Creek (P) (00396)
USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives stormwater only, the flow of which is dependent on precipitation. During the previous permit cycle, permit limits for Settleable Solids were exceeded once in 2006 at this outfall. Based on the statewide default stormwater hardness of 193mg/L, the acute water quality standard for Total Recoverable Lead is 188.4µg/L. Total Recoverable Lead was measured at 160µg/L at this outfall during the previous permit cycle. This measured value and the proximity of this outfall to the wastewater pretreatment plant justifies keeping monitoring requirements for lead in the current permit renewal. The facility has requested the removal of Chemical Oxygen Demand (COD) monitoring at this outfall. The reported COD for 2007, 2008, and 2009 have all been well within permitted limits found in other industrial stormwater permits. In 2004, however, COD was reported once at 118mg/L and in 2006 COD was reported once at 120mg/L. Once again, these high values and the proximity of this outfall to the wastewater pretreatment plant justifies keeping monitoring requirements for COD in the current permit renewal.

Outfall #008 – Industry – SIC #3711

Legal Description: SW ¼, NW ¼, Sec 26, T51N, R32W, Clay County
UTM Coordinates: X = 372644, Y = 4340533
Receiving Stream: Shoal Creek (P)
First Classified Stream and ID: Shoal Creek (P) (00396)
USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives stormwater only from a parking lot, the flow of which is dependent on precipitation. There were no permit limit exceedances at this outfall during the previous permit cycle. As in the previous permit, this outfall is considered representative of Outfalls #005 and #007 on the east and northeast edge of the property, which will not require monitoring in this permit cycle.

Outfall #012 – Industry – SIC #3711

Legal Description: NW ¼, SE ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 372138, Y = 4340103
Receiving Stream: Thornton Mill Creek (U)
First Classified Stream and ID: Shoal Creek (P) (00396)
USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives an average of 1,000 GPD of non-contact cooling water plus a precipitation-dependent volume of stormwater from the parking lot of the truck body shop. There were no permit limit exceedances at this outfall during the previous permit cycle.

Outfall #013 – Industry – SIC #3711

Legal Description: NE ¼, SE ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 372395, Y = 4339927
Receiving Stream: Thornton Mill Creek (U)
First Classified Stream and ID: Shoal Creek (P) (00396)
USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives an average of 4,000 GPD of non-contact cooling water plus a precipitation-dependent volume of stormwater from the roof and parking lot of the truck paint shop. During the previous permit cycle, permit effluent limitations for pH were exceeded once in 2006.

Outfall #016 – Industry – SIC #3711

Legal Description: NW ¼, SE ¼, Sec 27, T51N, R32W, Clay County
UTM Coordinates: X = 371967, Y = 4340208
Receiving Stream: Thornton Mill Creek (U)
First Classified Stream and ID: Shoal Creek (P) (00396)
USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives an average of 21,000 GPD of non-contact cooling water plus a precipitation-dependent volume of stormwater from the roof and parking lot of the truck body shop. During the previous permit cycle, permit effluent limitations for pH were exceeded once in 2007. Reported concentrations of Total Residual Copper at this outfall repeatedly exceed acute water quality standards of 26.0µg/L for the statewide stormwater default hardness of 196mg/L. As such, permit limits will be assessed for Total Residual Copper at this outfall.

Outfall #021 – Industry – SIC #3711

Legal Description: NE ¼, SE ¼, Sec 27, T51N, R32W, Clay County

UTM Coordinates: X = 372554, Y = 4339989

Receiving Stream: Thornton Mill Creek (U)

First Classified Stream and ID: Shoal Creek (P) (00396)

USGS Basin & Sub-watershed No.: (10300101 – 040001)

This outfall receives an average of 5,000 GPD of non-contact cooling water plus a precipitation-dependent volume of stormwater from the rail car loading and unloading area. There were no permit limit exceedances at this outfall during the previous permit cycle.

Part II – Operator Certification Requirements

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.010(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Check boxes below that are applicable to the facility;

- Owned or operated by or for:
 - Municipalities
 - Public Sewer District
 - County
 - Public Water Supply Districts
 - Private sewer company regulated by the Public Service Commission
 - State or Federal agencies

Each of the above entities are only applicable if they have a Population Equivalent greater than two hundred (200) and/or fifty (50) or more service connections.

- This facility is not required to have a certified operator.

Part III – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

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

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

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

RECEIVING STREAM(S) TABLE:

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Thornton Mill Creek	U	NA	General Criteria	10300101	Central Plains Blackwater/Lamine
Shoal Creek	P	00396	LWW, AQL, WBC-B***		

* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery (CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).

** - Ecological Drainage Unit

*** - UAA has not been conducted.

RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Thornton Mill Creek (U)	0	0	0
Shoal Creek (P)	0.1	0.1	1.0

MIXING CONSIDERATIONS:

Mixing Zones and Zones of Initial Dilution are not allowed. Effluent from this facility is primarily stormwater runoff. Permit limits and water quality standards must be met at the end of the pipe.

RECEIVING STREAM MONITORING REQUIREMENTS:

No receiving water monitoring requirements recommended at this time.

Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions**ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

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

Not Applicable

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

ANTI-BACKSLIDING:

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

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

ANTIDEGRADATION:

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

Renewal no degradation proposed and no further review necessary.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

As per [10 CSR 20-6.010(3)(B)], ... An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the department.

BIO-SOLIDS, SLUDGE, & SEWAGE SLUDGE:

Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sludge is any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works.

Not Applicable

This permit is for stormwater and non-contact cooling water only; therefore, this condition does not apply.

COMPLIANCE AND ENFORCEMENT:

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

Not Applicable

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

PRETREATMENT PROGRAM:

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

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

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

Not Applicable

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

REASONABLE POTENTIAL ANALYSIS (RPA):

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard.

In accordance with [40 CFR Part 122.44(d)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Not Applicable

A RPA was not conducted for this facility. All permit limits in this permit are for stormwater only; therefore, reasonable potential has been determine by direct comparison of measured effluent parameters to corresponding water quality standards.

REMOVAL EFFICIENCY:

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD₅) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals. Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm.

Not Applicable

Influent monitoring is not being required to determine percent removal.

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

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

Untreated or partially treated discharges from SSSs are commonly referred to as SSOs. SSOs have a variety of causes including blockages, line breaks, sewer defects that allow excess storm water and ground water to overload the system, lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. A SSO is defined as an untreated or partially treated sewage release from a SSS. SSOs can occur at any point in an SSS, during dry weather or wet weather. SSOs include overflows that reach waters of the state. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations. SSSs can back up into buildings, including private residences. When sewage backups are caused by problems in the publicly-owned portion of an SSS, they are considered SSOs.

Not Applicable

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

SCHEDULE OF COMPLIANCE (SOC):

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

Applicable

The time given for effluent limitations of this permit listed under Interim Effluent Limitation and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(10)].

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

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

In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

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

Applicable

A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan.

VARIANCE:

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

Not Applicable

This operating permit is not drafted under premises of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the department to release into a given stream after the department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Applicable

Wasteload allocations were calculated where applicable using water quality criteria. Since no mixing zones or zones of initial dilution are allowed for this facility, WLAs have been set at the applicable water quality standards.

WLA MODELING:

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

Not Applicable

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

WATER QUALITY STANDARDS:

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

WHOLE EFFLUENT TOXICITY (WET) TEST:

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

Not applicable :

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

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

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

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

Not Applicable

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

Part V – Effluent Limits Determination

Basis for Limitations Codes:

- | | |
|--|------------------------------------|
| 1. State or Federal Regulation/Law | 7. Antidegradation Policy |
| 2. Water Quality Standard (includes RPA) | 8. Water Quality Model |
| 3. Water Quality Based Effluent Limits | 9. Best Professional Judgment |
| 4. Lagoon Policy | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy | 11. WET Test Policy |
| 6. Dissolved Oxygen Policy | 12. Antidegradation Review |
| | 13. Dissolved Oxygen Policy |

Outfalls #001, #002, #003, #004, #012, #013, and #021

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	NO	SAME
SETTLABLE SOLIDS	ML/L/HR	9	1.5		1.0	NO	SAME
pH	SU	1	6.5-9.0		6.5-9.0	YES	6.0-9.0
TEMPERATURE	°C	1	**		**	NO	SAME
OIL & GREASE (MG/L)	MG/L	2/3	15		10	NO	SAME
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* Monitoring requirement only.

** Effluent shall not raise or lower the temperature of the receiving stream more than 2.78°C and shall not cause or contribute to stream temperature in excess of 32.22°C.

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

OUTFALLS #001, #002, #003, #004, #012, #013, AND #021 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow**. In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- **Settleable Solids (SS)**. Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream's Water Quality. Therefore, effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.
- **pH**. Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged.
- **Temperature**. Effluent limitations have been set according to state regulation [10 CSR 20-7.031(4)(D)1] for warm water fisheries.
- **Oil & Grease**. Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

Outfall #006

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	NO	SAME
SETTLABLE SOLIDS	ML/L/HR	9	1.5		1.0	NO	SAME
pH	SU	1	6.5-9.0		6.5-9.0	YES	6.0-9.0
OIL & GREASE (MG/L)	MG/L	2/3	15		10	NO	SAME
CHEMICAL OXYGEN DEMAND	mg/L	9	*		*	NO	SAME
HARDNESS	mg/L	9	*		*	NO	SAME
PRECIPITATION	inches	9	*		*	YES	***
LEAD, TOTAL RECOVERABLE	µg/L	2/3	*		*	NO	SAME
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* Monitoring requirement only.

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

OUTFALL #006 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- **Settleable Solids (SS).** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream’s Water Quality. Therefore, effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.
- **pH.** Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Chemical Oxygen Demand.** Monitoring requirement has been retained from the previous operating permit due to observed values and the proximity of this outfall to the wastewater pretreatment plant.
- **Hardness.** Monitoring requirement only since the toxicity of lead is hardness dependent.
- **Total Recoverable Lead.** Monitoring requirement has been retained from the previous permit due to observed values and the proximity of this outfall to the wastewater pretreatment plant.
- **Precipitation.** Monitoring requirement only. Data does not necessarily need to be collected at Outfall #006 but should be reported along with Outfall #006’s quarterly reports.

Outfall #008

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	NO	SAME
SETTLABLE SOLIDS	ML/L/HR	9	1.5		1.0	NO	SAME
pH	SU	1	6.5-9.0		6.5-9.0	YES	6.0-9.0
OIL & GREASE (MG/L)	MG/L	2/3	15		10	NO	SAME
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* Monitoring requirement only.

OUTFALL #008 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- **Settleable Solids (SS).** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream’s Water Quality. Therefore, effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information.**
- **pH.** Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

The previous permit for this facility contained monitoring for lead and hardness at this outfall. Since observed values for lead during the previous permit cycle were well below water quality standards, these monitoring requirements have been removed from the current permit renewal.

Outfall #016

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	NO	SAME
SETTLEABLE SOLIDS	ML/L/HR	9	1.5		1.0	NO	SAME
pH	SU	1	6.5-9.0		6.5-9.0	YES	6.0-9.0
TEMPERATURE	°C	1	**		**	NO	SAME
OIL & GREASE (MG/L)	MG/L	2/3	15		10	NO	SAME
HARDNESS	mg/L	9	*		*	NO	SAME
COPPER, TOTAL RECOVERABLE	µg/L	2/3	26		13	NO	SAME
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* Monitoring requirement only.

** Effluent shall not raise or lower the temperature of the receiving stream more than 2.78°C and shall not cause or contribute to stream temperature in excess of 32.22°C.

OUTFALLS #016 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- **Settleable Solids (SS).** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream’s Water Quality. Therefore, effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information.**
- **pH.** Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged.
- **Temperature.** Effluent limitations have been set according to state regulation [10 CSR 20-7.031(4)(D)1] for warm water fisheries.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Hardness.** Monitoring requirement only since the toxicity of copper is hardness dependent.

Metals

Effluent limitations for total recoverable metals were developed using methods and procedures outlined in EPA/505/2-90-001 and “The Metals Translator: Guidance For Calculating A Total Recoverable Permit Limit From A Dissolved Criterion” (EPA 823-B-96-007). General warm-water fishery criteria apply and water hardness = 193mg/L.

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

METAL	CONVERSION FACTORS	
	ACUTE	CHRONIC
Copper	0.960	NA

- **Copper, Total Recoverable.** Protection of Aquatic Life Acute Criteria (CMC) = 25 µg/L. No mixing allowed; therefore, the CMC = the WLA (after conversion).

Conversion for CMC = $25 / .960 = 26.0$ µg/L

WLA_a = 26 µg/L

LTA_a = 26 µg/L (0.321...) = 8.3 µg/L

[CV = 0.6, 99th Percentile]

MDL = 8.3 µg/L (3.11...) = 26 µg/L

[CV = 0.6, 99th Percentile]

AML = 8.3 µg/L (1.55...) = 13 µg/L

[CV = 0.6, 95th Percentile, n = 4]

The previous permit for this facility contained monitoring for lead at this outfall. Since observed values for lead during the previous permit cycle were well below water quality standards, this monitoring requirement has been removed from the current permit renewal.

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

Precipitation - Monitoring requirement only for the daily maximum and monthly average for each month in the quarter. This measurement is not specific to any outfall, but rather, applies to the entire facility in general. Precipitation data may be obtained from the nearest rain gauge or weather monitoring station. Data need not be collected on a daily basis, but rather, may be obtained for the entire month once it has ended. Only the daily maximums and the monthly averages for each month should be reported but daily data should be kept on file for future reference.

Part VI – Administrative Requirements

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

PUBLIC NOTICE:

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

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

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

- The Public Notice period for this operating permit was from May 28, 2010 to June 28, 2010. No responses received or responses to the Public Notice of this operating permit do not warrant the modification of effluent limits and/or the terms and conditions of this permit.

DATE OF FACT SHEET: APRIL 28, 2010

DATE OF FACT SHEET REVISION: DECEMBER 22, 2010

COMPLETED BY:

JIMMY COLES, ENVIRONMENTAL SPECIALIST
KANSAS CITY REGIONAL OFFICE
NPDES PERMITS UNIT
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Part VII – Appendices

APPENDIX # 1 - FACILITY MAP VIEW



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

**PART III – SLUDGE AND BIOSOLIDS FROM DOMESTIC AND
INDUSTRIAL WASTEWATER TREATMENT FACILITIES**

SECTION A – GENERAL REQUIREMENTS

1. This permit pertains to sludge requirements under the Missouri Clean Water Law and regulation for domestic wastewater and industrial process wastewater. This permit also incorporates applicable federal sludge disposal requirements under 40 CFR 503 for domestic wastewater. The Environmental Protection Agency (EPA) has principal authority for permitting and enforcement of the federal sludge regulations under 40 CFR 503 for domestic wastewater. EPA has reviewed and accepted these standard sludge conditions. EPA may choose to issue a separate sludge addendum to this permit or a separate federal sludge permit at their discretion to further address the federal requirements.
2. These Part III Standard Conditions apply only to sludge and biosolids generated at domestic wastewater treatment facilities, including public owned treatment works (POTW), privately owned facilities and sludge or biosolids generated at industrial facilities.
3. Sludge and Biosolids Use and Disposal Practices:
 - a. The permittee is authorized to operate the sludge and biosolids treatment, storage, use, and disposal facilities listed in the facility description of this permit.
 - b. The permittee shall not exceed the design sludge volume listed in the facility description and shall not use sludge disposal methods that are not listed in the facility description, without prior approval of the permitting authority.
 - c. The permittee is authorized to operate the storage, treatment or generating sites listed in the Facility Description section of this permit.
4. Sludge Received from other Facilities:
 - a. Permittees may accept domestic wastewater sludge from other facilities including septic tank pumpings from residential sources as long as the design sludge volume is not exceeded and the treatment facility performance is not impaired.
 - b. The permittee shall obtain a signed statement from the sludge generator or hauler that certifies the type and source of the sludge
5. These permit requirements do not supersede nor remove liability for compliance with county and other local ordinances.
6. These permit requirements do not supersede nor remove liability for compliance with other environmental regulations such as odor emissions under the Missouri Air Pollution Control Law and regulations.
7. This permit may (after due process) be modified, or alternatively revoked and reissued, to comply with any applicable sludge disposal standard or limitation issued or approved under Section 405(d) of the Clean Water Act under Chapter 644 RSMo.
8. In addition to STANDARD CONDITIONS, the Department may include sludge limitations in the special conditions portion or other sections of a site specific permit.
9. Alternate Limits in the Site Specific Permit.

Where deemed appropriate, the Department may require an individual site specific permit in order to authorize alternate limitations:

 - a. A site specific permit must be obtained for each operating location, including application sites.
 - b. To request a site specific permit, an individual permit application, permit fee, and supporting documents shall be submitted for each operating location. This shall include a detailed sludge/biosolids management plan or engineering report.
10. Exceptions to these Standard Conditions may be authorized on a case-by-case basis by the Department, as follows:
 - a. The Department will prepare a permit modification and follow permit notice provisions as applicable under 10 CSR 20-6.020, 40 CFR 124.10, and 40 CFR 501.15(a)(2)(ix)(E). This includes notification of the owner of the property located adjacent to each land application site, where appropriate.
 - b. Exceptions cannot be granted where prohibited by the federal sludge regulations under 40 CFR 503.

SECTION B – DEFINITIONS

1. Best Management Practices include agronomic loading rates, soil conservation practices and other site restrictions.
2. Biosolids means organic fertilizer or soil amendment produced by the treatment of domestic wastewater sludge.
3. Biosolids land application facility is a facility where biosolids are spread onto the land at agronomic rates for production of food or fiber. The facility includes any structures necessary to store the biosolids until soil, weather, and crop conditions are favorable for land application.
4. Class A biosolids means a material that has met the Class A pathogen reduction requirements or equivalent treatment by a Process to Further Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
5. Class B biosolids means a material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
6. Domestic wastewater means wastewater originating from the sanitary conveniences of residences, commercial buildings, factories and institutions; or co-mingled sanitary and industrial wastewater processed by a (POTW) or a privately owned facility.
7. Industrial wastewater means any wastewater, also known as process water, not defined as domestic wastewater. Per 40 CFR Part 122, process water means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.
8. Mechanical treatment plants are wastewater treatment facilities that use mechanical devices to treat wastewater, including septic tanks, sand filters, extended aeration, activated sludge, contact stabilization, trickling filters, rotating biological discs, and other similar facilities. It does not include wastewater treatment lagoons and constructed wetlands for wastewater treatment.
9. Operating location as defined in 10 CSR 20-2.010 is all contiguous lands owned, operated or controlled by one (1) person or by two (2) or more persons jointly or as tenants in common.
10. Plant Available Nitrogen (PAN) is the nitrogen that will be available to plants during the growing seasons after biosolids application.
11. Public contact site is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.
12. Sludge is the solid, semisolid, or liquid residue removed during the treatment of wastewater. Sludge includes septage removed from septic tanks or equivalent facilities. Sludge does not include carbon coal byproducts (CCBs)
13. Sludge lagoon is part of a mechanical wastewater treatment facility. A sludge lagoon is an earthen basin that receives sludge that has been removed from a wastewater treatment facility. It does not include a wastewater treatment lagoon or sludge treatment units that are not a part of a mechanical wastewater treatment facility.
14. Septage is the material pumped from residential septic tanks and similar treatment works (with a design population of less than 150 people). The standard for biosolids from septage is different from other sludges.

SECTION C – MECHANICAL WASTEWATER TREATMENT FACILITIES

1. Sludge shall be routinely removed from wastewater treatment facilities and handled according to the permit facility description and sludge conditions of this permit.
2. The permittee shall operate the facility so that there is no sludge discharged to waters of the state.
3. Mechanical treatment plants shall have separate sludge storage compartments in accordance with 10 CSR 20, Chapter 8. Failure to remove sludge from these storage compartments on the required design schedule is a violation of this permit.

SECTION D – SLUDGE DISPOSED AT OTHER TREATMENT FACILITY OR CONTRACT HAULER

1. This section applies to permittees that haul sludge to another treatment facility for disposal or use contract haulers to remove and dispose of sludge.
2. Permittees that use contract haulers are responsible for compliance with all the terms of this permit including final disposal, unless the hauler has a separate permit for sludge or biosolids disposal issued by the Department; or the hauler transports the sludge to another permitted treatment facility.
3. Haulers who land apply septage must obtain a state permit.
4. Testing of sludge, other than total solids content, is not required if sludge is hauled to a municipal wastewater treatment facility or other permitted wastewater treatment facility, unless it is required by the accepting facility.

SECTION E – INCINERATION OF SLUDGE

1. Sludge incineration facilities shall comply with the requirements of 40 CFR 503 Subpart E; air pollution control regulations under 10 CSR 10; and solid waste management regulations under 10 CSR 80.
2. Permittee may be authorized under the facility description of this permit to store incineration ash in lagoons or ash ponds. This permit does not authorize the disposal of incineration ash. Incineration ash shall be disposed in accordance with 10 CSR 80; or if the ash is determined to be hazardous with 10 CSR 25.
3. In addition to normal sludge monitoring, incineration facilities shall report the following as part of the annual report, quantity of sludge incinerated, quantity of ash generated, quantity of ash stored, and ash used or disposal method, quantity, and location. Permittee shall also provide the name of the disposal facility and the applicable permit number.

SECTION F – SURFACE DISPOSAL SITES AND SLUDGE LAGOONS

1. Surface disposal sites of domestic facilities shall comply with the requirements in 40 CFR 503 Subpart C; air pollution control regulations under 10 CSR 10; and solid waste management regulations under 10 CSR 80.
2. Sludge storage lagoons are temporary facilities and are not required to obtain a permit as a solid waste management facility under 10 CSR 80. In order to maintain sludge storage lagoons as storage facilities, accumulated sludge must be removed routinely, but not less than once every two years unless an alternate schedule is approved in the permit. The amount of sludge removed will be dependent on sludge generation and accumulation in the facility. Enough sludge must be removed to maintain adequate storage capacity in the facility.
 - a. In order to avoid damage to the lagoon seal during cleaning, the permittee may leave a layer of sludge on the bottom of the lagoon, upon prior approval of the Department; or
 - b. Permittee shall close the lagoon in accordance with Section H.

SECTION G – LAND APPLICATION

1. The permittee shall not land apply sludge or biosolids unless land application is authorized in the facility description or the special conditions of the issued NPDES permit.
2. Land application sites within a 20 miles radius of the wastewater treatment facility are authorized under this permit when biosolids are applied for beneficial use in accordance with these standard conditions unless otherwise specified in a site specific permit. If the permittee's land application site is greater than a 20 mile radius of the wastewater treatment facility, approval must be granted from the Department.
3. Land application shall not adversely affect a threatened or endangered species or its designated critical habitat.
4. Biosolids shall not be applied unless authorized in this permit or exempted under 10 CSR 20, Chapter 6.
 - a. This permit does not authorize the land application of domestic sludge except for when sludge meets the definition of biosolids.
 - b. This permit authorizes "Class A or B" biosolids derived from domestic wastewater and/or process water sludge to be land applied onto grass land, crop land, timber or other similar agricultural or silviculture lands at rates suitable for beneficial use as organic fertilizer and soil conditioner.
5. Public Contact Sites:

Permittees who wish to apply Class A biosolids to public contact sites must obtain approval from the Department after two years of proper operation with acceptable testing documentation that shows the biosolids meet Class A criteria. A shorter length of testing will be allowed with prior approval from the Department. Authorization for land applications must be provided in the special conditions section of this permit or in a separate site specific permit.

 - a. After Class B biosolids have been land applied, public access must be restricted for 12 months.
 - b. Class B biosolids are only land applied to root crops, home gardens or vegetable crops whose edible parts will not be for human consumption.

6. Agricultural and Silvicultural Sites:

Septage – Based on Water Quality guide 422(WQ422) published by the University of Missouri

- a. Haulers that land apply septage must obtain a state permit
- b. Do not apply more than 30,000 gallons of septage per acre per year.
- c. Septage tanks are designed to retain sludge for one to three years which will allow for a larger reduction in pathogens and vectors, as compared to other mechanical type treatment facilities.
- d. To meet Class B sludge requirements, maintain septage at 12 pH for at least thirty (30) minutes before land application. 50 pounds of hydrated lime shall be added to each 1,000 gallons of septage in order to meet pathogen and vector stabilization for septage biosolids applied to crops, pastures or timberland.
- e. Lime is to be added to the pump truck and not directly to the septic tanks, as lime would harm the beneficial bacteria of the septic tank.

Biosolids - Based on Water Quality guide 423, 424, and 425 (WQ423, WQ424, WQ425) published by the University of Missouri;

- a. Biosolids shall be monitored to determine the quality for regulated pollutants
- b. The number of samples taken is directly related to the amount of sludge produced by the facility (See Section I of these Standard Conditions). Report as dry weight unless otherwise specified in the site specific permit. Samples should be taken only during land application periods. When necessary, it is permissible to mix biosolids with lower concentrations of biosolids as well as other suitable Department approved material to reach the maximum concentration of pollutants allowed.
- c. Table 1 gives the maximum concentration allowable to protect water quality standards

TABLE 1

Biosolids Ceiling Concentration ¹	
Pollutant	Milligrams per kilogram dry weight
Arsenic	75
Cadmium	85
Copper	4,300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7,500

¹ Land application is not allowed if the sludge concentration exceeds the maximum limits for any of these pollutants

- d. The low metal concentration biosolids has reduced requirements because of its higher quality and can safely be applied for 100 years or longer at typical agronomic loading rates. (See Table 2)

TABLE 2

Biosolids Low Metal Concentration ¹	
Pollutant	Milligrams per kilogram dry weight
Arsenic	41
Cadmium	39
Copper	1,500
Lead	300
Mercury	17
Nickel	420
Selenium	36
Zinc	2,800

¹ You may apply low metal biosolids without tracking cumulative metal limits, provided the cumulative application of biosolids does not exceed 500 dry tons per acre.

- e. Each pollutant in Table 3 has an annual and a total cumulative loading limit, based on the allowable pounds per acre for various soil categories.

TABLE 3

Pollutant	CEC 15+		CEC 5 to 15		CEC 0 to 5	
	Annual	Total ¹	Annual	Total ¹	Annual	Total ¹
Arsenic	1.8	36.0	1.8	36.0	1.8	36.0
Cadmium	1.7	35.0	0.9	9.0	0.4	4.5
Copper	66.0	1,335.0	25.0	250.0	12.0	125.0
Lead	13.0	267.0	13.0	267.0	13.0	133.0
Mercury	0.7	15.0	0.7	15.0	0.7	15.0
Nickel	19.0	347.0	19.0	250.0	12.0	125.0
Selenium	4.5	89.0	4.5	44.0	1.6	16.0
Zinc	124.0	2,492.0	50.0	500.0	25.0	250.0

¹ Total cumulative loading limits for soils with equal or greater than 6.0 pH (salt based test) or 6.5 pH (water based test)

TABLE 4 - Guidelines for land application of other trace substances ¹

Cumulative Loading	
Pollutant	Pounds per acre
Aluminum	4,000 ²
Beryllium	100
Cobalt	50
Fluoride	800
Manganese	500
Silver	200
Tin	1,000
Dioxin	(10 ppt in soil) ³
Other	⁴

¹ Design of land treatment systems for Industrial Waste, 1979. Michael Ray Overcash, North Carolina State University and Land Treatment of Municipal Wastewater, EPA 1981.)

² This applies for a soil with a pH between 6.0 and 7.0 (salt based test) or a pH between 6.5 to 7.5 (water based test). Case-by-case review is required for higher pH soils.

³ Total Dioxin Toxicity Equivalents (TEQ) in soils, based on a risk assessment under 40 CFR 744, May 1998.

⁴ Case by case review. Concentrations in sludge should not exceed the 95th percentile of the National Sewage Sludge Survey, EPA, January 2009.

Best Management Practices – Based on Water Quality guide 426 (WQ426) published by the University of Missouri

- a. Use best management practices when applying biosolids.
- b. Biosolids cannot discharge from the land application site
- c. Biosolid application is subject to the Missouri Department of Agriculture State Milk Board concerning grazing restrictions of lactating dairy cattle.
- d. Biosolid application must be in accordance with section 4 of the Endangered Species Act.
- e. Do not apply more than the agronomic rate of nitrogen needed.
- f. The applicator must document the Plant Available Nitrogen (PAN) loadings, available nitrogen in the soil and crop removals unless the nitrogen content of the biosolids does not exceed 50,000 milligrams per kilogram of total nitrogen on a dry weight basis and biosolids application rate is less than two dry tons per acre per year.
 - i. PAN can be determined as follows and is in accordance with WQ426
 $(\text{Nitrate} + \text{nitrite nitrogen}) + (\text{organic nitrogen} \times 0.2) + (\text{ammonia nitrogen} \times \text{volatilization factor}^1)$.

¹ Volatilization factor is 0.7 for surface application and 1 for subsurface application.

- g. Buffer zones are as follows:
 - i. 300 feet of a water supply well, sinkhole, lake, pond, water supply reservoir or water supply intake in a stream;
 - ii. 300 feet of a losing stream, no discharge stream, stream stretches designated for whole body contact recreation, wild and scenic rivers, Ozark National Scenic Riverways or outstanding state resource waters as listed in the Water Quality Standards, 10 CSR 20-7.031;
 - iii. 150 feet if dwellings;
 - iv. 100 feet of wetlands or permanent flowing streams;
 - v. 50 feet of a property line or other waters of the state, including intermittent flowing streams.
- h. Slope limitation for application sites are as follows:
 - i. A slope 0 to 6 percent has no rate limitation
 - ii. Applied to a slope 7 to 12 percent, the applicator may apply biosolids when soil conservation practices are used to meet the minimum erosion levels
 - iii. Slopes > 12, apply biosolids only when grass is vegetated and maintained with at least 80 percent ground cover at a rate of two dry tons per acre per year or less.
- i. No biosolids may be land applied in an area that it is reasonably certain that pollutants will be transported into waters of the state.
- j. Do not apply biosolids to sites with soil that is snow covered, frozen or saturated with liquid without prior approval by the Department.
- k. Biosolids / sludge applicators must keep detailed records up to five years.

SECTION H – CLOSURE REQUIREMENTS

1. This section applies to all wastewater facilities (mechanical, industrial, and lagoons) and sludge or biosolids storage and treatment facilities and incineration ash ponds. It does not apply to land application sites.
2. Permittees of a domestic wastewater facility who plan to cease operation must obtain Department approval of a closure plan which addresses proper removal and disposal of all residues, including sludge, biosolids. Mechanical plants, sludge lagoons, ash ponds and other storage structures must obtain approval of a closure plan from the Department. Permittee must maintain this permit until the facility is closed in accordance with the approved closure plan per 10 CSR 20 – 6. 010 and 10 CSR 20 – 6.015.
3. Residuals that are left in place during closure of a lagoon or earthen structure or ash pond shall not exceed the agricultural loading rates as follows:
 - a. Residuals shall meet the monitoring and land application limits for agricultural rates as referenced in Section H of these standard conditions.
 - b. If a wastewater treatment lagoon has been in operation for 15 years or more without sludge removal, the sludge in the lagoon qualifies as a Class B biosolids with respect to pathogens due to anaerobic digestion, and testing for fecal coliform is not required. For other lagoons, testing for fecal coliform is required to show compliance with Class B biosolids limitations. In order to reach Class B biosolids requirements, fecal coliform must be less than 2,000,000 colony forming units or 2,000,000 most probable number. All fecal samples must be presented as geometric mean per gram.
 - c. The allowable nitrogen loading that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. For a grass cover crop, the allowable PAN is 300 pounds/acre.
 - i. PAN can be determined as follows:

$$(\text{Nitrate} + \text{nitrite nitrogen}) + (\text{organic nitrogen} \times 0.2) + (\text{ammonia nitrogen} \times \text{volatilization factor}^1)$$

¹ Volatilization factor is 0.7 for surface application and 1 for subsurface application.
4. When closing a domestic wastewater treatment lagoon with a design treatment capacity equal or less than 150 persons, the residuals are considered “septage” under the similar treatment works definition. See Section B of these standard conditions. Under the septage category, residuals may be left in place as follows:
 - a. Testing for metals or fecal coliform is not required
 - b. If the wastewater treatment lagoon has been in use for less than 15 years, mix lime with the sludge at a rate of 50 pounds of hydrated lime per 1000 gallons (134 cubic feet) of sludge.
 - c. The amount of sludge that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. 100 dry tons/acre of sludge may be left in the basin without testing for nitrogen. If 100 dry tons/acre or more will be left in the lagoon, test for nitrogen and determine the PAN using the calculation above. Allowable PAN loading is 300 pounds/acre.

5. Residuals left within the domestic lagoon shall be mixed with soil on at least a 1 to 1 ratio, the lagoon berm shall be demolished, and the site shall be graded and contain $\geq 70\%$ vegetative density over 100% of the site so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
6. Lagoons and/or earthen structure and/or ash pond closure activities shall obtain a storm water permit for land disturbance activities that equal or exceed one acre in accordance with 10 CSR 20-6.200
7. When closing a mechanical wastewater and/or industrial process wastewater plant; all sludge must be cleaned out and disposed of in accordance with the Department approved closure plan before the permit for the facility can be terminated.
 - a. Land must be stabilized which includes any grading, alternate use or fate upon approval by the Department, remediation, or other work that exposes sediment to stormwater per 10 CSR 20-6.200. The site shall be graded and contain $\geq 70\%$ vegetative density over 100% of the site, so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
 - b. Per 10 CSR 20-6.015(4)(B)6, Hazardous Waste shall not be land applied or disposed during industrial and mechanical plant closures unless in accordance with Missouri Hazardous Waste Management Law and Regulations under 10 CSR 25.
 - c. After demolition of the mechanical plant / industrial plant, the site must only contain clean fill defined in RSMo 260.200 (5) as uncontaminated soil, rock, sand, gravel, concrete, asphaltic concrete, cinderblocks, brick, minimal amounts of wood and metal, and inert solids as approved by rule or policy of the Department for fill or other beneficial use. Other solid wastes must be removed.
8. If sludge from the domestic lagoon or mechanical treatment plant exceeds agricultural rates under Section G and/or H, a landfill permit or solid waste disposal permit must be obtained if the permittee chooses to seek authorization for on-site sludge disposal under the Missouri Solid Waste Management Law and regulations per 10 CSR 80, and the permittee must comply with the surface disposal requirements under 40 CFR 503, Subpart C.

SECTION I – MONITORING FREQUENCY

1. At a minimum, sludge or biosolids shall be tested for volume and percent total solids on a frequency that will accurately represent sludge quantities produced and disposed. Please see the table below.

TABLE 5

Design Sludge Production (dry tons per year)	Monitoring Frequency (See Notes 1 and 2)			
	Metals, Pathogens and Vectors	Nitrogen TKN ¹	Nitrogen PAN ²	Priority Pollutants and TCLP ³
0 to 100	1 per year	1 per year	1 per month	1 per year
101 to 200	biannual	biannual	1 per month	1 per year
201 to 1,000	quarterly	quarterly	1 per month	1 per year
1,001 to 10,000	1 per month	1 per month	1 per week	-- ⁴
10,001 +	1 per week	1 per week	1 per day	-- ⁴

¹ Test total Kjeldahl nitrogen, if biosolids application is 2 dry tons per acre per year or less

² Calculate plant available nitrogen, if biosolids application is more than 2 dry tons per acre per year.

³ Priority pollutants (40 CFR 122.21, Appendix D, Tables II and III) and toxicity characteristic leaching procedure (40 CFR 261.24) is required only for permit holders that must have a pre-treatment program.

⁴ One sample for each 1,000 dry tons of sludge.

Note 1: Total solids: A grab sample of sludge shall be tested one per day during land application periods for percent total solids. This data shall be used to calculate the dry tons of sludge applied per acre.

Note 2: Total Phosphorus: Total phosphorus and total potassium shall be tested at the same monitoring frequency as metals.

2. If you own a wastewater treatment lagoon or sludge lagoon that is cleaned out once a year or less, you may choose to sample only when the sludge is removed or the lagoon is closed. Test one composite sample for each 100 dry tons of sludge or biosolids removed from the lagoon during the year within the lagoon at closing. Composite sample must represent various areas at one-foot depth.
3. Additional testing may be required in the special conditions or other sections of the permit. Permittees receiving industrial wastewater may be required to conduct additional testing upon request from the Department.
4. At this time, the Department recommends monitoring requirements shall be performed in accordance with, "POTW Sludge Sampling and Analysis Guidance Document," United States Environmental Protection Agency, August 1989, and the subsequent revisions.

SECTION J – RECORD KEEPING AND REPORTING REQUIREMENTS

1. The permittee shall maintain records on file at the facility for at least five years for the items listed in these standard conditions and any additional items in the Special Conditions section of this permit. This shall include dates when the sludge facility is checked for proper operation, records of maintenance and repairs and other relevant information.
2. Reporting period
 - a. By January 28th of each year, an annual report shall be submitted for the previous calendar year period for all mechanical wastewater treatment facilities, sludge lagoons, and sludge or biosolids disposal facilities.
 - b. Permittees with wastewater treatment lagoons shall submit the above annual report only when sludge or biosolids are removed from the lagoon during the report period or when the lagoon is closed.
3. Report Forms. The annual report shall be submitted on report forms provided by the Department or equivalent forms approved by the Department.
4. Reports shall be submitted as follows:

Major facilities (those serving 10,000 persons or 1 million gallons per day) shall report to both the Department and EPA. Other facilities need to report only to the Department. Reports shall be submitted to the addresses listed as follows:

DNR regional office listed in your permit
(see cover letter of permit)
ATTN: Sludge Coordinator

EPA Region VII
Water Compliance Branch (WACM)
Sludge Coordinator
11201 Renner Blvd.
Lenexa, KS 66219

5. Annual Report Contents. The annual report shall include the following:
 - a. Sludge and biosolids testing performed. Include a copy or summary of all test results, even if not required by the permit.
 - b. Sludge or biosolids quantity shall be reported as dry tons for quantity generated by the wastewater treatment facility, the quantity stored on site at the end of the year, and the quantity used or disposed.
 - c. Gallons and % solids data used to calculate the dry ton amounts.
 - d. Description of any unusual operating conditions.
 - e. Final disposal method, dates, and location, and person responsible for hauling and disposal.
 - i. This must include the name, address for the hauler and sludge facility. If hauled to a municipal wastewater treatment facility, sanitary landfill, or other approved treatment facility, give the name of that facility.
 - ii. Include a description of the type of hauling equipment used and the capacity in tons, gallons, or cubic feet.

f. Contract Hauler Activities

If contract hauler, provide a copy of a signed contract from the contractor. Permittee shall require the contractor to supply information required under this permit for which the contractor is responsible. The permittee shall submit a signed statement from the contractor that he has complied with the standards contained in this permit, unless the contract hauler has a separate sludge or biosolids use permit.

g. Land Application Sites:

- i. Report the location of each application site, the annual and cumulative dry tons/acre for each site, and the landowners name and address. The location for each spreading site shall be given as a legal description for nearest $\frac{1}{4}$, $\frac{1}{4}$, Section, Township, Range, and county, or UTM coordinates. If biosolids application exceeds 2 dry tons/acre/year, reports biosolids nitrogen results, Plant Available Nitrogen (PAN) in pounds/acre, crop nitrogen requirement.
- ii. If the "Low Metals" criteria are exceeded, report the annual and cumulative pollutant loading rates in pounds per acre for each applicable pollutant, and report the percent of cumulative pollutant loading which has been reached at each site.
- iii. Report the method used for compliance with pathogen and vector attraction requirements.
- iv. Report soil test results for pH, CEC, and phosphorus. If none was tested during the year, report the last date when tested and results.



**Ford Motor Company
Vehicle Operations**

**Kansas City Assembly Plant
P.O. Box 11009, Antioch Station
Kansas City, Missouri 64119**

Missouri Department of Natural Resources
Kansas City Regional Office
500 Northeast Colbern Rd.
Lee's Summit, MO 64086-4710

February 21, 2014

Subject: Ford Motor Company Kansas City Assembly Plant
Operating Permit # MO-0004936
NPDES Application for Permit Modification

MAR 2 2014

Dear Sir or Madam:

Ford Motor Company is requesting modification of NPDES Permit No. MO-0004936 to add four new stormwater only outfalls and modify the information for one existing stormwater only outfall. Enclosed are the required permit modification forms. No sampling was completed as part of this permit modification process since all the outfalls being added to the facility are for collection of stormwater only.

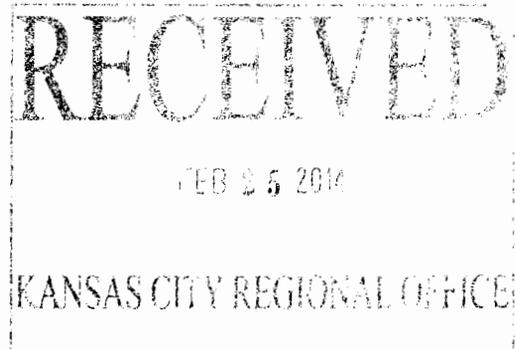
A copy of the check for \$375 is included in the attachment. The check was previously submitted to the State. Based on a telephone conversation with Mr. Logan Cole on February 20, 2014, the State received the check associated with this permit modification application.

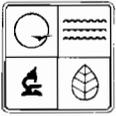
If you have any questions regarding this submittal, please contact Dan Derocher, Plant Environmental Engineer, at 816-459-1427.

Sincerely,

Daniel J. Jowiski
Plant Manager

Enclosures
cc: Rob Streight, EQO





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

FOR AGENCY USE ONLY

CHECK NUMBER

DATE RECEIVED

FEE SUBMITTED

MAR 8 2014
 111153

3/10/14

4315.00

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

1. This application is for:

- An operating permit and antidegradation review public notice
- A construction permit following an appropriate operating permit and antidegradation review public notice
- A construction permit and concurrent operating permit and antidegradation review public notice
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)
- An operating permit for a new or unpermitted facility Construction Permit # _____
- An operating permit renewal: permit # MO- _____ Expiration Date _____
- An operating permit modification: permit # MO- 0004936 Reason: add 4 outfalls, mod 1 outfall

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

2. FACILITY

NAME Ford Motor Company - Kansas City Assembly Plant		TELEPHONE WITH AREA CODE (816) 459-1130	
ADDRESS (PHYSICAL) 8121 Northeast US Highway 69		CITY Claycomo	STATE ZIP CODE MO 64119

3. OWNER

NAME Ford Motor Company - Environmental Quality Office		E-MAIL ADDRESS	TELEPHONE WITH AREA CODE (313) 845-8364
ADDRESS (MAILING) Fairlane Plaza North, Ste. 800, 290 Town Center Dr.		CITY Dearborn	FAX (313) 248-5030
		STATE MI	ZIP CODE 48126

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

4. CONTINUING AUTHORITY

NAME Ford Motor Company - Kansas City Assembly Plant		TELEPHONE WITH AREA CODE (816) 459-1130	
ADDRESS (MAILING) 8121 Northeast US Highway 69		CITY Claycomo	STATE ZIP CODE MO 64119

5. OPERATOR

NAME Ford Motor Company - Kansas City Assembly Plant		CERTIFICATE NUMBER NA	TELEPHONE WITH AREA CODE (816) 459-1130
ADDRESS (MAILING) 8121 Northeast US Highway 69		CITY Claycomo	FAX (816) 459-1134
		STATE MO	ZIP CODE 64119

6. FACILITY CONTACT

NAME Daniel Derocher		TITLE Environmental Engineer	TELEPHONE WITH AREA CODE (816) 459-1427
			FAX (816) 459-1134

7. ADDITIONAL FACILITY INFORMATION

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

- 001 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)
- 002 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____
- 003 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____
- 004 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____

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

- 001 - SIC 3711 _____ and NAICS 336111 _____ 002 - SIC 3465 _____ and NAICS 336370 _____
 003 - SIC _____ and NAICS _____ 004 - SIC _____ and NAICS _____

RC
 041

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 (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
B.	Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C and D.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
C.	Is application for storm water discharges only? If yes, complete EPA Form 2F.	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
D.	Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.		
E.	Is wastewater land applied? If yes, complete Form I.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
F.	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"/>

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

NAME Virginia Holding Company			
ADDRESS 8 North Jefferson Street	CITY Roanoke	STATE VA	ZIP CODE 24042

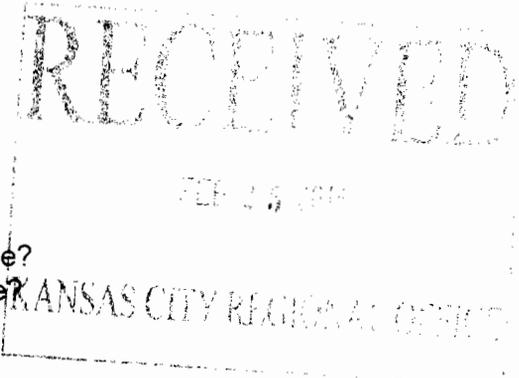
10. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions,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

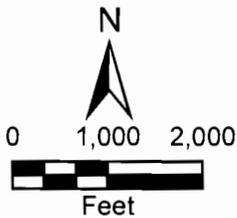
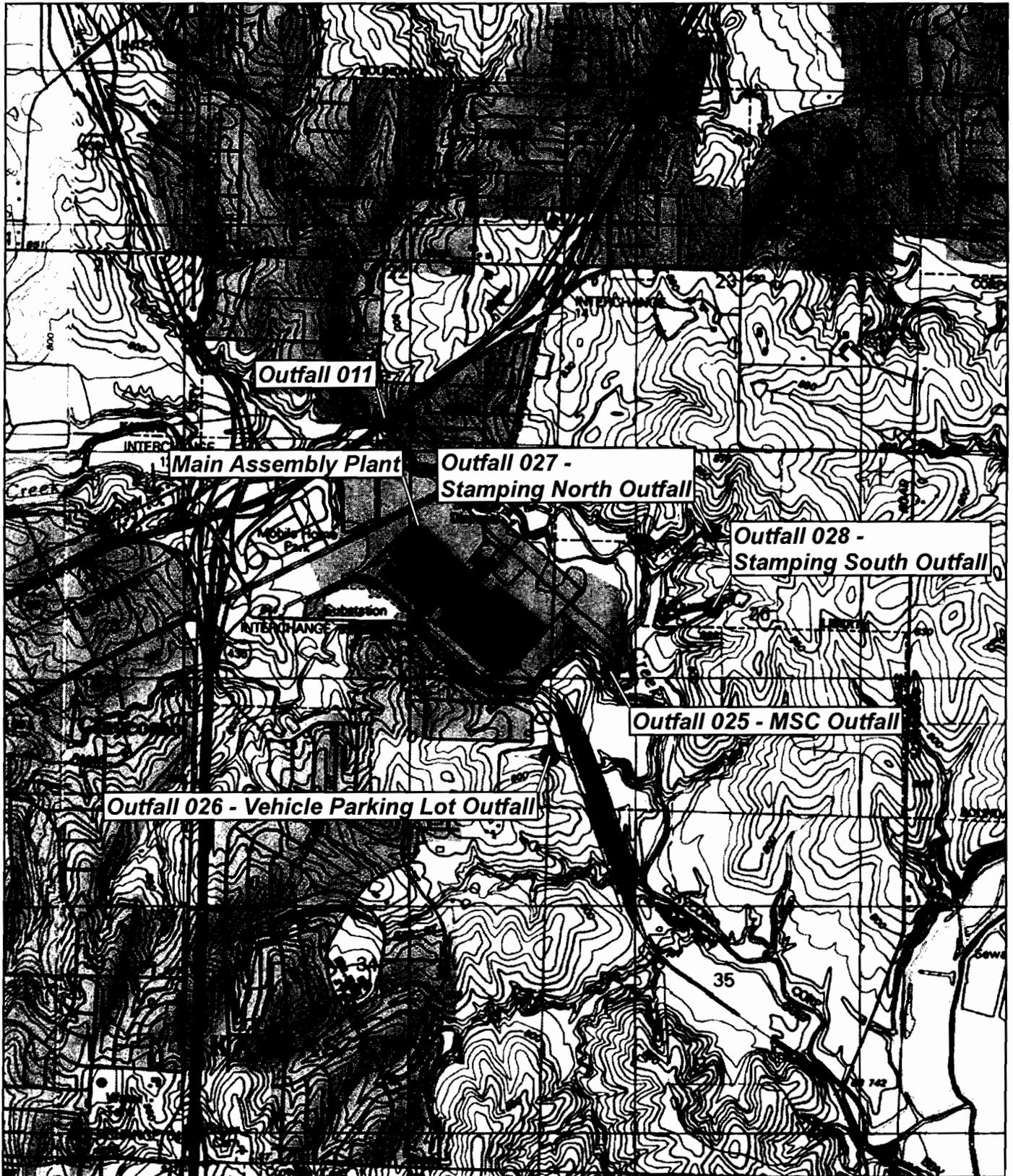
NAME AND OFFICIAL TITLE (TYPE OR PRINT) Daniel J. Jowisk, Plant Manager	TELEPHONE WITH AREA CODE (816) 459-1601
SIGNATURE 	DATE SIGNED 21 FEB 2014

MO 780-1479 (01-09)

BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.
Submittal of an incomplete application may result in the application being returned.

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





Ford Motor Company
 Kansas City Stormwater Sampling
 Claycomo, Missouri

Figure 1
 Site Location Map



X:\IP\2619\003\Projects\mtd\Figure1.mxd

Source: USGS Liberty, MO 7.5 Minute Topo Quad, 1996
 USGS North Kansas City, MO 7.5 Minute Topo Quad, 1997

Date: 12/31/13

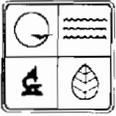
Drawn By: Nick Wiederholt

Project No: 103/P2619.003

NPDES MODIFICATION APPLICATION

OUTFALL NUMBER	LEGAL DESCRIPTION	UTM COORDINATES		RECEIVING WATER	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
		EASTING (X)	NORTHING (Y)		OPERATION	AVERAGE FLOW (INCLUDE UNITS) (MAXIMUM FLOW)	DESCRIPTI ON	LIST CODES FROM TABLE A
* 011	SW1/4, SE1/4 Section 22, Township 51N, Range 32 West, Clay County	1220107	14242550	Thorton Mill Creek	Stormwater Runoff	Depends on storm event	None	Not applicable
025 – MSC	NW ¹ / ₄ , SE ¹ / ₄ , Section 27, Township 51N, Range 32 West, Clay County	1223401.7544	14238927.2784	Shoal Creek	Stormwater Runoff	Depends on storm event	None	Not applicable
026 – Vehicle Parking Lot	SE ¹ / ₄ , SE ¹ / ₄ , Section 27, Township 51N, Range 32 West, Clay County	1222521.7587	14237705.3533	Shoal Creek	Stormwater Runoff	Depends on storm event	None	Not applicable
027 – Stamping North	NE ¹ / ₄ , NW ¹ / ₄ , Section 26, Township 51N, Range 32 West, Clay County	1224860.1455	14240933.9994	Shoal Creek	Stormwater Runoff	Depends on storm event	None	Not applicable
028 – Stamping South	SE ¹ / ₄ , NW ¹ / ₄ , Section 26, Township 51N, Range 32 West, Clay County	1224897.9449	14239846.1085	Shoal Creek	Stormwater Runoff	Depends on storm event	None	Not applicable

* Outfall 011 is an existing outfall. Previously it was listed in the permit application as “not monitored, no exposure.” Now that the new MSC building has been constructed this outfall will receive stormwater runoff from the MSC building; thus, the information has been updated.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
FORM C – APPLICATION FOR DISCHARGE PERMIT –
MANUFACTURING, COMMERCIAL, MINING,
SILVICULTURE OPERATIONS, PROCESS AND STORMWATER

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY
 Ford Motor Company - Kansas City Assembly Plant

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
 MO-0004936

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

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 3711 B. SECOND 3465

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ COUNTY _____

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)	RECEIVING WATER
see Attachment 1	

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

The Kansas City Assembly Plant builds light duty trucks and in 2014 will begin to built transit vans. Plant operations include body construction, painting, and assembly operations. Process support operations include a powerhouse, raw material storage (tanks and containers), emission control systems, a waste water pre-treatment plant, warehouse storage and shipping and receiving areas.

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?
 YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

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

2.50 MAXIMUM PRODUCTION
 A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?
 YES (COMPLETE B.) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?
 YES (COMPLETE c.) NO (GO TO SECTION 2.60)

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

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

2.60 IMPROVEMENTS
 A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET, ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.
 YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

1. IDENTIFICATION OF CONDITION AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
				A. REQUIRED	B. PROJECTED

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

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

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

3.20 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) NO (GO TO 3.30)

A. NAME	B. ADDRESS	C. TELEPHONE (area code and number)	D. POLLUTANTS ANALYZED (list)

3.30 CERTIFICATION

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT)

Daniel J. Jowisky, Plant Manager

TELEPHONE NUMBER WITH AREA CODE

(816) 459-1601

SIGNATURE (SEE INSTRUCTIONS)



DATE SIGNED

21 FEB 2014

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

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.

INTAKE AND EFFLUENT CHARACTERISTICS

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

1. POLLUTANT	2. EFFLUENT				D. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		B. NO. OF ANALYSES
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)			A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	(2) MASS	
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
A. Biochemical Oxygen Demand (BOD)										
B. Chemical Oxygen Demand (COD)										
C. Total organic Carbon (TOC)										
D. Total Suspended Solids (TSS)										
E. Ammonia (as N)										
F. Flow	VALUE		VALUE				VALUE			
G. Temperature (winter)	VALUE		VALUE				VALUE			
H. Temperature (summer)	VALUE		VALUE				VALUE			
I. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM			STANDARD UNITS			

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)		B. NO. OF ANALYSES
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (1) CONCENTRATION	B. MAXIMUM 30 DAY VALUE (if available) (2) MASS CONCENTRATION	C. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS CONCENTRATION	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	(2) MASS	
A. Bromide (24959-67-9)											
B. Chlorine, Total Residual											
C. Color											
D. Fecal Coliform											
E. Fluoride (16984-48-8)											
F. Nitrate - Nitrate (as N)											

CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"		3. EFFLUENT						4. UNITS			5. INTAKE <i>(optional)</i>		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE <i>(if available)</i>		C. LONG TERM AVRG. VALUE <i>(if available)</i>		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
G. Nitrogen, Total Organic <i>(as N)</i>														
H. Oil and Grease														
I. Phosphorus <i>(as P)</i> , Total (7723-14-0)														
J. Sulfate <i>(as SO₄⁻)</i> (14808-79-8)														
K. Sulfide <i>(as S)</i>														
L. Sulfite <i>(as SO₃⁻)</i> (14265-45-3)														
M. Surfactants														
N. Aluminum, Total (7429-90-5)														
O. Barium, Total (7440-39-3)														
P. Boron, Total (7440-42-8)														
Q. Cobalt, Total (7440-48-4)														
R. Iron, Total (7439-89-6)														
S. Magnesium, Total (7439-95-4)														
T. Molybdenum, Total (7439-98-7)														
U. Manganese, Total (7439-96-5)														
V. Tin, Total (7440-31-5)														
W. Titanium, Total (7440-32-6)														

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS			5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVRG. VALUE		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)														
2M. Arsenic, Total (7440-38-2)														
3M. Beryllium, Total (7440-41-7)														
4M. Cadmium, Total (7440-43-9)														
5M. Chromium III (16065-83-1)														
6M. Chromium VI (18540-29-9)														
7M. Copper, Total (7440-50-8)														
8M. Lead, Total (7439-92-1)														
9M. Mercury, Total (7439-97-6)														
10M. Nickel, Total (7440-02-0)														
11M. Selenium, Total (7782-49-2)														
12M. Silver, Total (7440-22-4)														
13M. Thallium, Total (7440-28-0)														
14M. Zinc, Total (7440-66-6)														
15M. Cyanide, Amenable to Chlorination														
16M. Phenols, Total														
RADIOACTIVITY														
(1) Alpha Total														
(2) Beta Total														
(3) Radium Total														
(4) Radium 226 Total														

NPDES MODIFICATION APPLICATION

OUTFALL NUMBER	LEGAL DESCRIPTION	UTM COORDINATES		RECEIVING WATER	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
		EASTING (X)	NORTHING (Y)		OPERATION	AVERAGE FLOW (INCLUDE UNITS) (MAXIMUM FLOW)	DESCRIPTI ON	LIST CODES FROM TABLE A
* 011	SW1/4, SE1/4 Section 22, Township 51N, Range 32 West, Clay County	1220107	14242550	Thorton Mill Creek	Stormwater Runoff	Depends on storm event	None	Not applicable
025 – MSC	NW ¹ / ₄ , SE ¹ / ₄ , Section 27, Township 51N, Range 32 West, Clay County	1223401.7544	14238927.2784	Shoal Creek	Stormwater Runoff	Depends on storm event	None	Not applicable
026 – Vehicle Parking Lot	SE ¹ / ₄ , SE ¹ / ₄ , Section 27, Township 51N, Range 32 West, Clay County	1222521.7587	14237705.3533	Shoal Creek	Stormwater Runoff	Depends on storm event	None	Not applicable
027 – Stamping North	NE ¹ / ₄ , NW ¹ / ₄ , Section 26, Township 51N, Range 32 West, Clay County	1224860.1455	14240933.9994	Shoal Creek	Stormwater Runoff	Depends on storm event	None	Not applicable
028 – Stamping South	SE ¹ / ₄ , NW ¹ / ₄ , Section 26, Township 51N, Range 32 West, Clay County	1224897.9449	14239846.1085	Shoal Creek	Stormwater Runoff	Depends on storm event	None	Not applicable

* Outfall 011 is an existing outfall. Previously it was listed in the permit application as “not monitored, no exposure.” Now that the new MSC building has been constructed this outfall will receive stormwater runoff from the MSC building; thus, the information has been updated.