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-0004863
Owner:	United States Department of Energy (USDOE)
Address:	P.O. Box 410202, Kansas City, MO 64141-0202
Continuing Authority:	United States Department of Energy (USDOE)
Address:	P.O. Box 410202, Kansas City, MO 64141-6159
Facility Name:	USDOE, Kansas City Plant
Address:	2000 East 95th Street, Kansas City, MO 64131-3095
Legal Description:	See page 2
Receiving Stream:	See page 2
First Classified Stream and ID:	See page 2
USGS Basin & Sub-watershed No.:	See page 2

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

FACILITY DESCRIPTION

See page 2

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.

October 1, 2012
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

September 30, 2017
Expiration Date

John Madras, Director, Water Protection Program

FACILITY DESCRIPTION

Outfall #001 – Federal Facility/Industry – SIC #9711 NAICS # 92811 Storm water runoff. Fire protection test water. Storm water collected in various sumps, secondary containment structures, and excavated pits. Sample collection point at flap gate structure located 135 feet northeast of the flood protection levee sluice gate / Hydrostatic testing of new piping and tanks using city water/condensate from building heating and cooling units.
Flows are dependent on precipitation
Average actual flow is 0.52 MGD.

Legal Description:	SE ¼, SE ¼, Sec. 21, T48N, R33W, Jackson County
UTM Coordinates:	X=364536, Y=4314006
Receiving Stream:	Blue River (P)
First Classified Stream and ID:	Blue River 2 (P) (00419)
USGS Basin & Sub-watershed No.:	(10300101-0105)

Outfall #002 – Federal Facility/Industry – SIC #9711 NAICS # 92811 Sample collection point located at sluice gate located in the southeast parking lot.
Storm water runoff. Fire protection test water/ Storm water collected in various sumps, secondary containment structures, and excavated pits / Hydrostatic testing of new piping and tanks using city water/ Condensate from building heating and cooling units.
Flows are dependent on precipitation
Average actual flow is 0.21 MGD.

Legal Description:	SW ¼, NE ¼, Sec. 28, T48N, R33W, Jackson County
UTM Coordinates:	X=364286, Y=4312952
Receiving Stream:	Indian Creek (C)
First Classified Stream and ID:	Indian Creek (C) (00420)
USGS Basin & Sub-watershed No.:	(10300101-0103)

Outfall #003 – Federal Facility/Industry – SIC #9711 NAICS # 92811 This outfall has been moved 300 feet to the south. Sample collection point located at flap gate structure
Storm water runoff. Fire protection test water. Storm water collected in various sumps, secondary containment structures, and excavated pits / Hydrostatic testing of new piping and tanks using city water/ Condensate from building heating and cooling units.
Flows are dependent on precipitation
Average actual flow is 0.11 MGD.

Legal Description:	NW ¼, SW ¼, Sec. 28, T48N, R33W, Jackson County
UTM Coordinates:	X=364872, Y=4312865
Receiving Stream:	Indian Creek (C)
First Classified Stream and ID:	Indian Creek (C) (00420)
USGS Basin & Sub-watershed No.:	(10300101-0105)

Outfall #004 – Federal Facility/Industry – SIC #9711 NAICS # 92811 This outfall has been moved 700 feet to the southeast. Sample collection point located at flap gate structure.
Storm water runoff. Fire protection test water. Storm water collected in various sumps, secondary containment structures, and excavated pits / Hydrostatic testing of new piping and tanks using city water /Condensate from building heating and cooling units.
Flows are dependent on precipitation
Average actual flow is 0.18 MGD.

Legal Description:	NW ¼, SW ¼, Sec. 28, T48N, R33W, Jackson County
UTM Coordinates:	X=363414, Y=4313051
Receiving Stream:	Indian Creek (C)
First Classified Stream and ID:	Indian Creek (C) (00420)
USGS Basin & Sub-watershed No.:	(10300101-0103)

Downstream Sampling Point S1

Sampling point is:	at confluence of Blue River and Boone Creek at the Prospect Bridge
Legal Description:	SW ¼, SW ¼, Sec. 22, T48N, R33W, Jackson County
UTM Coordinates:	X=365094, Y=4313899
Receiving Stream:	Blue River 2
First Classified Stream and ID:	Blue River 2 (P) (0419)
USGS Basin & Sub-watershed No.:	(10300101-0105)

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	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls #001- #004						
Flow	MGD	*		*	once/week	24 hr estimate
Rainfall	inches	*		*	once/day	******
PCBs , see Special Condition 7	µg/L	****			once/week	modified composite
pH – Units ***	SU	6.5-9		6.5-9	once/week	grab
Settleable Solids	mL/L	1.5		1.0	once/month	grab
Total Suspended Solids	mg/L	*		*	once/month	grab
Oil & Grease	mg/L	15		10	once/month	grab

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

Outfalls #001- #004						
Aluminum, Total Recoverable	µg/L	*		*	once/quarter*****	grab
Chromium VI, Total Recoverable	µg/L	*		*	once/quarter*****	grab
Trichloroethylene	µg/L	*		*	once/quarter*****	grab
1,2-Dichloroethylene	µg/L	*		*	once/quarter*****	grab
Vinyl Chloride	µg/L	*		*	once/quarter*****	grab
Hardness	mg/L	*		*	once/quarter*****	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE January 28, 2013.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980, 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	MEASUREMENT FREQUENCY	SAMPLE TYPE
Downstream Sampling point S1						
Flow **	MGD	*		*	once/month	**
PCBs	µg/L	*		*	once/month	grab
Hardness*******	mg/L	*		*	once/month	grab

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

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.
** Report flow as measured at the USGS Gauging Station #06893500
*** pH is measured in pH units and is not to be averaged.
**** The facility is authorized to discharge consistent with Missouri's Water Quality Standards (0.000045 µg/L). The water quality standard is below current detection limits. The minimum quantification level (ML) found in approved EPA methods for PCBs is 0.5 µg/L. Measured values greater than or equal to the minimum quantification level of 0.5 µg/L will be considered an exceedance of the permit limit which will trigger corrective action of the site's BMPs as detailed in special condition #7. Measured values lower than 0.5 µg/L shall be considered non detect. The minimum quantification level does not authorize the discharge of PCBs in excess of the water quality standard.
***** See table below for quarterly sampling.
****** Report rainfall as measured at the USGS Gauging Station #06893400
******* Hardness measurement shall be obtained from USGS station # 06893500

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

B. SCHEDULE OF COMPLIANCE

The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be prepared within 60 days of permit issuance and implemented within 120 days of permit issuance. The SWPPP must be kept on-site and a copy shall be submitted to the Department. 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) An assessment of all storm water discharges associated with this facility. This must include a list of potential contaminants and an annual estimate of amounts that will be used in the described activities.
(b) 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 Condition #6 below.
(c) The SWPPP must include a schedule for monthly site inspection and a brief written report. The inspections must include observation and evaluation of BMP effectiveness, deficiencies, and corrective measures that will be taken. Deficiencies must be corrected within seven days. Inspection reports must be kept on site with the SWPPP. These must be made available to DNR personnel upon request.
(d) A provision for designating an individual to be responsible for environmental matters.
(e) 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.

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.
   (d) Add numeric limits for any analyte currently monitored in this permit if it is determined that the concentration of that analyte is increasing, rather than remaining constant or decreasing.
   (e) Add numeric limits for any analyte currently monitored in this permit if it is determined that Best Management Practices are not being adhered to.

   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.

C. SPECIAL CONDITIONS (continued)

6. 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 BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
   (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
   (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
   (f) Secondary containment sumps and excavated pits:
      (1) Prior to discharge, storm water contained in sumps and pits shall be visually examined by facility staff for visual sheen, discoloration, turbidity, or other contaminants. If evidence of contamination exists, the storm water shall be treated prior to discharge or disposed of in the sanitary sewer system. During daily operation, discharge valves shall remain closed and sump pumps remain off until an inspection is completed. A log of each inspection and findings shall be kept on site for a period of at least five years and made available to MDNR staff upon request.
      (2) At least once per month, each secondary containment structure shall be visually inspected by facility staff to identify problems that may cause contamination of storm water in the structure, discharge of contaminants, or violation of this permit. Items to inspect include but are not limited to storage tank and drum integrity, foundation integrity, piping, valves, and other appurtenances. A log of such inspections and findings shall be kept on site for a period of at least five years and made available to MDNR staff upon request.
      (3) In the event of a spill, leak, or release of contaminants within a secondary containment structure or pit, any storm water which accumulates in the structure or pit from the time the spill, leak, or release is detected until all evidence of the spill, leak, or release is removed, shall not be discharged but be disposed of in the sanitary sewer system or another permitted manner. Discharge to the sanitary sewer shall only be made in accordance with the city of Kansas City's sewer use ordinance or with their approval. A thorough inspection of the structure, including chemical analyses of storm water, should be conducted after removal of any spilled material to insure no contamination exists within the structure.
      (4) Before releasing water that has accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of sheen. When the presence of hydrocarbons is indicated, and at a minimum of twice per year, this water must be tested for all hydrocarbon parameters listed in Effluent Limitations and Monitoring Requirements. Water shall be taken to a WWTP for treatment before release if it does not meet state requirements.

7. Table A of this permit requires weekly sampling of outfalls 001, 002, 003 and 004 for PCBs. If the discharge concentration at an outfall exceeds 0.5 ug/L for PCB the facility shall:

   (a) First exceedance within a 12 month period (same outfall).
      (1) Verify exceedance with follow-up sampling.
      (2) Investigate / document conditions associated with sample event (e.g., discharge rate, rain event, construction activity) and determine if the event is situational dependent.
      (3) Conduct investigation to identify root cause.
      (4) Inspect condition of pipe and inspect BMPs.
      (5) Based upon inspection, implement repairs as necessary
      (6) Review the facilities' Storm water Pollution Prevention Plan (SWPPP) and BMPs to determine whether any improvement or additional controls are needed to reduce PCBs in the stormwater discharge(s). Document the outcome/result of special condition 7.(a)(1)-(5) in the facilities' SWPPP.
      (7) Submit to Permits and Engineering Section a progress report detailing action taking to remedy the PCB exceedance no later than 30 days from the date of the exceedance. If MDNR makes the determination that the discharge causes or contributes to an exceedance of a water quality standard, the facility must comply with any requirements or schedules, including submitting additional information concerning the potential cause of the exceedance.

C. SPECIAL CONDITIONS (continued)

(b) Second exceedance within a rolling 12 month period (same outfall)
   (1) Complete steps outlined in 7.(a)(1)-(5)
   (2) Investigate potential causes (e.g., TV inspection of lines (target smaller physically inaccessible lines near areas of PCB soil contamination, increased sampling within system to narrow interval of pipe) utilize sampling regimen to identify cause of exceedance.
   (3) Implement appropriate repairs.
      a. Repairs to currently implemented BMPs as necessary
      b. Implement additional BMPs as necessary to address second exceedance
   (4) Remove sediments
   (5) Design first flush capture system and any other corrective action BMP necessary to address future PCB exceedances.
      a. First flush system shall be designed if no root cause of PCB exceedances is identified. If root cause is identified implement appropriate corrective action to address future exceedances.
   (6) Review their Storm water Pollution Prevention Plan (SWPPP) and BMPs to determine whether any improvement or additional controls are needed to reduce that pollutant in the stormwater discharge(s). Document the outcome/result of special condition 7.(b)(2)-(5) in the facilities' SWPPP.
   (7) Submit to Permits and Engineering Section a progress report detailing action taking to remedy the second PCB exceedance no later than 30 days from the date of the exceedance. If MDNR makes the determination that the discharge causes or contributes to an exceedance of a water quality standard, the facility must comply with any requirements or schedules, including submitting additional information concerning the potential cause of the exceedance.

(c) Third exceedance within a 12 month rolling period (same outfall)

   (1) Within 10 days after of the third exceedance, the facility shall review their Stormwater Pollution Prevention Plan (SWPPP) and BMPs to determine improvement or additional controls that are needed to reduce that pollutant in the stormwater discharge(s).
   (2) Within 15 days after the third exceedance the facility shall document the outcome/result of the review in the facilities' SWPPP. This documentation shall be an addendum to the facilities SWPPP titled, "Corrective Action Plan Associated to PCB exceedances" and be associated specifically to the date of the third exceedance. This corrective action plan shall include measures to address BMP deficiencies and implement additional BMPs to achieve compliance.
   (3) Within 30 days after the third exceedance, submit to The Missouri Department of Natural Resources Water Protection Program the facilities SWPPP including the Corrective Action Plan addendum for the review and approval prior to the implementation.
   (4) Upon approval by the Department the facility shall implement the approved SWPPP and Corrective Action Plan within the timelines established there in.
   (5) If at any time the facility or DNR determine(s) that the discharge(s) causes or contributes to an exceedance of applicable water quality standards, the facility must take corrective actions and conduct follow-up monitoring. Failure to undertake and document reviews, take the necessary corrective actions, or follow the DNR notification procedures stipulated in this permit are violations of this permit.
   (6) Installation of a treatment device, such as first flush capture system, may require a construction permit.

Missouri Department of Natural Resources
FACT SHEET FOR THE PURPOSE OF RENEWAL OF
MO-0004863
USDOE, Kansas City 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 a ☒ Major☒, Industrial Facility;

Part I – Facility Information

Facility Type: Industrial
Facility SIC Code(s): 9711 NAICS 92811

Facility Description: U.S. Department of Energy Kansas City Plant manufactures non-nuclear components for nuclear weapons.

Application Date: 2004

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#001	2.98	BMPs	Storm water	0
002	2.37	BMPs	Storm water	0
003	1.24	BMPs	Storm water	0
004	1.74	BMPs	Storm water	0

Water Quality History: Some PCB exceedances

Comments: Extensive history of investigation and related corrective actions to address the occurrence of PCBs in stormwater discharges. PCB cleanup at the KCP is addressed by the facilities Missouri Hazardous Waste Management Facility Permit MO-9890010524.

Outfall #001 – Federal Facility/Industry – SIC #9711 Sample collection point at flap gate structure located 135 feet northeast of the flood protection levee sluice gate
Storm water runoff. Fire protection test water. Storm water collected in various sumps, secondary containment structures, and excavated pits. Hydrostatic testing of new piping and tanks using city water/condensate from building heating and cooling units.
Total design flow is 1.925 MGD.
Average actual flow is 0.52 MGD.

Legal Description:	SE ¼, SE ¼, Sec. 21, T48N, R33W, Jackson County
Latitude/ Longitude:	3857524 /-09433489
Receiving Stream:	Blue River (P)
First Classified Stream and ID:	Blue River 2 (P) (00419)
USGS Basin & Sub-watershed No.:	(10300101-010030)

Outfall #002 – Federal Facility/Industry – SIC #9711 Sample collection point located at sluice gate located in the southeast parking lot.
Storm water runoff. Fire protection test water/ Storm water collected in various sumps, secondary containment structures, and excavated pits / Hydrostatic testing of new piping and tanks using city water/ Condensate from building heating and cooling units.
Total design flow is 1.53 MGD.
Average actual flow is 0.21 MGD.

Legal Description:	SW ¼, NE ¼, Sec. 28, T48N, R33W, Jackson County
Latitude/ Longitude:	3857181/-09433585
Receiving Stream:	Indian Creek (C)
First Classified Stream and ID:	Indian Creek (C) (00420)
USGS Basin & Sub-watershed No.:	(10300101-010050)

Outfall #003 – Federal Facility/Industry – SIC #9711 This outfall has been moved 700 feet to the south. Sample collection point located at flap gate structure
Storm water runoff. Fire protection test water. Storm water collected in various sumps, secondary containment structures, and excavated pits / Hydrostatic testing of new piping and tanks using city water/ Condensate from building heating and cooling units.
Total design flow is 0.80 MGD.
Average actual flow is 0.11 MGD.

Legal Description:	NW ¼, SW ¼, Sec. 28, T48N, R33W, Jackson County
Latitude/ Longitude:	3857148/-09434286
Receiving Stream:	Indian Creek (C)
First Classified Stream and ID:	Indian Creek (C) (00420)
USGS Basin & Sub-watershed No.:	(10300101-010050)

Outfall #004 – Federal Facility/Industry – SIC #9711 This outfall has been moved 700 feet to the southeast. Sample collection point located at flap gate structure.
Storm water runoff. Fire protection test water. Storm water collected in various sumps, secondary containment structures, and excavated pits / Hydrostatic testing of new piping and tanks using city water /Condensate from building heating and cooling units.
Total design flow is 1.125 MGD.
Average actual flow is 0.18 MGD.

Legal Description:	NW ¼, SW ¼, Sec. 28, T48N, R33W, Jackson County
Latitude/ Longitude:	3857149/-09434287
Receiving Stream:	Indian Creek (C)
First Classified Stream and ID:	Indian Creek (C) (00420)
USGS Basin & Sub-watershed No.:	(10300101-010050)

Part II – Operator Certification Requirements

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

Part III – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:
As per Missouri's Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category list 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.

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**
Indian Creek	C	0420	LWW,AQL,,WBC***, IND	10300101	Central Plains/ Blackwater /Lamine
Blue River	P	0419	LWW,AQL,,WBC***, SCR		

* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery(CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).
** - 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
Indian Creek*	0	0	0
Blue River	0.1	0.1	0.1

MIXING CONSIDERATIONS TABLE:

MIXING ZONE (CFS) [10 CSR 20-7.031(4)(A)4.B.(II)(a)]			ZONE OF INITIAL DILUTION (CFS) [10 CSR 20-7.031(4)(A)4.B.(II)(b)]		
1Q10	7Q10	30Q10	1Q10	7Q10	30Q10
	0.025			0.0025	

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

RECEIVING STREAM MONITORING REQUIREMENTS:

Site 01. (Downstream Sampling Point S1)

PARAMETER(S)	SAMPLING FREQUENCY	SAMPLE TYPE	LOCATION
Flow	monthly	24 hr estimate	SW ¼, SW ¼, Sec. 22, T48N, R33W, Jackson County
PCB	monthly	grab	
Hardness	monthly	grab	

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.

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

Section 402(o)(2) outlines specific exceptions to the general prohibition against establishment of less stringent effluent limitations. Codified in the NPDES regulations at 40 CFR 122.44(l), Section 402(o)(2) provided that the establishment of less stringent limits may be allowed where:

(1) There have been material and substantial alternations or additions to the permitted facility which justify this relaxation.

(2) Technical mistakes or mistaken interpretations of the law were made in issuing the permit under Section 402(a)(1)(b).

(3) The permittee has installed and properly operated and maintained required treatment facilities but still has been unable to meet the permit limitations (relaxation may only be allowed to the treatment levels actually achieved).

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.

APPLICABLE PERMIT PARAMETERS:
Effluent parameters contained in Factsheets and Missouri State Operating Permits are obtained from Technology Based Effluent Limit (TBEL), Missouri's Effluent Regulations [10 CSR 20-7.015], Missouri's Water Quality Standards [10 CSR 20-7.031], previous Missouri State Operating Permits, and from Operating Permit Applications.

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 condition is not applicable to the permittee for this specific facility.

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

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

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

Not Applicable ☒;
At this time, the permittee is not required to implement and enforce a Pretreatment Program.

REMOVAL EFFICIENCY:
Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD_5) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs). 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 ☒;
This facility is not a POTW. Influent monitoring is not being required to determine percent removal.

SANITARY SEWER OVERFLOWS (SSOS), AND INFLOW & INFILTRATION (I&I):
Collection systems are a critical element in the successful performance of the wastewater treatment process. Under certain conditions, poorly designed, built, managed, operated, and/or maintained systems can pose risks to public health, the environment, or both. Causes of SSOs include, but are not limited to, the following: high levels of I&I during wet weather; blockages; structural, mechanical, or electrical failures; collapsed or broken sewer pipes; insufficient conveyance capacity; and vandalism. Effective and continuous management, operation, and maintenance, as well as ensuring adequate capacity and rehabilitation when necessary are critical to maintaining collection system capacity and performance while extending the life of the system.

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 ☒;
This permit contains a SOC.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):
A plan to schedule activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. The plan may include, but is not limited to, treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

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 to total amount of pollutant that may be discharged into that stream without endangering its water quality.

Not Applicable ☒;
Wasteload allocations were not calculated.

WLA MODELING:

Not Applicable ☒;
A WLA study was either not submitted or determined not applicable by department staff.

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 ☒;

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

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

Applicable ☒;
Indian Creek is listed on the 2002 Missouri 303(d) List for bacteria.
Blue River is listed on the 2006 Missouri 303(d) List for bacteria.

☒ – This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of the Blue River or Indian Creek.

Part V – Effluent Limits Determination

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM		MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	NO	
RAINFALL	INCHES	9	*		*	NO	
PCB	UG/L	1,3	****			YES	0.5 UG/L
pH	SU	1	6.5-9		6.5-9	YES	6-9
SETTLEABLE SOLIDS	mL/L	9	1.5		1.0	NO	
TOTAL SUSPENDED SOLIDS	MG/L	9	*		*	YES	***
OIL AND GREASE	MG/L	9	15		10	NO	
ALUMINUM, TOTAL RECOVRABLE	UG/L	1	*		*	NO	
CHROMIUM VI, TOTAL RECOVERABLE	UG/L	1	*		*	YES	***
TRICHLOROEHTYLENE	µG/L	3	*		*	NO	
1,2- DICHLOROETHYLENE	µg/L	3	*		*	YES	***
VINYL CHLORIDE	µg/L	3	*		*	NO	
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

*** -** Monitoring requirement only
** - reserved.
*** - Parameter not previously established in previous state operating permit.
**** The facility is authorized to discharge consistent with Missouri's Water Quality Standards (0.000045 µg/L). The water quality standard is below current detection limits. The minimum quantification level (ML) found in approved EPA methods for PCBs is 0.5 µg/L. Measured values greater than or equal to the minimum quantification level of 0.5 µg/L will trigger corrective action of the site's BMPs as detailed in special condition #7. Measured values lower than 0.5 µg/L shall be considered non detect. The minimum quantification level does not authorize the discharge of PCBs in excess of the water quality standard.

N/A – Not applicable

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

OUTFALL #001 – #004 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. Flow rates are determined by engineering estimates.

- **Rainfall** Monitoring Only

- **Settleable Solids** Effluent limitations have been determined to be protective of water quality hand have been retained from previous state operating permit.

- **Total Suspended Solids** Because PCBs are adhered to solids, an evaluation of the solids loading from this facility is necessary.

- **PCBs**

A PCB effluent limit for outfalls #001- #004 was established without an allowance for instream dilution, so that the water quality criterion, 45 picograms/Liter, must be attained at the point of discharge. However, because the effluent limit is below the detection level for PCB, the compliance level is defined in the permit as the minimum level (ML), 0.5 µg/L. Defining the compliance level as the ML is consistent with the approach set forth in the Technical Support Document For Water Quality – based Toxics Control (TSD) (U.S. Environmental Protection Agency, Office of Water, EPA/505/2-90-001, March 1991, page 111).

Missouri's water quality standards provide a general provision allowing for some consideration of mixing zones in the establishment of permit limits, but this provision does not apply to bioaccumulative pollutants. Pursuant to 10 CSR 20-7.031(4)(B)4.A, mixing zones are generally exempted from the application of chronic aquatic life support criteria "for those components of waste that are rendered nontoxic by dilution, dissipation, or rapid chemical transformation." The specific criterion for PCB set forth in 10 CSR 20.7.031, Table A, is a Human Health Protection-Fish Consumption (HHF) value. It is not intended to protect against chronic toxicity to aquatic life. As noted in 10 CSR 20-7.031(1)(C)(7), "[c]riteria to protect [the HHF] use are based on the assumption of an average amount of fish consumed on a long-term basis. Protection of this use includes compliance with [FDA] limits for fish tissue, maximum water concentrations corresponding to the 10^{-6} cancer risk level, and other human health fish consumption criteria." Compare this with the definition for chronic toxicity given at 10 CSR 20-7.031(1)(E): "[c]onditions producing adverse effects on aquatic life or wildlife following long-term exposure but having no readily observable effect over a short time period." In general, bioaccumulative pollutants are substances that accumulate in the tissues of living organisms. Bioaccumulative pollutants are not rendered nontoxic by dilution, dissipation, or rapid chemical transformation. Accordingly, mixing zones are not an appropriate consideration in the establishment of permit limits for these pollutants.

This general argument is not without precedent. The section on mixing zones in the TSD (5) provides that "a State regulatory agency may decide to deny a mixing zone in a site-specific case. For example, denial should be considered when bioaccumulative pollutants are in the discharge." (Page 71, cite). For instance and of note, in 2000 the EPA issued a Final Rule to Amend the Final Water Quality Guidance for the Great Lakes System to Prohibit Mixing Zones for Bioaccumulative Chemicals of Concern(6). This rulemaking specifically identified PCBs as one of the pollutants of concern for which mixing zones were not allowed.

Furthermore, with respect to the Kansas City Plant, the establishment of a requirement for PCB BMP corrective action to take place given a dection is appropriate in spite of significant reductions of PCB discharges, there is still no assimilative capacity for PCB in the receiving stream due to existing accumulations. DOE/NNSA has greatly decreased the amounts of PCBs discharged from the Kansas City Plant through a series of projects. Daily flows from the facility (cooling water, etc.) have been diverted to the city sewers and now only storm water is discharged. The pipes carrying storm water have been sealed to avoid inflow of groundwater and soil into the collection system. Contaminated roof materials were removed from several buildings. There were also a number of other small projects to reduce PCB sources.

On site activities have reduced PCB discharges about tenfold in DOE estimates. About 84 grams of PCB were discharged through Outfall 002 in 2003, while about 5.2 grams of PCB were discharged in 2007. In 2008, a wetter year, annual discharges were about 8.28 grams of PCB.

Analytical sensitivity is another key consideration in establishing appropriate requirements for the Kansas City Plant. The MDNR rules set the water quality criterion for PCBs at 45 picograms per liter, a value well below the analytical detection limit for this pollutant. Therefore, the discharge limit given in the existing DOE permit is based on a method limit of 500,000 picograms per liter. This approach recognizes that there is no feasible way to accurately detect and quantify lower concentrations of PCBs, and that any measurable amount of PCB in the effluent (i.e., any concentration equal to or greater than the ML) will correspond to an instream concentration that greatly exceeds the applicable water quality criterion.

PCB exposure is a cumulative process in which the pollutant becomes concentrated in organisms over long periods of time. One method of assessing the assimilative capacity of the receiving stream, Indian Creek, is to calculate the amount of PCB that could be in the volume of water that passes by the facility each year while still attaining the water quality standard. Using the median flow as a rough estimate of long term average flows, total annual assimilative capacity can be calculated. The calculation would look at follows:

(16.27 cubic feet/second)(Liters/cubic foot)(seconds/year)(criteria) = 0.65 grams/year

While this is an extremely simplified means of assessing the complexities of PCB exposure in the natural environment, it is meant to demonstrate that current discharge levels, 5-8 grams/year, are at least ten times the theoretical assimilative capacity of the stream.

There are other sources of PCBs in Indian Creek and the Blue River that must also be considered. While these background sources of PCBs cannot be readily detected by water sampling, they can be detected in fish tissue, where PCBs accumulate and concentrate at levels far above those found in the water column. In a study from 2007, channel catfish were collected from various sites in Indian Creek and the Blue River (2). In catfish collected several miles upstream on Indian Creek, PCBs were present at an average of 0.10µg/g. Catfish collected in Indian Creek downstream from DOE site averaged 0.40µg/g. This implies that outside sources of PCBs are contributors to stream loading.

The calculation shown above is a means of estimating magnitudes of PCB loading, but doesn't tell the whole story. The numeric criterion cited above is based on a level of exposure to PCBs in the water column. Actual exposure to PCB in the environment is much more complicated. PCBs are "sticky" and bind to particles in sediment and in the water column. The PCB contamination in the discharge is carried on the small particles of clay that are suspended in the storm water. Some of these particles settle out near the outfall and others are carried downstream in the storm events. The plants and animals of the food chain are then exposed to these sediments and collect the PCBs in their fatty tissues.

It is difficult to accurately assess the water column values of PCB due to the complex interaction of sediment and water column exposure, and the inability to detect PCB at low levels. Based on the data in fish tissue, it is evident that fish PCB exposure exceeds the levels that would be predicted by constant exposure to PCB at the level set by water quality criterion. It is likely that instream exposure and fish tissue concentration of PCB would remain elevated even if PCB discharges from the DOE site could be further reduced.

Based on levels of PCBs and chlordane in fish tissue the Missouri Department of Health and Senior Services has issued a consumption limit for carp and channel catfish consumed from the Blue River in the 2010 Fish Advisory(3).

A consultant for the Department of Energy, Geosyntec, reviewed the methodologies used to derive MDNR's PCB criterion and the collected fish tissue data from the site, including data from upstream Indian Creek and the Blue River (4). Geosyntec stated: "The weight of available evidence and information provided by the Honeywell FM&T supports the hypothesis that assimilative capacity for total PCBs is negligible in reaches of Indian Creek and the Blue River."

(1) Kansas City Plant 2008 Annual Site Environmental Survey, U.S. Department of Energy National Nuclear Security Administration, September 2009.
(2) Evaluation of Polychlorinated Biphenyls in Fish and SPMDs Near the U.S. Department of Energy Kansas City Plant, Oak Ridge National Laboratory, ORNL/TM-2008/243, December 2008.
(3) 2010 Missouri fish Advisory, A Guide to Eating Missouri Fish, Missouri Department of Health and Human Services. http://www.dhss.mo.gov/fishadvisory/10FishAdvisory.pdf
(4) Memorandum: Assimilative Capacity Evaluation for Polychlorinated Biphenyls (PCBs) at the U.S. Department of Energy Kansas City Plant (MO-0004863). From Chris Zell and Brandon Sheets, Geosyntec Consultants to Mike Stites, Honeywell Federal Manufacturing & Technologies, LLC. June 23, 2010.
(5) Technical Support Document For Water Quality-based Toxics Control. EPA/505/2-90-001, March 1991. http://www.epa.gov/npdes/pubs/owm0264.pdf
(6) Final Rule to Amend the Final Water Quality Guideance for the Great Lakes System to Prohibit Mixing zones for Bioaccumulative Chemicals of Concern. Federal Register: November 13, 2000 (Volume 65, Number 219, Page 67638-67651) http://www.epa.gov/fedrgstr/EPA-WATER/2000/November/Day-13/w28709.htm

- **pH**. Effluent limitations have been changed to 6.5-9 SU to be in conformance with 10 CSR 20- 7.031(4) (E).

- **Oil & Grease**. Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

- **Trichloroethylene** Monitoring established to determine if trichloroethylene is present in the discharge. Data will be evaluated at permit renewal to determine if there is reasonable potential to violate water quality standards.

- **1, 2- Dichloroethylene** A reasonable potential analysis was conducted to determine if the potential to exceed the Missouri Water Quality standard exist for 1,2 Dichloroethylene specifically the isomer 1,2 trans Dichloroethylene. This analysis stated that no reasonable potential exists therefore a monitoring only requirement has been established.

- **Vinyl Chloride** Monitoring established to determine if vinyl chloride is present in the discharge. Data will be evaluated at permit renewal to determine if there is reasonable potential to violate water quality standards.

- **Mercury, Total Recoverable** Eliminated because of no detections since 2002

- **Chromium VI, Total Recoverable**. Monitoring established to determine if hexavalent chromium is present in the discharge. Data will be evaluated at permit renewal to determine if there is reasonable potential to violate water quality standards.

- **Aluminum, Total Recoverable and Dissolved** Monitoring established to determine if aluminum is present in the discharge. Data will be evaluated at permit renewal to determine if there is reasonable potential to violate water quality standards.

Part VI – Administrative Requirements

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

PUBLIC NOTICE:
As per the Missouri Clean Water Law, the Missouri Clean Water Commission, and the federal Clean Water Act, persons wishing to comment on Missouri State Operating Permits are directed to do so by a department approved Public Notice coversheet. This Public Notice coversheet is attached to a Missouri State Operating Permit during the Public Notice period.

☒ - The Public Notice period for this operating permit was from November 1, 2011 to November 30, 2011.

Date of Fact Sheet: January 18, 2011

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