

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 RSMo, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0002411

Owner: Eaton Filtration LLC
Address: 1000 Eaton Boulevard, Cleveland, OH 44122

Continuing Authority: Unisys Corporation
Address: 3199 Pilot Knob Road, Eagan, MN 55121

Facility Name: Eaton Filtration LLC/Unisys – Former Vickers Facility
Facility Address: 2800 West 10th Street, Joplin, MO 64801

Legal Description: See page 2
UTM Coordinates: See page 2

Receiving Stream: See page 2
First Classified Stream and ID: See page 2
USGS Basin & Sub-watershed No.: See page 2

authorizes activities pursuant to the terms and conditions of this permit in accordance with the Missouri Clean Water Law and/or the National Pollutant Discharge Elimination System; it does not apply to other regulated activities.

FACILITY DESCRIPTION

SIC #4959; NAICS #568910; Former Vickers facility is a hazardous waste remediation site for various hazardous wastes previously generated at the site. The former Vickers facility was a manufacturing facility that produced piston and gear hydraulic pumps, motors, hydrostatic transmissions, and power steering and boosters for industrial and agricultural applications. Remediation of groundwater through Outfall #003 has ceased. No industrial sludge is produced at this site. This facility does not require a certified wastewater operator per 10 CSR 20-9.030 as this facility is privately owned. Domestic wastewater is managed via a pump and haul system.

July 1, 2023
Effective Date

June 30, 2028
Expiration Date



John Hoke, Director, Water Protection Program

OUTFALL #001

Inactive stormwater outfall as of April 11, 2008. This outfall is no longer authorized to discharge.

OUTFALL #002 – Stormwater

Stormwater runoff from environmental remediation site.

Legal Description:	Sec. 08, T72N, R33W, Jasper County
UTM Coordinates:	X = 361927, Y = 4104971
Receiving Stream:	Tributary to Short Creek
First Classified Stream and ID:	Presumed-Use Stream (C) (3960) (Short Creek)
USGS Basin & Sub-watershed No.:	Spring Basin; (11070207-0904)
Design Flow:	2.80 MGD (~26 acres, 10year/24hour rain event of 5.8 inches, runoff coefficient of 0.7)
Actual Flow:	Dependent upon precipitation (0.160 MGD from DMR data)

OUTFALL #003

Eliminated in 2021, as pump and treat remediation of groundwater ceased in 2018. This outfall is no longer authorized to discharge.

OUTFALL #004

Inactive wastewater outfall as of December 09, 2010. This outfall is no longer authorized to discharge.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL #002 <i>Stormwater Only</i>		TABLE A FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS				
The facility is authorized to discharge from outfall(s) as specified. The final effluent limitations shall become effective on July 1, 2023 and remain in effect until expiration of the permit. Discharges shall be controlled, limited and monitored by the facility as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE		MINIMUM MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: Q						
PHYSICAL						
Flow	MGD	*		-	once/quarter ◇	24 Hr Est.
Precipitation	inches	*		-	once/quarter ◇	measured
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	*		-	once/quarter ◇	grab
Oil & Grease	mg/L	*		-	once/quarter ◇	grab
pH †	SU	**		6.5-9.0	once/quarter ◇	grab
Total Suspended Solids	mg/L	*		-	once/quarter ◇	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2023</u> .						

* Monitoring and reporting requirement only

** Monitoring and reporting requirement with benchmark. See Special Conditions for additional requirements.

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

◇ Quarterly sampling

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

C. 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.

D. SPECIAL CONDITIONS

1. Spills, Overflows, and Other Unauthorized Discharges.
 - (a) Any spill, overflow, or other discharge(s) not specifically authorized are unauthorized discharges.
 - (b) If an unauthorized discharge cause or permit any contaminants to discharge or enter waters of the state, the unauthorized discharge must be reported to the regional office as soon as practicable but no more than 24 hours after the discovery of the discharge. If the spill or overflow needs to be reported after normal business hours or on the weekend, the facility must call the Department’s 24 hour spill line at 573-634-2436.
2. Any discharge not meeting permitted limits may be pumped and hauled to an accepting wastewater treatment facility, or otherwise properly disposed.
3. Electronic Discharge Monitoring Report (eDMR) Submission System. The NPDES Electronic Reporting Rule, 40 CFR Part 127, reporting of effluent monitoring data and any report required by the permit (unless specifically directed otherwise by the permit), shall be submitted via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data for the NPDES program. The eDMR system is currently the only Department-approved reporting method for this permit unless specified elsewhere in this permit, or a waiver is granted by the Department.

The facility must register in the Department's eDMR system through the Missouri Gateway for Environmental Management (MoGEM) before the first report is due. All reports uploaded into the system shall be reasonably named so they are easily identifiable, such as "WET Test Chronic Outfall 002 Jan 2023", or "Outfall004-DailyData-Mar2025".

4. Stormwater Pollution Prevention Plan (SWPPP).

The facility's SIC code or description is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) and hence shall implement a Stormwater Pollution Prevention Plan (SWPPP) which must be prepared and implemented upon permit effective date. The SWPPP must be kept on-site and not sent to the Department unless specifically requested. The SWPPP must be reviewed and updated annually or if site conditions affecting stormwater change. The facility shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002 March 2021) https://www.epa.gov/sites/production/files/2021-03/documents/swppp_guide_industrial_2021_030121.pdf The purpose of the SWPPP and the Best Management Practices (BMPs) listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was ineffective at providing the necessary protections for which it was designed. Corrective action describes the steps the facility took to eliminate the deficiency.

The SWPPP must include:

- (a) A listing of specific contaminants and their control measures (BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater.
- (b) A map with all outfalls and structural BMPs marked.
- (c) If within the boundaries of a regulated Municipal Separate Storm Sewer System (MS4s), list the name of the regulated MS4.
- (d) A schedule for at least once per quarter site inspections and brief written reports. The inspection report must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. A BMP is considered to be disrupted if it is rendered ineffective as a result of damage or improper maintenance. Categorization of a deficiency is reliant on the length of time required to correct each disrupted BMP. Corrective action after discovering a disrupted BMP must be taken as soon as possible. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
 - (1) Operational deficiencies are disrupted BMPs which the facility is able to and must correct within 7 calendar days.
 - (2) Minor structural deficiencies are disrupted BMPs which the facility is able to and must correct within 14 calendar days.
 - (3) Major structural deficiencies (deficiencies projected to take longer than 14 days to correct) are disrupted BMPs which must be reported as an uploaded attachment through the eDMR system with the DMRs. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including proposed timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. If required by the Department, the facility shall work with the regional office to determine the best course of action. The facility may consider temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.
 - (4) All actions taken to correct the deficiencies shall be included with the written report, including photographs, and kept with the SWPPP. Additionally, corrective action of major structural deficiencies shall be reported as an uploaded attachment through the eDMR system with the DMRs.
 - (5) BMP failure causing discharge through an unregistered outfall is considered an illicit discharge and must be reported in accordance with Standard Conditions Part I.
 - (6) Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to Department personnel upon request. Electronic versions of the documents and photographs are acceptable.
- (e) A provision for designating a responsible individual for environmental matters and a provision for providing training to all personnel involved in housekeeping, material handling (including but not limited to loading and unloading), storage, and staging of all operational, maintenance, storage, and cleaning areas. Proof of training shall be submitted upon request by the Department.

5. Site-wide minimum Best Management Practices (BMPs). At a minimum, the facility shall adhere to the following:

- (a) Provide good housekeeping practices on the site to keep trash from entry into waters of the state. Dumpsters must remain closed when not in use.
- (b) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, warehouse activities, and other areas, to prevent the contamination of stormwater from these substances.
- (c) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
- (d) Store all paint, solvents, petroleum products, petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater 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. Spill records shall be retained on-site or readily accessible electronically.

- (e) Provide sediment and erosion control sufficient to prevent or minimize sediment loss off of the property, and to protect embankments from erosion.
 - (f) Wash water for vehicles, building(s), or pavement must be handled in a no-discharge manner (infiltration, hauled off-site, etc.). Describe the no-discharge method used and include all pertinent information (quantity/frequency, soap use, effluent destination, BMPs, etc.) in the application for renewal. If wash water is not produced, note this instead.
 - (g) The facility shall not apply salt and sand (traction control) in excess of what is required to maintain safe roadways and walkways. In the spring, after potential for additional snow or ice accumulation, if there is evidence of significant excess traction control materials, the facility shall remove excess sand or salt as soon as possible to minimize and control the discharge of salt and solids. At all times the facility shall use salt judiciously to minimize freshwater salinization.
 - (h) Salt and sand shall be stored in a manner minimizing mobilization in stormwater (for example: under roof, in covered container, under tarp, etc.).
6. Stormwater Benchmarks. This permit stipulates numeric pollutant benchmarks applicable to the facility's stormwater discharges.
- (a) Benchmarks do not constitute direct numeric effluent limitations; therefore, a benchmark exceedance alone is not a permit violation. Stormwater monitoring, numeric benchmark compliance, and visual inspections shall be used to determine the overall effectiveness of the BMPs identified in the SWPPP.
 - (b) If a sample exceeds a benchmark concentration, the facility must review the SWPPP and BMPs to determine what improvements or additional controls are needed to reduce pollutant concentrations in future stormwater discharges.
 - (c) Every time a numeric benchmark exceedance occurs, a Corrective Action Report (CAR) must be completed. A CAR is a document recording the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and be available to the Department upon request. This permit may require CARs be submitted to the Department upon permit renewal; see Renewal Requirements section below.
 - (d) Failure to take corrective action to address numeric benchmark exceedance, and failure to make measureable progress towards achieving the numeric benchmark(s), is a permit violation.
 - (e) Stormwater benchmarks and required minimum BMPs as described in this permit are enforceable permit conditions. Any requested change(s) to numeric benchmark values or deviation from minimum BMP requirements must be established through the permitting process. Assessment, evaluation, and implementation of specific BMPs to meet numeric benchmarks or minimum BMP requirements, must be addressed through the SWPPPs and CARs.
7. All outfalls must be clearly marked in the field.
8. Report no discharge when a discharge does not occur during the report period. It is a violation of this permit to report no-discharge when a discharge has occurred.
9. Reporting of Non-Detects.
- (a) Compliance analysis conducted by the facility or any contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated. See sufficiently sensitive test method requirements in Standard Conditions Part I, §A, No. 4 regarding proper testing and detection limits used for sample analysis. For the purposes of this permit, the definitions in 40 CFR 136 apply; method detection limit (MDL) and laboratory-established reporting limit (RL) are used interchangeably in this permit. The reporting limits established by the laboratory must be below the lowest effluent limits established for the specified parameter (including any parameter's future limit after an SOC) in the permit unless the permit provides for an ML.
 - (b) The facility shall not report a sample result as "non-detect" without also reporting the MDL. Reporting "non-detect" without also including the MDL will be considered failure to report, which is a violation of this permit.
 - (c) For the daily maximum, the facility shall report the highest value; if the highest value was a non-detect, use the less than "<" symbol and the laboratory's highest method detection limit (MDL) or the highest reporting limit (RL); whichever is higher (e.g. <6).
 - (d) When calculating monthly averages, zero shall be used in place of any value(s) not detected. Where all data used in the average are below the MDL or RL, the highest MDL or RL shall be reported as "<#" for the average as indicated in item (c).
10. Failure to pay fees associated with this permit is a violation of the Missouri Clean Water Law (644.055 RSMo).
11. This permit does not cover land disturbance activities.
12. This permit does not apply to fertilizer products receiving a current exemption under the Missouri Clean Water Law and regulations in 10 CSR 20-6.015(3)(B)8, and are land applied in accordance with the exemption.

13. This permit does not allow stream channel or wetland alterations unless approved by Clean Water Act §404 permitting authorities.
14. This permit does not authorize in-stream treatment, the placement of fill materials in flood plains, placement of solid materials into any waterway, the obstruction of stream flow, or changing the channel of a defined drainage course.
15. All records required by this permit may be maintained electronically. These records can be maintained in a searchable format.
16. Changes in Discharges of Toxic Pollutant.
In addition to the reporting requirements under 40 CFR 122.41, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director per 40 CFR 122.42(a)(1) and (2) as soon as recognizing:
 - (a) An activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, 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;
 - (3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
 - (4) One milligram per liter (1 mg/L) for antimony;
 - (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - (6) The notification level established by the Department in accordance with 40 CFR 122.44(f).
 - (b) Any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
 - (4) The level established by the Director in accordance with 40 CFR 122.44(f).
 - (c) Authorization of new or expanded pollutant discharges may be required under a permit modification or renewal, and may require an antidegradation review.
17. This permit does not authorize the facility to accept, treat, or discharge wastewater from other sources. If the facility would like to accept, treat, or discharge wastewater from another activity or facility, the permit must be modified to include external wastewater pollutant sources in the permit.
18. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with provisions of the Missouri Clean Water Law equivalent to Sections 301, 302, 306, 307, and 403 of the federal Clean Water Act, except for standards imposed under Section 307 for toxic pollutants injurious to human health, in accordance with Section 644.051.16 RSMo and CWA §402(k).
19. Any discharges (or qualified activities such as land application) not expressly authorized in this permit, and not clearly disclosed in the permit application, cannot become authorized or shielded from liability under CWA section 402(k) or Section 644.051.16, RSMo, by disclosure to EPA, state, or local authorities after issuance of this permit via any means, including any other permit applications, funding applications, the SWPPP, discharge monitoring reporting, or during an inspection. Submit a permit modification application, as well as an antidegradation determination if appropriate, to request authorization of new or expanded discharges.

F. NOTICE OF RIGHT TO APPEAL

If you were adversely affected by this decision, you may be entitled to pursue an appeal before the administrative hearing commission (AHC) pursuant to 621.250 and 644.051.6 RSMo. To appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Any appeal shall be directed to:

Administrative Hearing Commission; U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557; Jefferson City, MO 65102-1557
Phone: 573-751-2422; Fax: 573-751-5018
Website: <https://ahc.mo.gov>

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL OF
MO-0002411
EATON FILTRATION LLC/UNISYS – FORMER VICKERS FACILITY

The Federal Water Pollution Control Act (Clean Water Act (CWA) §402 Public Law 92-500 as amended) established the National Pollutant 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 stormwater from certain point sources. All such discharges are unlawful without a permit (§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 644 RSMo as amended). MSOPs may also cover underground injection, non-discharging facilities, and land application facilities. Permits are issued for a period of five (5) years unless otherwise specified for less.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)(A)2.] a factsheet shall be prepared to give pertinent information regarding applicable regulations, rationale for the development of limitations and conditions, and the public participation process for the Missouri State Operating Permit (MSOP or permit) listed below. A factsheet is not an enforceable part of a permit.

PART I. FACILITY INFORMATION

Facility Type:	Industrial: Non-categorical < 1 MGD
SIC Code(s):	#4595
NAICS Code(s):	#568910
Application Date:	10/06/2022
Expiration Date:	03/31/2023
Last Inspection:	08/04/2021

FACILITY DESCRIPTION

Eaton Filtration LLC/Unisys (facility) was formerly known as Vickers, Inc., and was a manufacturing plant with operations beginning in 1952 and ending in December 1987. The plant made piston and gear hydraulic pumps, motors, hydrostatic transmissions, and power steering boosters for industrial and agricultural applications. Chemical use included corrosives, paint sludges, spent solvents, mineral spirits, waste oils, metal plating wastes, scrap metals, cyanides, kolene salts, and solvents including trichloroethene, 1,1,1-trichlorethane, petroleum hydrocarbons, light non-aqueous phase liquid (LNAPL), and dense non-aqueous phase liquid (DNAPL). Prior to construction of the plant, the site had been mined for lead and zinc.

The facility was formerly owned and/or operated by Sperry-Vickers, a division of Sperry Corporation, the predecessor corporate entity to Unisys Corporation. Effective January 1, 1984, the facility was owned and/or operated by Vickers, Inc., a wholly-owned subsidiary of Libby-Owens-Ford Company, later known as TRINOVA Corporations. TRINOVA Corporation changed its name to Aeroquip-Vickers, Inc. on April 17, 1997, and is the current owners of the facility to date. Manufacturing operations ceased in 1987, and the manufacturing building and associated area were sold to Able Manufacturing Corporation, which is the adjacent property to this facility. The facility operated several interim status regulated hazardous waste management units that included two (2) surface impoundments, a hazardous waste storage building, and a sludge drying basin. Other solid waste management units operated at the facility included two abandoned landfills, and additional lagoon/surface impoundment, a former drum storage area, a settling basin, tow filter basins, a contaminated drainage ditch, and elementary neutralization unit, three underground storage tank areas, a former drum rack area, a drum disposal area, and the Able Manufacturing sewer.

This facility is now a closed permitted hazardous waste treatment, storage, and disposal facility undergoing corrective action at eighteen (18) closed solid waste management units (SWMUs) and four (4) areas of concern.

Outfall #001 – This outfall was removed in the April 11, 2008 permit, which indicated “Outfall Terminated – This stormwater came from off the Vickers site and was discharging on the North side of the Vickers property.” Stormwater run-off from Able Manufacturing is the sole source of industrial stormwater run-off that was in the previous permitted Outfall #001, which was verified on January 30, 2009, during a site-visit conducted by the previous permit writer. Stormwater discharges from Able Manufacturing are permitted under MO-R203167. Stormwater runoff from the Vickers site is not regulated because there is no industrial activity on that portion of the site draining to this location. For this reason, Outfall #001 will remain out of this permit at this time.

Outfall #002 – Currently this outfall consists of comingled stormwater run-off from the adjacent property (Able Manufacturing) in the southern portion of this facility’s property and storm water run-off from this facility.

This outfall previously also consisted of decant water from the acid washing rinsing process for the air stripping towers discussed below in the description for Outfall #003; however, with the discontinuation of remediation activity from this outfall, decant water is no longer being produced. As such, this outfall has become a true stormwater-only outfall, with no process wastewater contributions whatsoever. In addition, previous site investigations have shown that there is no reasonable potential for pollutants of concern previously listed in Outfall #003 to contaminate the stormwater that is discharged from Outfall #002. Submitted DMRs document an average flow of 0.126 MGD.

The permittee provided the following description in this current MSOP renewal application: Outfall #002 monitors surface water runoff from approximately 260 acres from the adjacent Able Manufacturing property and the southern and western portion of the Eaton Hydraulics Facility to an unnamed tributary of Short Creek.

Outfall #003 – As this facility no longer provides remediation for groundwater through this outfall, it has been discontinued. The permittee may not discharge from this outfall. However, this permit may be modified in the future to re-permit this outfall. As such, the outfall description has been maintained in an effort to aid the next permit writer in writing this permit.

Outfall #003's discharges consisted of treated groundwater from the light non-aqueous phase liquid (LNAPL) treatment plant (LTP). The LTP was installed under the US RPA RCRA corrective action program to clean up soil and groundwater related to prior industrial activities that took place between 1952 and 1987. Soil and groundwater contamination consists of trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA) and degradation byproducts of enhanced reductive dechlorination (ERD). The LTP consists of groundwater extraction wells, LNAPL recovery wells, an oil and water separator, flow equalization tank, air stripping towers, vapor phase recovery system (VIC), and multiphase extraction (MPE). The combined flow from all groundwater extraction wells goes to the equalization tank, with a minor contribution from the oil/water separator tank, and VIC decanter, and thereafter, no additional water is added to the LTP process flow. Submitted DMRs document an average flow of 0.377 MGD.

The groundwater extraction system consists of nine (9) recovery wells. Each well is equipped with a shutoff valve and an electrical disconnect switch at the well head. The pressure gauge, flow meter, sampling port, in-line strainer, and flow control valve for each extraction well are located inside the LTP.

The LNAPL recovery system consists of fifteen (15) recovery wells. A Pressure Pump System (PPS) is used to remove the LNAPL and dense non-aqueous phase liquid (DNAPL) from wells exhibiting 0.04 feet or greater accumulation of water, contaminants or a combination of the two. LNAPL collected from pumping is placed into a labeled container. The wastewater is transported to the decontamination area of the LTP, where it is pumped into the oil/water separator.

The oil/water separator is an American Petroleum Institute (API) approved, 350 gallon steel coalescing separator tank. Recovered LNAPL and groundwater mixture is pumped to the oil/water separator. LNAPL (e.g. oil) from the oil/water separator is received at a 5,000 gallon capacity LNAPL tank. LNAPL from this tank is disposed of by incineration at an approved treatment, storage, and disposal facility, which is off-site.

Effluent (water) from the oil/water separator, after gravity separation, flows from the separator to a bag filter and then to the equalization tank. The equalization tank (6,000 gallon storage capacity) represents the end source of water input to the LTP prior to treatment via the air stripping towers. The tank allows for equalization of all influent flow from groundwater recovery wells, oil/water separator, the VIC wastewater return, and other LTP water usage.

The air stripping towers consist of two (2) forced air counter-current Carbon-air stripping towers operating in series that are utilized to remove VOCs from the groundwater. Water from the equalization tank is pumped to the top of air stripper 1 and is dispersed over the full diameter of the tower. The water is spread over media which allows a maximum surface area for the transfer of VOCs from a liquid phase to gaseous phase. The water is then pumped to the top of air stripper 2 and is dispersed over the full diameter of the tower. The treated water is then pumped to the VIC. Additionally, the air stripping towers are acid washed twice a month to remove scale and buildup in the towers. The wastewater and solids from the acid washing process are pumped to a poly tank. The poly tank allows settling of solids, which are then dewatered into non-hazardous filter cake waste. This filter cake waste is disposed off-site at a landfill. Water generated from the press is added back into the LTP water stream at the surge tank to be treated prior to discharge through Outfall #003. The air strippers are then rinsed with tap water. The rinse water is pumped to a separate settling tank in order to separate solids and water generated during rinsing. After solids sufficiently settle, decant water is pumped to Outfall #002 without further treatment.

The VIC unit recovers VOCs from the air streams generated by the LTP. Air exhaust from the oil/water separator, flow equalization tank, and air stripper is manifolded to the VIC. The VIC consists of two 72-inch diameter vapor phase carbon adsorption vessels. While VOCs are adsorbed on the activated carbon within the vessels, the VIC decanter serves as a separator for the solvent (VOCs) and water. The decanter is a gravity separator. The heavier solvent settles to the bottom of the decanter while steam condensate water flows to the wastewater receiver tank.

Water in the wastewater receiver tank is pumped back to the flow equalization tank for treatment prior to discharge from Outfall #003. Recovered solvent is pumped from the decanter to the 2,000 gallon solvent recovery tank and is disposed at an off-site location.

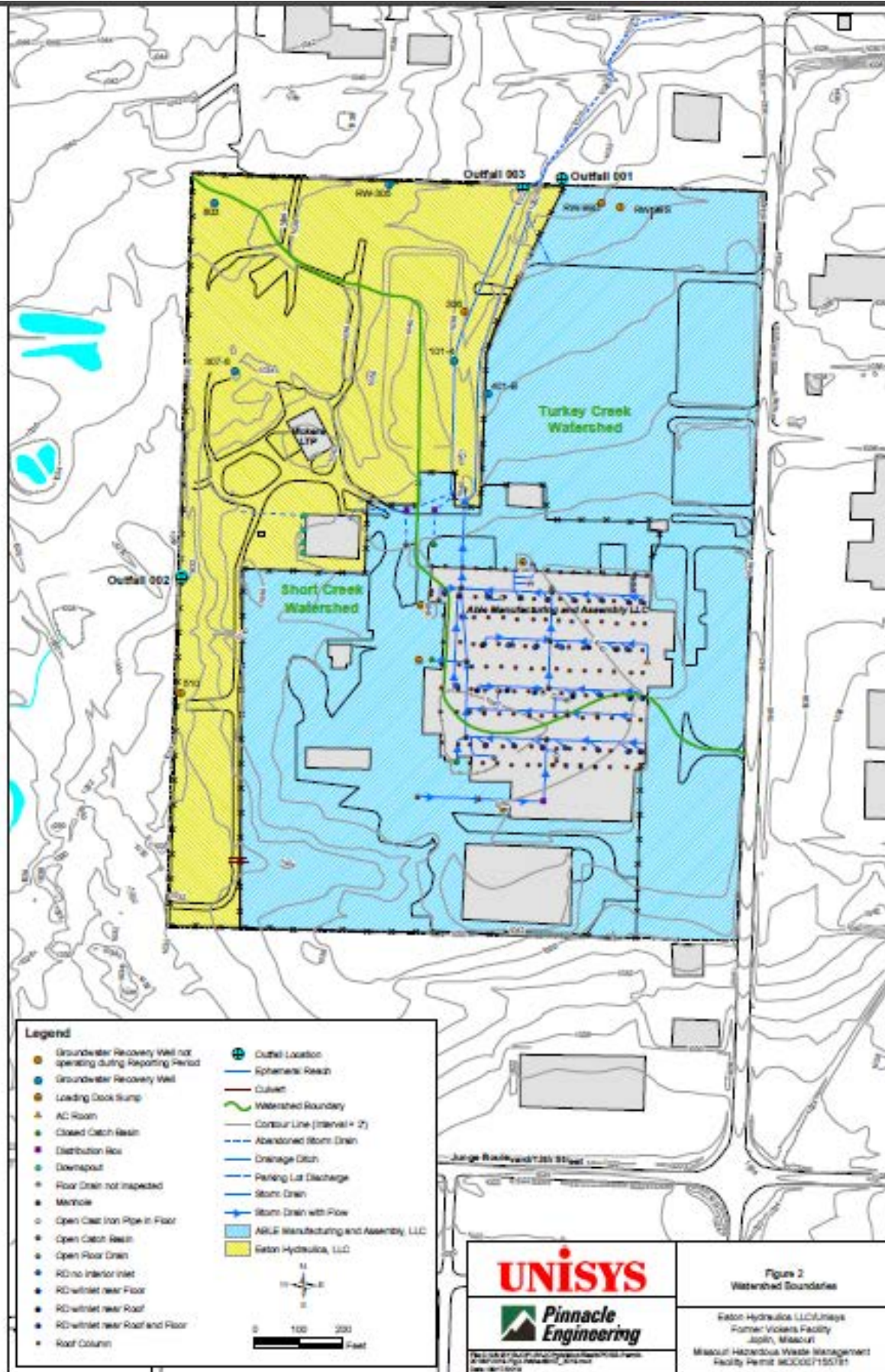
Outfall #004 – This outfall was removed in the April 11, 2008 permit, which indicated “Inactive outfall. Discharges from this previously permitted outfall are no longer allowed. Flows from this previously permitted outfall are now diverted to Outfall #003.”

Items listed in the facility (or outfall) description, applicable to the operation, maintenance, control, and resultant effluent quality are required to be enumerated in the facility description. The facility description ensures the facility continues to operate the wastewater (or stormwater) controls listed in the permit to preserve and maintain the effluent quality pursuant to 40 CFR 122.21(e). Any planned changes to the facility (which changes the facility or outfall description) are required to be reported to the Department pursuant to 40 CFR 122.41(l)(1)(ii). If the facility does not or cannot use all of their disclosed treatment devices, this is considered bypassing pursuant to 40 CFR 122.41(m) in the case of wastewater, and BMP disruption in the case of stormwater.

PERMITTED FEATURES TABLE

OUTFALL	AVERAGE FLOW	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#002	0.161 MGD	2.8 MGD	BMPs	Stormwater

FACILITY MAP



FACILITY PERFORMANCE HISTORY & COMMENTS

The electronic discharge monitoring reports were reviewed for the last permit term. There were no exceedances of pH, the only parameter with a benchmark. Additionally, concentrations of other parameters were insufficient to warrant the addition of benchmarks in this permit term. During the most recent inspection, the facility was cited for failing to complete inspections per the SWPPP on a monthly basis per Special Condition 10 in the most recent permit. The facility requested during this permit term to reduce inspection frequency to quarterly. Given the long history this facility has maintaining consistent compliance, and the fact that the discharge is well characterized with low risk to water quality, the permit writer granted this request.

CONTINUING AUTHORITY

Pursuant to 10 CSR 20-6.010(2)(A) and (E), the Department has received the appropriate continuing authority authorized signature from the facility. The Missouri Secretary of State continuing authority charter number for this facility is F00262693; this number was verified to be associated with the facility and precisely matches the continuing authority reported by the facility. The charter number is perpetual.

OTHER ENVIRONMENTAL PERMITS:

In accordance with 40 CFR 122.21(f)(6), the facility reported other environmental permits currently held by this facility. This facility has the following permits: MOD00715578, a Missouri Hazardous Waste Management permit which requires post-closure care, including ongoing groundwater monitoring and corrective action. The permit also required implementation of a holistic corrective action program to address releases from other solid waste management units and areas of concern.

INEFFECTIVE PERMITS:

MO 0292-003, a construction permit, allowed for upgrades from the original light non-aqueous phase liquid treatment plant to a 400 gpm treatment plant to remove volatile organic compounds from pumped groundwater. As this construction was completed in the 1990s, it is no longer effective.

UI-0000032, an Underground Injection Control Permit, was terminated on January 3, 2018 when the groundwater extraction and multiphase extraction operations ceased.

MO-040401, a Missouri Boiler Permit, allowed for the operation of the low-pressure boiler system in the LTP operations. Groundwater extraction and multiphase extraction operations have ceased, so this facility is no longer using this permit as of August 14, 2018, per their application.

MOD007155781 is a hazardous waste permit requiring post-closure care, including groundwater monitoring, and corrective action for two former surface impoundments, which have been closed as landfills.

PART II. RECEIVING WATERBODY INFORMATION

RECEIVING WATERBODY TABLE:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	DISTANCE TO SEGMENT	12-DIGIT HUC
#002	Tributary to Short Creek	n/a	n/a	GEN	0.0 mi	11070207-0904; Spring Basin
#002	Presumed-Use Stream	C*	5079	GEN, HHP, IRR, LWW, SCR, WBC-B, WWH (ALP)	0.13 mi	

* The previous permit identified WBID# 3960 and 100K Extent-Remaining Stream; these changes are due to a new numbering system and new naming convention for streams and lakes based on the HUC8 watershed number, the actual receiving stream has not changed.

Classes are representations of hydrologic flow volume or lake basin size per 10 CSR 20-7.031(1)(E).

Designated uses are described in 10 CSR 20-7.031(1)(F).

WBID: Waterbody Identification Number per 10 CSR 20-7.031(1)(Q) and (S)

HUC: Hydrologic Unit Code <https://water.usgs.gov/GIS/huc.html>

Other:

10 CSR 20-7.015(7) and 10 CSR 20-7.031(6): **GRW** = Groundwater

10 CSR 20-7.031(4): **GEN** – GEN may be assigned on a case by case basis if the NHD line is determined to be a water requiring protection by the Watershed Protection Section.

10 CSR 20-7.031(5)(N)6: **NNC** – lake numeric nutrient criteria apply

Water Quality Standards Search https://apps5.mo.gov/mocwis_public/waterQualityStandardsSearch.do

EXISTING WATER QUALITY & IMPAIRMENTS

The receiving waterbody(s) segment(s), upstream, and downstream confluence water quality was reviewed. The USGS

<https://waterdata.usgs.gov/nwis/sw> or the Department’s quality data database was reviewed.

https://apps5.mo.gov/mocwis_public/wqa/waterbodySearch.do and <https://apps5.mo.gov/wqa/> Impaired waterbodies which may be impacted by discharges from this facility were determined. Impairments include waterbodies on the 305(b) or 303(d) list and those waterbodies or watersheds under a TMDL. <https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/tmdls> Section 303(d) of the federal Clean Water Act requires each state identify waters not meeting water quality standards and for which adequate water pollution controls have not been required. <https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/impaired-waters> Water quality standards protect beneficial uses of water as provided in 10 CSR 20-7.031. The 303(d) list helps state and federal agencies keep track of impaired waters not addressed by normal water pollution control programs. A TMDL is a calculation of the maximum amount of a given pollutant a water body can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards.

✓ There are no upstream or downstream impairments near this facility.

PART III. RATIONALE AND DERIVATION OF PERMIT CONDITIONS

ANTIBACKSLIDING

Federal antibacksliding requirements [CWA §402(o) and 40 CFR § 122.44(1) [https://www.ecfr.gov/current/title-40/chapter-1/subchapter-D/part-122#p-122.44\(1\)](https://www.ecfr.gov/current/title-40/chapter-1/subchapter-D/part-122#p-122.44(1))] generally prohibit a reissued permit from containing effluent limitations that are less stringent than the previous permit, with some exceptions. All renewed permits are analyzed for evidence of backsliding. There are several express statutory exceptions to the antibacksliding requirements, located in CWA § 402(o)(2) and 40 CFR 122.44(1). Parameters are discussed individually in Part IV of the fact sheet.

ANTIDegradation REVIEW

Wastewater discharges with new, altered, or expanding flows, the Department is to document, by means of antidegradation review, if the use of a water body’s available assimilative capacity is justified. See <https://dnr.mo.gov/document-search/antidegradation-implementation-procedure>

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

BEST MANAGEMENT PRACTICES

Minimum site-wide best management practices are established in this permit to ensure all facilities are managing their sites equally to protect waters of the state from certain activities which could cause negative effects in receiving water bodies. While not all sites require a SWPPP because the SIC codes are specifically exempted in 40 CFR 122.26(b)(14) or 10 CSR 20-6.200(2), these best management practices are not specifically included only for stormwater purposes. These practices are minimum requirements for all industrial sites to protect waters of the state. If the minimum best management practices are not followed, the facility may violate

general criteria [10 CSR 20-7.031(4)]. Statutes are applicable to all permitted facilities in the state, therefore pollutants cannot be released unless in accordance with 644.011 and 644.016 (17) RSMo.

CLOSURE

To properly decontaminate and close a wastewater storage structure, treatment structure, lagoon, basin, or device, the facility must draft a complete closure plan, and include the Closure Request Form #2512 <https://dnr.mo.gov/document-search/facility-closure-request-form-mo-780-2512>. The publication, Wastewater Treatment Plant Closure - PUB2568 found at <https://dnr.mo.gov/print/document-search/pub2568> may be helpful to develop the closure plan. The regional office will then approve the closure plan, and provide authorization to begin the work. The regional office contact information can be found here: <https://dnr.mo.gov/about-us/division-environmental-quality/regional-office>

CHANGES IN DISCHARGES OF TOXIC POLLUTANT

This special condition reiterates the federal rules found in 40 CFR 122.44(f) for technology treatments and 122.42(a)(1) for all other toxic substances. In these rules, the facility is required to report changes in amounts of toxic substances discharged. Toxic substances are defined in 40 CFR 122.2 as "...any pollutant listed as toxic under section 307(a)(1)" or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing section 405(d) of the CWA." Section 307 of the clean water act then refers to those parameters listed in 40 CFR 401.15 and any other toxic parameter the Department determines is applicable for reporting under these rules in the permit. The facility must also consider any other toxic pollutant in the discharge as reportable under this condition and must report all increases to the Department as soon as discovered in the effluent. The Department may open the permit to implement any required effluent limits pursuant to CWA §402(k) where sufficient data was not supplied within the application but was supplied at a later date by either the facility or other resource determined to be representative of the discharge, such as sampling by Department personnel.

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 facility is not currently under Water Protection Program enforcement action.

DISCHARGE MONITORING REPORTING – ELECTRONIC (eDMR) SUBMISSION SYSTEM

The U.S. Environmental Protection Agency (EPA) promulgated a final rule on October 22, 2015, to modernize Clean Water Act reporting for municipalities, industries, and other facilities by requiring electronic data reporting. To comply with the federal rule, the Department is requiring all facilities to submit discharge monitoring data and reports online. To review historical data, the Department's database has a publically facing search engine, available at https://apps5.mo.gov/mocwis_public/dmrDisclaimer.do

Registration and other information regarding MoGEM can be found at <https://dnr.mo.gov/mogem>. Information about the eDMR system can be found at <https://dnr.mo.gov/env/wpp/edmr.htm>. The first user shall register as an Organization Official and the association to the facility must be approved by the Department. To access the eDMR system, use: <https://apps5.mo.gov/mogems/welcome.action> For assistance using the eDMR system, contact edmr@dnr.mo.gov or call 855-789-3889 or 573-526-2082. To assist the facility in entering data into the eDMR system, the permit describes limit sets designators in each table in Part A of the permit. Facility personnel will use these identifiers to ensure data entry is being completed appropriately. For example, M for monthly, Q for quarterly, A for annual, and others as identified.

DOMESTIC WASTEWATER, SLUDGE, AND BIOSOLIDS

Domestic wastewater is defined as wastewater originating primarily from the sanitary conveyances of bathrooms and kitchens. Domestic wastewater excludes stormwater, wash water, animal waste, process, or ancillary wastewater.

✓ Not applicable; this facility utilizes a pump and haul system to manage domestic waste.

EFFLUENT LIMITATIONS

Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs) are reviewed. Permits are required to establish the most stringent or most protective limit per 10 CSR 20-7.015(9)(A) and 40 CFR 122.44(b)(1). Effluent limitations derived and established for this permit are based on current operations of the facility. Any flow through the outfall is considered a discharge and must be sampled and reported as provided in the permit. Daily maximums and monthly averages are required for continuous discharges per 40 CFR 122.45(d)(1). Weekly limits are not available for non-POTWs.

FEDERAL EFFLUENT LIMITATION GUIDELINES

Effluent Limitation Guidelines, or ELGs, are found at 40 CFR 400-499. <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-N> These are limitations established by the EPA based on the type of activities a facility is conducting. Most ELGs are for process wastewater and some address stormwater. Effluent guidelines are not always established for every pollutant present in a point source discharge. In many instances, EPA promulgates effluent guidelines for an indicator pollutant. Industrial facilities complying with the effluent guidelines for the indicator pollutant will also control other pollutants (e.g. pollutants with a similar chemical structure). For

example, EPA may choose to regulate only one of several metals present in the effluent from an industrial category, and compliance with the effluent guidelines will ensure similar metals present in the discharge are adequately controlled. All are technology based limitations which must be met by the applicable facility at all times.

If Reasonable Potential is established for any particular parameter, and water-quality based effluent limits are more protective of the receiving water's quality, the WQBEL will be used as the limiting factor in accordance with 40 CFR 122.44(d) and 10 CSR 20-7.015(9)(A).

✓ The facility does not have an associated ELG.

GENERAL CRITERIA CONSIDERATIONS

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants determined to cause, have reasonable potential to cause, or to contribute to, an excursion above any water quality standard, including narrative water quality criteria. In order to comply with this regulation, permit decisions were made by completing a reasonable potential determination on whether discharges have reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). See Part III REASONABLE POTENTIAL for more information. In instances where reasonable potential exists, the permit includes limitations to address the reasonable potential. In discharges where reasonable potential does not exist, the permit may include monitoring to later determine the discharge's potential to impact the narrative criteria. Additionally, 644.076.1 RSMo, as well as Part I §D – Administrative Requirements of Standard Conditions included in this permit state it shall be unlawful for any person to cause or allow any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of §§644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule, or regulation promulgated by the commission. See Part IV for specific determinations.

GOOD HOUSEKEEPING PRACTICES

Good housekeeping is a practical, cost-effective way to maintain a clean and orderly facility to prevent potential pollution sources from coming into contact with stormwater. It includes establishing protocols to reduce the possibility of mishandling materials or equipment and employee training. Common areas where good housekeeping practices should be followed include trash containers and adjacent areas, material storage areas, vehicle and equipment maintenance areas, and loading docks. Good housekeeping practices must include a schedule for regular pickup and disposal of garbage and waste materials and routine inspections of drums, tanks, and containers for leaks and structural conditions. Practices also include containing and covering garbage, waste materials, and debris. Involving employees in routine monitoring of housekeeping practices is an effective means of ensuring the continued implementation of these measures.

Specific good housekeeping may include:

- ◆ Spill and overflow protection under chemical or fuel connectors to contain spillage at liquid storage tanks
- ◆ Load covers on residue hauling vehicles and ensure gates on trucks are sealed and the truck body is in good condition
- ◆ Containment curbs around loading/unloading areas or tanks
- ◆ Techniques to reduce solids residue which may be tracked on to access roads traveled by residue trucks or residue handling vehicles.
- ◆ Techniques to reduce solid residue on exit roads leading into and out of residue handling areas

Industrial facilities may conduct activities that use, store, manufacture, transfer, and/or dispose of PFAS containing materials. Successful good housekeeping practices to minimize PFAS exposure to stormwater could include inventorying the location, quantity, and method of storage; using properly designed storage and transfer techniques; providing secondary containment around chemical storage areas; and using proper techniques for cleaning or replacement of production systems or equipment.

Where feasible, minimizing exposure of potential pollutant sources to precipitation is an important control option. Minimizing exposure prevents pollutants, including debris, from coming into contact with precipitation and can reduce the need for BMPs to treat contaminated stormwater runoff. It can also prevent debris from being picked up by stormwater and carried into drains and surface waters. Examples of BMPs for exposure minimization include covering materials or activities with temporary structures (e.g., tarps) when wet weather is expected or moving materials or activities to existing or new permanent structures (e.g., buildings, silos, sheds). Even the simple practice of keeping a dumpster lid closed can be a very effective pollution prevention measure. Another example could include locating PFAS-containing materials and residues away from drainage pathways and surface waters. For erosion and sediment control, BMPs must be selected and implemented to limit erosion on areas of your site that, due to topography, activities, soils, cover, materials, or other factors, are likely to experience erosion. Erosion control BMPs such as seeding, mulching, and sodding prevent soil from becoming dislodged and should be considered first. Sediment control BMPs such as silt fences, sediment ponds, and stabilized entrances trap sediment after it has eroded. Sediment control BMPs should be used to back-up erosion control BMPs.

The SWPPP (if required for this facility) must contain a narrative evaluation of the appropriateness of stormwater management practices that divert, infiltrate, reuse, or otherwise manage stormwater runoff so as to reduce the discharge of pollutants. Appropriate measures are highly site-specific, but may include, among others, vegetative swales, collection and reuse of stormwater, inlet controls, snow management, infiltration devices, and wet retention measures. A combination of preventive and treatment BMPs will yield the most effective stormwater management for minimizing the offsite discharge of pollutants via stormwater runoff. BMPs schedules

must also address preventive maintenance records or logbooks, regular facility inspections, spill prevention and response, and employee training.

GROUNDWATER MONITORING

Groundwater is a water of the state according to 644.016(27) RSMo, is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6), and must be protected accordingly.

✓ This facility is not required to monitor groundwater for the water protection program as there are no sub-surface discharges.

ICE-MELT PRODUCT REMOVAL

The Department is authorized to require BMPs for facilities per 40 CFR 122.44(k)(2). The facility should, to the extent practicable, remove large pieces of salt as soon as possible. After winter weather has ceased for the year, the facility needs to inspect all low-lying areas for extra salt and sand, and remove these as soon as possible. Salt applied to large areas has the potential to cause freshwater salinization which could result in a fish kill of sensitive species. To reduce potential for solids entering a stream, sand or other traction control materials will need to be evaluated against the probability that these materials could cause general criteria violations of solids and bottom deposits per 10 CSR 20-7.031(4).

LAND APPLICATION

Land application, which is surficial dispersion of wastewater or surficial spreading of sludge can be performed by facilities as an alternative to discharging. Authority to regulate these activities is pursuant to 644.026 RSMo. The Department implements requirements for these types of operations pursuant to 10 CSR 20-6.015(4)(A)1 which instructs the Department to develop permit conditions containing limitations, monitoring, reporting, and other requirements to protect soils, crops, surface waters, groundwater, public health, and the environment. Sub-surface dispersion or application of wastewater is typically considered a Class V UIC system; See UNDERGROUND INJECTION CONTROL section below.

✓ Not applicable; this permit does not authorize operation of a surficial land application system to disperse wastewater or sludge.

LAND DISTURBANCE

Land disturbance, sometimes called construction activities, are actions which cause disturbance of the root layer or soil; these include clearing, grading, and excavating of the land. 40 CFR 122.26(b)(14) and 10 CSR 20-6.200(3) requires permit coverage for these activities. Coverage is not required for facilities when only providing maintenance of original line and grade, hydraulic capacity, or to continue the original purpose of the facility.

✓ Not applicable; this permit does not provide coverage for land disturbance activities. The facility may obtain a separate land disturbance permit (MORA) online at <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance> MORA permits may not cover disturbance of contaminated soils, however, site specific permits such as this one can be modified to include appropriate controls for land disturbance of contaminated soils by adding site-specific BMP requirements and additional outfalls.

MAJOR WATER USER

Any surface or groundwater user with a water source and the equipment necessary to withdraw or divert 100,000 gallons (or 70 gallons per minute) or more per day combined from all sources from any stream, river, lake, well, spring, or other water source is considered a major water user in Missouri. <https://dnr.mo.gov/water/business-industry-other-entities/reporting/major-water-users> All major water users are required by 256.400 RSMo to register water use annually. <https://dnr.mo.gov/document-search/frequently-asked-major-water-user-questions-pub2236/pub2236>

✓ Not applicable; this facility cannot withdraw water from the state in excess of 70 gpm or 0.1 MGD.

MODIFICATION REQUESTS

Facilities have the option to request a permit modification from the Department at any time under RSMo 644.051.9. Requests must be submitted to the Water Protection Program with the appropriate forms and fees paid per 10 CSR 20-6.011. It is recommended facilities contact the program early so the correct forms and fees are submitted, and the modification request can be completed in a timely fashion. Minor modifications, found in 40 CFR 122.63, are processed without the need for a public comment period. Major modifications, those requests not explicitly fitting under 40 CFR 122.63, do require a public notice period. Modifications to permits must be completed when: a new pollutant is found in the discharge; operational or functional changes occur which affect the technology, function, or outcome of treatment; the facility desires alternate numeric benchmarks; or other changes are needed to the permit.

Modifications are not required when utilizing or changing additives in accordance with the publication <https://dnr.mo.gov/document-search/additive-usage-wastewater-treatment-facilities-pub2653/pub2653> nor are required when a temporary change or provisional discharge has been authorized by the regional office. While provisional discharges may be authorized by the regional office, they will not be granted for more than the time necessary for the facility to obtain an official modification from the Water Protection Program. Temporary provisional discharges due to weather events or other unforeseen circumstances may or may not necessitate a permit modification. The facility may ask for a Compliance Assistance Visit (CAV) from the regional office to assist in the decision-making process; CAVs are provided free to the permitted entity.

MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

This permit allows discharge to waters of the state. The discharges this permit allows may flow into and through the city's stormwater collection system. Regulated MS4s are managed by public entities, cities, municipalities, or counties. Phase I MS4s are Kansas City, Independence, and Springfield. Phase II MS4s are determined by population or location in an urbanized area. Regulated MS4s are required to develop and maintain a stormwater management program. These programs have requirements for developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system. Phase I MS4s also maintain oversight programs for industrial and high risk runoff. Regulated MS4s may keep a list of all of the other regulated dischargers (wastewater and stormwater) flowing through their system. If this facility discharges into a separate storm sewer system, the facility must make contact with the owner/operator of that system to coordinate with them. Regulated MS4 operators may request to inspect facilities discharging into their system; a list of regulated MS4s can be viewed at <https://dnr.mo.gov/document-search/missouris-regulated-municipal-separate-storm-sewer-systems-ms4s> or search by permit ID: MOR04 at https://apps5.mo.gov/mocwis_public/permitSearch.do to determine if this facility needs to contact a local stormwater authority.

OPERATOR CERTIFICATION REQUIREMENTS

Operators or supervisors of operations at regulated domestic wastewater treatment facilities shall be certified in accordance with 10 CSR 20-9 and any other applicable state law or regulation.

- ✓ Not applicable; this facility is not owned or operated by a municipality, public sewer district, county, public water supply district, or private sewer company regulated by the Public Service Commission, or operated by a state or federal agency.

PERMIT SHIELD

The permit shield provision of the Clean Water Act (Section 402(k)) and Missouri Clean Water Law (644.051.16 RSMo) provides that when a permit holder is in compliance with its NPDES permit or MSOP, it is effectively in compliance with certain sections of the Clean Water Act, and equivalent sections of the Missouri Clean Water Law. In general, the permit shield is a legal defense against certain enforcement actions, but is only available when the facility is in compliance with its permit and satisfies other specific conditions, including having completely disclosed all discharges and all facility processes and activities to the Department at time of application. It is the facility's responsibility to ensure that all potential pollutants, waste streams, discharges, and activities, as well as wastewater land application, storage, and treatment areas, are all fully disclosed to the Department at the time of application or during the draft permit review process. Previous permit applications are not necessarily evaluated or considered during permit renewal actions. All relevant disclosures must be provided with each permit application, including renewal applications, even when the same information was previously disclosed in a past permit application. Subsequent requests for authorization to discharge additional pollutants, expanded or newly disclosed flows, or for authorization for previously unpermitted and undisclosed activities or discharges, will likely require an official permit modification, including another public participation process.

REASONABLE POTENTIAL (RP)

Regulations per 10 CSR 20-7.015(9)(A)2 and 40 CFR 122.44(d)(1)(i) require effluent limitations for all pollutants which are (or may be) discharged at a level causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times; however, acute toxicity criteria may be exceeded by permit allowance in zones of initial dilution, and chronic toxicity criteria may be exceeded by permit allowance in mixing zones. A reasonable potential analysis (RPA) is a numeric RP decision calculated using effluent data provided by the facility for parameters that have a numeric Water Quality Standard (WQS). If any given pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS, the permit must contain a WQBEL for the pollutant per 40 CFR Part 122.44(d)(1)(iii) and the most stringent limits per 10 CSR 20-7.031(9)(A). The RPA is performed using the *Technical Support Document for Water Quality Based Toxics Control (TSD)* methods (EPA/505/2-90-001) for continuous discharges. See additional considerations under Part II WATERBODY MIXING CONSIDERATIONS and Part III WASTELOAD ALLOCATIONS. Wasteload allocations are determined utilizing the same equations and statistical methodology. Absent sufficient effluent data, WQBELs are derived without consideration of effluent variability and is assumed to be present unless found to be absent to meet the requirements of antidegradation review found in 10 CSR 20-7.031(3) and reporting of toxic substances pursuant to 40 CFR 122.44(f). The Department's permit writer's manual (<https://dnr.mo.gov/water/business-industry-other-entities/technical-assistance-guidance/wastewater-permit-writers-manual>), the EPA's permit writer's manual (<https://www.epa.gov/npdes/npdes-permit-writers-manual>), program policies, and best professional judgment guide each decision. Each parameter in each outfall is carefully considered; and all applicable information regarding: technology based effluent limitations, effluent limitation guidelines, water quality standards, inspection reports, stream water quality information, stream flows, uses assigned to each waterbody, and all applicable site specific information and data gathered by the facility through discharge monitoring reports and renewal (or new) application sampling.

Reasonable potential determinations (RPD) are based on physical conditions of the site as provided in Sections 3.1.2, 3.1.3, and 3.2 of the TSD using best professional judgement. An RPD consists of evaluating visual observations for compliance with narrative criteria, non-numeric information, or small amounts of numerical data (such as 1 data point supplied in the application). Narrative criteria with RP typically translate to a numeric WQS, so a parameter's establishment being based on narrative criteria does not necessarily make the decision an RPD vs RP—how the data is collected does, however. For example, a facility with orange discharge can have RP for

narrative criteria like color, but a numeric iron limit is established to account for the violation of narrative criteria based on effluent data submitted by the facility.

When insufficient data is received to make a determination on RP based on numeric effluent data, the RPD decisions are based on best professional judgment considering the type of effluent discharged, the current operational controls in place, and historical overall management of the site. In the case of iron causing excursions of narrative criteria for color, if a facility has not had iron monitoring in a previous permit, adding iron monitoring would be an RPD, since numeric data isn't being used in the determination, but observable, site-specific conditions are.

When the facility is performing surficial or subsurface land application, the volume of water, frequency of application, type of vegetation, soil type, land slopes, and general overall operating conditions are considered. 10 CSR 20-8 are regulations for the minimum operating conditions for land application; these regulations cannot be excused even if there is no RP. RP is reserved for discharging outfalls given that these outfalls are the only ones which water quality standards apply to, but the process is similar as the site conditions are compared to regulations, soil sampling, pollutant profile, and other site specific conditions. In the case of non-discharging outfalls, an RPD is instead used to determine monitoring requirements.

The TSD RPA method cannot be performed on stormwater as the flow is intermittent and highly variable. A stormwater RPD consists of reviewing application data and discharge monitoring data and comparing those data to narrative or numeric water quality criteria. For stormwater outfalls, considerations are required per 10 CSR 20-6.200(6)(B)2: A. application and other information supplied by the facility; B. effluent guidelines; C. best professional judgment; D. water quality; and E. BMPs.

RPDs are also performed for WET testing in wastewater. While no WET regulations specific to industrial wastewater exist, 40 CFR 122.21(j)(5) implies the following can be considered: 1) the variability of the pollutants; 2) the ratio of wastewater flow to receiving stream flow; and 3) current technology employed to remove toxic pollutants. Generally, sufficient data does not exist to mathematically determine RPA for WET, but instead compares the data for other toxic parameters in the wastewater with the necessity to implement WET testing with either monitoring or limits. When toxic parameters exhibit RP, WET testing is generally included in the permit as an RPD. However, if all toxic parameters are controlled via limitations or have exhibited no toxicity in the past, then WET testing may be waived. Only in instances where the wastewater is well characterized can WET testing be waived.

WET testing is typically not implemented for stormwater. Stormwater discharges do not adhere to the same principles of wastewater RPAs because stormwater discharges are not continuous, and at the time of precipitation discharge the receiving stream is also no longer at base (0) flow, meaning that using RP to develop WET testing requirements for stormwater is unrepresentative. The Department works with the Missouri Department of Conservation and has understanding of streams already exhibiting toxicity, even without the influence of industrial wastewater or stormwater. Facilities discharging to streams with historical toxicity are required to use laboratory water for dilution, instead of water from the receiving stream when performing WET tests.

TSD methods encountered may be § 3.3.2, § 5.7.3 for metals, and § 5.4.1 for chloride. Part IV EFFLUENT LIMIT DETERMINATIONS provides specific decisions related to this permit. In general, removal of a WQBEL if there is no RP is not considered backsliding, see ANTIBACKSLIDING for additional information.

✓ No statistical RPAs were performed for this permit.

REGIONAL OFFICES (ROS)

Regional Offices will provide a compliance assistance visit at a facility's request; a regional map with links to phone numbers can be found here: <https://dnr.mo.gov/about-us/division-environmental-quality/regional-office>. Or use <https://dnr.mo.gov/compliance-assistance-enforcement> to request assistance from the Region online.

RENEWAL REQUIREMENTS

The renewal special condition permit requirement is designed to guide the facility to prepare and include all relevant and applicable information in accordance with 10 CSR 20-6.010(7)(A)-(C), and if applicable, federal regulations. The special condition may not include all requirements and requests for additional information may be made at the time of permit renewal under 644.051.13(5) RSMo and 40 CFR 122.21(h). Prior to submittal, the facility must review the entire submittal to confirm all required information and data is provided; it is the facility's responsibility to discern if additional information is required. Failure to fully disclose applicable information with the application or application addendums may result in a permit revocation per 10 CSR 20-6.010(8)(A) and may result in the forfeiture of permit shield protection authorized in 644.051.16 RSMo. Forms are located at:

<https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/wastewater>

- ✓ This facility shall submit an appropriate and complete application to the Department no less than 180 days prior to the expiration date listed on page 1 of the permit.
- ✓ The facility may email cleanwaterpermits@dnr.mo.gov to submit the application to the Program. A paper copy is not necessary if submitted via email. For larger applications, a drop-box type service may also be used.
- ✓ Application materials shall include complete Form A, and Form C. If the form name has changed, then the facility should ensure they are submitting the correct forms as required by regulation.

SAMPLING FREQUENCY JUSTIFICATION

Sampling frequency for stormwater-only outfalls is typically quarterly even though BMP inspection occurs monthly or more often dependent on site needs. The facility may sample more frequently if additional data is required to determine if best management operations and technology are performing as expected.

A reduction in monitoring frequency is not considered backsliding. A numeric or narrative limit established in the permit is applicable every hour of every day, not only during the day the monitoring occurs, therefore, a reduction in monitoring frequency has no bearing on the numeric limits applied in the permit. Both § 402(o)(1) and the safety clause in § 402(o)(3) prohibit renewed permits from containing effluent limitations that are less stringent. The Department does not read 402(o) to apply to any other non-limiting type of permit conditions.

- ✓ The previous permit indicated “∞” and directed the facility within: “All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a discharge does not occur within the reporting period, report as no discharge. The total amount of precipitation should be noted from the event from which the samples were collected.” However, this language is unduly limiting; a sample can be taken at any time there is a discharge. Stormwater samples should be taken at various flows to determine if the BMPs are appropriate to the site’s conditions.

SAMPLING TYPE JUSTIFICATION

Sampling type was continued from the previous permit. The sampling types are representative of the discharges, and are protective of water quality. Discharges with altering effluent will consider implementing composite sampling; discharges with uniform effluent can have grab samples. Grab samples are usually appropriate for stormwater. Parameters which must have grab sampling are: pH, ammonia, *E. coli*, total residual chlorine, free available chlorine, hexavalent chromium, dissolved oxygen, total phosphorus, volatile organic compounds, and others. For further information on sampling and testing methods see 10 CSR 20-7.015(9)(D)2.

SCHEDULE OF COMPLIANCE (SOC)

A schedule of compliance is time allowed to meet future more stringent limitations.

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

SPILLS, OVERFLOWS, AND OTHER UNAUTHORIZED DISCHARGE REPORTING

Per 260.505 RSMo, any emergency involving a hazardous substance must be reported to the Department’s 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest possible moment after discovery. The Department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I.

<https://revisor.mo.gov/main/OneSection.aspx?section=260.500&bid=13989&hl=>

Any other spills, overflows, or unauthorized discharges reaching waters of the state must be reported to the regional office during normal business hours, or after normal business hours, to the Department’s 24 hour Environmental Emergency Response spill line at 573-634-2436.

Certain industrial facilities are subject to the self-implementing regulations for Oil Pollution Prevention in 40 CFR 112, and are required to initiate and follow Spill Prevention, Control, and Countermeasure (SPCC) Plans. This permit, as issued, is not intended to be a replacement for any SPCC plan, nor can this permit’s conditions be automatically relaxed based on the SPCC plan if the permit is more stringent than the plan.

SLUDGE – INDUSTRIAL

Industrial sludge is solid, semi-solid, or liquid residue generated during the treatment of industrial process or non-process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and any material derived from industrial sludge. Industrial sludge could also be derived from holding structure dredging or other similar maintenance activities. Certain oil sludge, like those from oil water separators, are subject to self-implementing federal regulations under 40 CFR 279 for used oils.

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

STANDARD CONDITIONS

The standard conditions Part I attached to this permit incorporate all sections of 10 CSR 20-6.010(8) and 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions must be reviewed by the facility to ascertain compliance with this permit, state regulations, state statutes, federal regulations, and the Clean Water Act.

STORMWATER PERMITTING: LIMITATIONS AND BENCHMARKS

Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater-only discharges. The *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-001; 1991) §3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater-only outfalls will generally only contain a maximum daily limit (MDL), a benchmark, or a monitoring requirement as dictated by site specific conditions, the BMPs in place, the BMPs proposed, past performance of the facility, and the receiving water's current quality.

Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute Water Quality Standards (WQSS) are based on one hour of exposure, and must be protected at all times. Therefore, industrial stormwater facilities with toxic contaminants present in the stormwater may have the potential to cause a violation of acute WQSS if toxic contaminants occur in sufficient amounts. In this instance, the permit may apply daily maximum limitations.

Conversely, it is unlikely for rainfall to cause a discharge for four continuous days from a facility; if this does occur however, the receiving stream will also likely sustain a significant amount of flow providing dilution. Most chronic WQSS are based on a four-day exposure with some exceptions. Under this scenario, most industrial stormwater facilities have limited potential to cause a violation of chronic water quality standards in the receiving stream.

A standard mass-balance equation cannot be calculated for stormwater because stormwater flow and flow in the receiving stream cannot be determined for conditions on any given day or storm event without real-time ad-hoc monitoring. The amount of stormwater discharged from the facility will vary based on current and previous rainfall, soil saturation, humidity, detention time, BMPs, surface permeability, etc. Flow in the receiving stream will vary based on climatic conditions, size of watershed, area of surfaces with reduced permeability (houses, parking lots, and the like) in the watershed, hydrogeology, topography, etc. Decreased permeability may increase the stream flow dramatically over a short period of time (flash).

Numeric benchmark values are based on site specific requirements taking in to account a number of factors but cannot be applied to any process water discharges. First, the technology in place at the site to control pollutant discharges in stormwater is evaluated. Other permits are also reviewed for similar activities. A review of the guidance forming the basis of Environmental Protection Agency's (EPA's) *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* (MSGP) may also occur. Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard may also be used. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States. If a facility has not disclosed BMPs applicable to the pollutants for the site, the facility may not be eligible for benchmarks.

40 CFR 122.44(b)(1) requires the permit implement the most stringent limitations for each discharge, including industrially exposed stormwater; and 40 CFR 122.44(d)(1)(i) and (iii) requires the permit to include water-quality based effluent limitations (WQBELs) where reasonable potential has been found. However, because of the non-continuous nature of stormwater discharges, staff are unable to perform statistical Reasonable Potential Analysis (RPA) under most stormwater discharge scenarios. Reasonable potential determinations (RPDs; see REASONABLE POTENTIAL above) using best professional judgment are performed.

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

BMP inspections typically occur more frequently than sampling. Sampling frequencies are based on the facility's ability to comply with the benchmarks and the requirements of the permit. Inspections must occur after large rain events and any other time an issue is noted; sampling after a benchmark exceedance may need to occur to show the corrective active taken was meaningful.

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented if there is no RP for water quality excursions.

✓ Applicable, this facility has stormwater-only outfalls where benchmarks or limitations were deemed appropriate contaminant measures.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A SWPPP must be prepared by the facility if the SIC code or facility description type is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2).

A SWPPP may be required of other facilities where stormwater has been identified as necessitating better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate stream pollution from stormwater runoff.

Pursuant to 40 CFR 122.44(k), Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when: 1) Authorized under §304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) Authorized under §402(p) of the CWA for the control of stormwater discharges; 3) Numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. A BMP may take the form of a numeric benchmark. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 and again in 2021 https://www.epa.gov/sites/default/files/2021-03/documents/swppp_guide_industrial_2021_030121.pdf BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to 1) identify sources of pollution or contamination, and 2) select and carry out actions which prevent or control the pollution of storm water discharges. Additional information can be found in *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006; September 1992).

Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. The following paragraph outlines the general steps the facility can take to determine which BMPs will work to achieve the benchmark values or limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure assisting in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

The facility can review the precipitation frequency maps for development of appropriate BMPs. The online map https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mo can be targeted to the facility location and is useful when designing detention structures and planning for any structural BMP component. The stormwater map can also be used to determine if the volume of stormwater caused a disrupted BMP; and if the BMP must be re-designed to incorporate additional stormwater flows.

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

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

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

If parameter-specific numeric benchmark exceedances continue to occur and the facility feels there are no practicable or cost-effective BMPs which will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the facility can submit a request to re-evaluate the benchmark values. This request needs to include 1) a detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values; 2) financial data of the company and documentation of cost associated with BMPs for review and 3) the SWPPP, which must contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. This will allow the Department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs.

The request shall be submitted in the form of an operating permit modification, which includes an appropriate fee; the application is found at: <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/wastewater>

✓ Applicable; a SWPPP shall be developed and implemented for this facility; see specific requirements in the SPECIAL CONDITIONS section of the permit.

SUFFICIENTLY SENSITIVE ANALYTICAL METHODS

Please review Standard Conditions Part 1, §A, No. 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 or 40 CFR 136 unless alternates are approved by the Department and incorporated within this permit. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure the selected methods are able to quantify the presence of pollutants in any given discharge at concentrations low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. The reporting limits established by the chosen laboratory must be below the lowest effluent limits established for the specified parameter (including any parameter's future limit after an SOC) in the permit unless the permit provides for an ML or if the facility provides a written rationale to the Department. It is the facility's responsibility to ensure the laboratory has adequate equipment and controls in place to quantify the pollutant. Inflated reporting limits will not be accepted by the Department if the reporting limit is above the parameter value stipulated in the permit. A method is "sufficiently sensitive" when; 1) the method quantifies the pollutant below the level of the applicable water quality criterion or; 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015 and or 40 CFR 136. These methods are also required for parameters listed as monitoring only, as the data collected may be used to determine if numeric limitations need to be established. A facility is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive.

UNDERGROUND INJECTION CONTROL (UIC)

Class V wells are sub-surface dispersal or injection of any industrial wastewater; and in certain circumstances, may also be considered a Class V well if it is domestic wastewater. They can also be shallow injection wells like heat pumps and groundwater remediation wells. UIC systems may be described as having "septic tanks" or "lateral lines" in addition to the traditional well type of injection.

✓ Not applicable; the facility has not submitted materials indicating the facility is or will be performing UIC at this site.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS

As per [10 CSR 20-2.010; definitions], the WLA is the maximum amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Only streams with available load allocations can be granted discharge allowances. Outfalls afforded mixing allocations provide higher limits because the receiving stream is able to accept more pollutant loading without causing adverse impacts to the environment or aquatic life.

✓ Not applicable, this is a stormwater only permit therefore WLAs were not calculated. See section on stormwater permitting as applying WLAs to stormwater is not normally applicable per TSD §3.1.

WASTELOAD ALLOCATION (WLA) MODELING

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

✓ Not applicable; a WLA study was either not submitted or determined not applicable by Department staff.

WHOLE EFFLUENT TOXICITY (WET) TEST

A WET test is a quantifiable method to conclusively determine if discharges from the facility cause toxicity to aquatic life by itself, in combination with, or through synergistic responses, typically when mixed with receiving stream water. Under the CWA §101(a)(3), requiring WET testing is reasonably appropriate for Missouri State Operating Permits to quantify toxicity. WET testing is also required by 40 CFR 122.44(d)(1) when RP is found. WET testing ensures the provisions in 10 CSR 20-6 and Missouri's Water Quality Standards in 10 CSR 20-7 are being met; the acute WQS for WET is 0.3 TUa. Under 10 CSR 20-6.010(8)(A)4, the Department may require other terms and conditions it deems necessary to ensure compliance with the CWA and related regulations of the Missouri Clean Water Commission. Missouri Clean Water Law (MCWL) RSMo 644.051.3 requires the Department to set permit conditions complying with the MCWL and CWA. 644.051.4 RSMo specifically references toxicity as an item the Department must consider in permits (along with water quality-based effluent limits); and RSMo 644.051.5 is the basic authority to require testing conditions. Requirements found in the federal application requirements for POTWs (40 CFR 122.21(j)(5)) do not apply to industrial facilities, therefore WET testing can be implemented on a case by case basis following the factors outlined below. Annual testing is the minimum testing frequency if reasonable potential is found; monitoring requirements promulgated in 40 CFR 122.44(i)(2) state "requirements to report monitoring results shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but in no case less than once per year." To determine reasonable potential, factors considered are: 1) history of toxicity; 2) quantity and quality of substances (either limited or not) in the permit with aquatic life protections assigned; and 3) operational controls on toxic pollutants. See Part III under REASONABLE POTENTIAL for additional information. A facility does not have to be designated as a major facility to receive WET testing; and being a major facility does not automatically require WET testing.

Additionally per 40 CFR 122.44(d)(1)(v), limits on whole effluent toxicity are not necessary where the permitting authority demonstrates in the fact sheet, using the procedures in 40 CFR 122.44(d)(1)(ii) of this section, that chemical-specific limits or specified operational controls are sufficient to attain and maintain applicable numeric and narrative water quality standards.

If WET limits are applied to this facility, follow up testing applies. When a facility exceeds the TU established in the permit, three additional follow-up tests are triggered. The follow up test results do not negate the initial testing result. If the facility is within the prescribed TU limit for all three follow up tests, then no further testing is required until the next regularly scheduled tests. If one or more additional tests exceed the TU limit, the facility may consider beginning the Toxicity Identification Evaluation (TIE) and Toxicity Identification Reduction (TIR) processes instead of waiting for three consecutive TU exceedances. The TIE and TIR process can take up to two years, especially when toxicity is variable or transient. We urge facilities to work closely with their WET testing laboratory to follow nationwide guidance for determining causes of toxicity and curative activities to remove toxicity. Additional wastewater controls may be necessary; and while, generally, no Construction Permit (CP) is required for adding treatment at industrial facilities, the facility may check with the Engineering Section to determine a plan of action.

If WET testing failures are from a known toxic parameter, and the facility is working with the Department to alleviate that pollutant's toxicity in the discharge, please contact the Department prior to conducting follow-up WET testing. Under certain conditions, follow-up testing may be waived when the facility is already working to reduce and eliminate toxicity in the effluent. For the purposes of reporting, the laboratory may supply either the TU value, the LC₅₀, or the NOEC. If the laboratory only supplied the LC₅₀ or the NOEC value, the toxic unit is calculated by 100/LC₅₀ for acute tests, or 100/NOEC for chronic tests. The TU value is entered in the eDMR system. Reports showing no toxicity are usually entered as <1.

✓ Not applicable; WET testing was not implemented in this permit because there are no pollutants identified as "toxic", and there is no RP for WET.

PART IV. EFFLUENT LIMIT DETERMINATIONS

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	DAILY MAXIMUM LIMIT	BENCH- MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	-	SAME	ONCE/QUARTER	QUARTERLY	24 HR. ESTIMATE
PRECIPITATION	inches	*	-	SAME	ONCE/QUARTER	QUARTERLY	24 HR. TOT
CONVENTIONAL							
COD	mg/L	*	-	SAME	ONCE/QUARTER	QUARTERLY	GRAB
OIL & GREASE	mg/L	*	-	SAME	ONCE/QUARTER	QUARTERLY	GRAB
pH †	SU	**	6.5-9.0	SAME	ONCE/QUARTER	QUARTERLY	GRAB
TSS	mg/L	*	-	SAME	ONCE/QUARTER	QUARTERLY	GRAB

- * monitoring and reporting requirement only
- ** monitoring with associated benchmark
- † report the minimum and maximum pH values; pH is not to be averaged
- ‡ An ML is established for TRC; see permit.
- new parameter not established in previous state operating permit
- interim parameter requirements prior to end of SOC
- final parameter requirements at end of SOC
- TR total recoverable

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to ensure compliance with permitted effluent limitations. If the facility is unable to obtain effluent flow, then it is the responsibility of the facility to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD), quarterly monitoring continued from previous permit. The facility reported from 0.006193 to 0.425 MGD in the last permit term.

Precipitation

Monitoring only requirement; measuring the amount of precipitation [(10 CSR 20-6.200(2)(C)1.E(VI)] during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the facility a better understanding of any specific control measures be employed to ensure protection of water quality. The facility will provide the 24 hour accumulation value of precipitation from the day of sampling the other parameters.

CONVENTIONAL:

Chemical Oxygen Demand (COD)

Monitoring continued from the previous permit using best professional judgment under 10 CSR 20-6.200(6)(B)2.C. There is no numeric 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 facility to identify increases in COD may indicate materials/chemicals coming into contact with stormwater causing an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs. The facility reported from 17 to 47 mg/L in the last permit term. The benchmark value falls within the range of values implemented in other permits having similar industrial activities and is achievable through proper BMP controls.

Oil & Grease

Monitoring continued from the previous permit using best professional judgment under 10 CSR 20-6.200(6)(B)2.C. The facility reported from 0.97 to 4.8 mg/L in the last permit term, all of which are likely non-detects. Oil and grease is considered a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or xylene, but these constituents are often lost during testing due to their boiling points. It is recommended to perform separate testing for these constituents if they are a known pollutant of concern at the site, i.e. aquatic life toxicity or human health is a concern. Results do not allow for separation of specific pollutants within the test, they are reported, totaled, as “oil and grease”.

Per 10 CSR 20-7.031 Table A1: *Criteria for Designated Uses*; 10 mg/L is the standard for protection of aquatic life. This standard will also be used to protect the general criteria found at 10 CSR 20-7.031(4). Ten mg/L is the level at which sheen is expected to form on receiving waters. Oils and greases of different densities will possibly form sheen or unsightly bottom deposits at levels which vary from 10 mg/L. To protect the general criteria, it is the responsibility of the facility to visually observe the discharge and receiving waters for sheen or bottom deposits. The benchmark is achievable through proper operational and maintenance of BMPs and falls within the range of values implemented in other permits having similar industrial activities. The benchmark this permit applies does not allow the facility to violate general criteria 10 CSR 20-7.015(4) even if data provided are below the benchmark.

pH

6.5 SU minimum to 9.0 SU maximum benchmarks are applicable to the stormwater outfalls. Using RPD, the stormwater has no reasonable potential to negatively impact water quality therefore a benchmark is applied; continued from previous permit. The facility reported from 6.59 to 7.75 SU in the last permit term at all outfalls. pH is a fundamental water quality indicator. This benchmark serves to provide general information about the stormwater discharges at the site and is included using RPD and under 10 CSR 20-6.200(6)(B)2.C.

Total Suspended Solids (TSS)

Monitoring maintained from previous permit. There is no numeric water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the facility to identify increases in TSS indicating uncontrolled materials leaving the site. Increased suspended solids in runoff can lead to decreased available oxygen for aquatic life and an increase of surface water temperatures in a receiving stream. Suspended solids can also be carriers of toxins, which can adsorb to the suspended particles; therefore, total suspended solids are a valuable indicator parameter for other pollution. The facility reported from 5 to 19 mg/L in the last permit term. The benchmark is achievable through proper operational and maintenance of BMPs and falls within the range of values implemented in other permits having similar industrial activities.

PART V. ADMINISTRATIVE REQUIREMENTS

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

PERMIT SYNCHRONIZATION

Permits are normally issued on a five-year term, but to achieve watershed synchronization some permits will need to be issued for less than the full five years as allowed by regulation. The intent is all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow the Department to explore a watershed based permitting effort at some point in the future.

- ✓ Industrial permits are not being synchronized.

PUBLIC NOTICE

The Department shall give public notice 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 or with 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 facility must be notified of the denial in writing. <https://dnr.mo.gov/water/what-were-doing/public-notices> The Department must issue public notice of a draft operating 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 wishing to submit comments regarding this proposed operating permit, 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. All comments must be in written form.

- ✓ The Public Notice period for this operating permit started April 28, 2023 and ended May 29, 2023. No comments were received.

DATE OF FACT SHEET: MARCH 14, 2023

COMPLETED BY:

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

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

Part I – General Conditions

Section A – Sampling, Monitoring, and Recording

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

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

Section B – Reporting Requirements

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



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

Section C – Bypass/Upset Requirements

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

Section D – Administrative Requirements

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



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



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

AP 40441

RECEIVED

OCT 06 2022



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

FOR AGENCY USE ONLY

CHECK NUMBER <i>10</i>	
DATE RECEIVED <i>10/6/22</i>	FEE SUBMITTED <i>10</i>
JET PAY CONFIRMATION NUMBER <i>10</i>	

PLEASE READ ALL THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.
SUBMITTAL OF AN INCOMPLETE APPLICATION MAY RESULT IN THE APPLICATION BEING RETURNED.

IF YOUR FACILITY IS ELIGIBLE FOR A NO EXPOSURE EXEMPTION:

Fill out the No Exposure Certification Form (Mo 780-2828): <https://dnr.mo.gov/forms/780-2828-f.pdf>

1. REASON FOR APPLICATION:

- a. This facility is now in operation under Missouri State Operating Permit (permit) MO – 0002411, is submitting an application for renewal, and there is no proposed increase in design wastewater flow. Annual fees will be paid when invoiced and there is no additional permit fee required for renewal.
- b. This facility is now in operation under permit MO – 0002411, is submitting an application for renewal, and there is a proposed increase in design wastewater flow. Antidegradation Review may be required. Annual fees will be paid when invoiced and there is no additional permit fee required for renewal.
- c. This is a facility submitting an application for a new permit (for a new facility). Antidegradation Review may be required. New permit fee is required.
- d. This facility is now in operation under Missouri State Operating Permit (permit) MO – 0002411 and is requesting a modification to the permit. Antidegradation Review may be required. Modification fee is required.

2. FACILITY

NAME Eaton Filtration, LLC/Unisys - Former Vickers Facility		TELEPHONE NUMBER WITH AREA CODE (417) 624-1811	
ADDRESS (PHYSICAL) 2800 West 10th Street	CITY Joplin	STATE MO	ZIP CODE 64801

3. OWNER

NAME Eaton Filtration, LLC		TELEPHONE NUMBER WITH AREA CODE (440) 523-4358	
EMAIL ADDRESS lisadsutton@eaton.com			
ADDRESS (MAILING) 1000 Eaton Boulevard - Mail Code 4N	CITY Cleveland	STATE OH	ZIP CODE 44122-6058

4. CONTINUING AUTHORITY

NAME Unisys Corporation		TELEPHONE NUMBER WITH AREA CODE (651) 635-7253	
EMAIL ADDRESS terry.etter@unisys.com			
ADDRESS (MAILING) 3199 Pilot Knob Rd - MS F1B05	CITY Eagan	STATE MN	ZIP CODE 55121

5. OPERATOR CERTIFICATION

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

6. FACILITY CONTACT

NAME Keith Rapp	TITLE Senior Project Manager	TELEPHONE NUMBER WITH AREA CODE (612) 382-3763
E-MAIL ADDRESS krapp@pineng.com		

7. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary.

NAME Modine Manufacturing Co.			
ADDRESS 3300 West 7th Street	CITY Joplin	STATE MO	ZIP CODE 64801

8. ADDITIONAL FACILITY INFORMATION**8.1 Legal Description of Outfalls. (Attach additional sheets if necessary.)**

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

001 _____¹/₄ _____¹/₄ Sec _____ T _____ R _____ _____ County
 UTM Coordinates Easting (X): _____ Northing (Y): _____
 002 SE _____¹/₄ NE _____¹/₄ Sec 08 T 27N R 33W Jasper _____ County
 UTM Coordinates Easting (X): 361908 Northing (Y): 4104994
 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): _____

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

Primary SIC 4959.1629 and NAICS 562910 SIC _____ and NAICS _____
 SIC _____ and NAICS _____ SIC _____ and NAICS _____

9. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION

- A. Is this permit for a manufacturing, commercial, mining, solid/hazardous waste, or silviculture facility? YES NO
 If yes, complete Form C.
- B. Is the facility considered a "Primary Industry" under EPA guidelines (40 CFR Part 122, Appendix A) : YES NO
 If yes, complete Forms C and D.
- C. Is wastewater land applied? YES NO
 If yes, complete Form I.
- D. Are sludge, biosolids, ash, or residuals generated, treated, stored, or land applied? YES NO
 If yes, complete Form R.
- E. Have you received or applied for any permit or construction approval under the CWA or any other environmental regulatory authority? YES NO
 If yes, please include a list of all permits or approvals for this facility.
- F. Do you use cooling water in your operations at this facility? YES NO
 If yes, please indicate the source of the water: _____
- G. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.

10. ELECTRONIC DISCHARGE MONITORING REPORT (eDMR) SUBMISSION SYSTEM

Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data. **One of the following must be checked in order for this application to be considered complete.** Please visit <http://dnr.mo.gov/env/wpp/edmr.htm> to access the Facility Participation Package.

- You have completed and submitted with this permit application the required documentation to participate in the eDMR system.
- You have previously submitted the required documentation to participate in the eDMR system and/or you are currently using the eDMR system.
- You have submitted a written request for a waiver from electronic reporting. See instructions for further information regarding waivers.

11. FEES

Permit fees may be paid by attaching a check, or online by credit card or eCheck through the JetPay system. Use the URL provided to access JetPay and make an online payment: <https://magic.collectorsolutions.com/magic-ui/payments/mo-natural-resources/>

12. CERTIFICATION

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

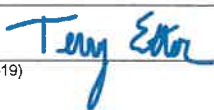
NAME AND OFFICIAL TITLE (TYPE OR PRINT)

Terry Etter

TELEPHONE NUMBER WITH AREA CODE

(651) 635-7253

SIGNATURE



DATE SIGNED

10/1/2022

Missouri Department of Natural Resources - Water Protection Program
Water Pollution Control Branch - Operating Permits Section
P.O. Box 176
Jefferson City, MO 65102-0176

Supplemental Information – Form 780-1479-F, Form A

Question 9.A - Is this permit for a manufacturing, commercial, mining, solid/hazardous waste, or silviculture facility? If yes, complete Form C.

The original Vickers property was a nearly 50-acre parcel (Facility) that is now a closed, permitted hazardous waste treatment, storage, disposal facility. The location of Facility-regulated solid waste management units (SWMUs) and Areas of Concern (AOCs) are depicted on Figure 3.

On August 11, 1988, approximately thirty-two and twenty-seven hundredth (32.27) acres of the operating Vickers Facility was sold to Able Body Corporation, later known as ABLE Manufacturing & Assembly, LLC (ABLE). ABLE purchased the primary plant and associated out-buildings, and later constructed a detached fiberglass manufacturing building to produce custom molded composites, fabricated metal products, thermoformed plastics and complex assemblies, primarily for military and heavy truck applications. ABLE operates under its own air and water discharge permits, and is a large quantity generator under RCRA (MOD981725203). On August 1, 2021, ABLE sold their portion of the permitted property to Lakeland LLC.

Eaton Corporation retained ownership of approximately sixteen and sixty-two hundredth (16.62) acres of the original Vickers Facility property. On April 13, 2022, as the result of an internal business change, Eaton Hydraulics, LLC changed its name to Eaton Filtration, LLC. Eaton Filtration LLC, currently owns the remaining 16⁺-acre parcel that is subject to the requirements of the MHWMF Part I Permit MOD007155781 post-closure care permit.

Historically, Vickers used the plant for parts and equipment production, assembly, and testing operations. These operations included complete parts machining, heat treating, parts cleaning, painting, assembly, and testing using several different chemicals in the production process. Vickers also operated three (3) metal plating operations, non-voltage cadmium and chromium plating operations, and a copper stripping system. Vickers operated several interim status hazardous waste management units that included two (2) surface impoundments, a hazardous waste storage building, and a sludge drying basin. Vickers stored lubricants, solvents, mineral spirits, and oils in eleven (11) underground storage tanks (USTs) in three (3) separate tank basins north of the manufacturing plant. Virgin chemicals were also stored in drums in warehouse racks west of the plant. The location of Facility SWMUs and AOCs are depicted on Figure 3.

Closed hazardous waste management units:

- Unit A – Lagoon 1 (post-closure care)
- Unit B – Lagoon 2 (post-closure care)
- Unit C – Hazardous Waste Management Storage Building (closed clean)

SWMUs identified in the EPA Order include:

- Unit D – Sludge Drying Basin (closed)
- Unit E – Northern Abandoned Landfill
- Unit F – Southern Abandoned Landfill
- Unit G – Decommissioned Surface Impoundment (DSI)
- Unit H – Former Drum Storage Area
- Unit I – Settling Basin
- Unit J – Two Filter Basins
- Unit K – Drainage Ditch

SWMUs identified after the EPA Order issuance:

- Unit L – Elementary Neutralization Units
- Unit M – Former Underground Storage Tank (UST) Area #1 (Tanks 1 through 6)
- Unit N – Former UST Area #2 (Tanks 7 through 10)
- Unit O – Former UST Area #3 (Tanks 11)
- Unit P – Drum Disposal Area
- Unit Q – Former Drum Rack Area
- Unit R – Able Body Manufacturing Sewer

Areas of Concern (AOC) identified after the EPA Order issuance:

- AOC 1 – Able Body Manufacturing Storage Area, encompassing the Former Drum Rack Area (SWMU Q)
- AOC 2 – Water Tower Area
- AOC 3 – Monitoring Well 201 Area
- AOC 4 – LNAPL Treatment Plant (LTP)

An Enhanced In-Situ Bioremediation (EISB) Interim Stabilization Measures (ISM) Workplan was approved by the Department on January 23, 2018, and the initial injections commenced mid-February 2018. This EISB program marked a shift from more than 28-years of groundwater pump & treat (P&T) with physical removal and treatment of impacted groundwater at the surface through a groundwater treatment plant, to treatment and destruction of impacted groundwater in-situ without routing groundwater to the surface. The EISB program consists of batch injections at each wellhead. Twenty-one (21)-well receive soluble compounds (molasses), and 4-wells received nano-structured zero valent iron (nZVI) and emulsified vegetable oil (EVO). Injection frequency and volumes are determined by evaluating geochemical, biological, and remediation progress parameters. EISB injections, buffering, water chases, and performance monitoring continued

throughout 2018 - 2022. Small tanks and portable equipment, housed in the containment area of the groundwater treatment plant are used to formulate the bioamendments.

The Vickers groundwater monitoring network, as of December 31, 2021, consists of one hundred twenty-one (121) groundwater monitoring, extraction, injection, and MPE wells. The monitoring network includes other locations (domestic and irrigation wells, mine shafts, cisterns, springs and surface water ponds) to assist in defining groundwater flow systems encompassing the Facility. Groundwater monitoring will continue pursuant to the requirements of the post-closure permit, through April 2034.

On December 21, 2021, the Department issued the Draft of *Missouri Hazardous Waste Management Facility Part 1 Permit MOD007155781* for public comment. The public comment period extended from December 21, 2021 to February 4, 2022. The Department issued *Missouri Hazardous Waste Management Facility Part 1 Permit MOD007155781* on March 16, 2022.

Question 9.E - Have you received or applied for any permit or construction approval under the CWA or any other environmental regulatory authority? If yes, please include a list of all permits or approvals for this facility.

Multiple permits have been applied for, and were approved by local, state, and federal agencies for the Facility, including:

Permit to Construct (MO 0292-003) - Effective February 4, 1992, the Facility received State Permit 0292-003 to upgrade the original light non-aqueous phase liquid (LNAPL) treatment plant (LTP) to a 400 gpm treatment plant to remove volatile organic compounds (VOCs) from pumped groundwater. This permit was authorized under Section (2) of the Missouri State Regulation 10 CSR 10-6.060, "Permits Required" since the potential emissions for PM₁₀, SO_x, NO_x, VOC, and CO were below *de minimums* levels.

Post-Closure Permit (MOD007155781) - Missouri Hazardous Waste Management Facility Permit MOD007155781 requires post-closure care, including groundwater monitoring and corrective action. The Permit also requires implementation of a holistic corrective action program to address releases from other SWMUs and AOCs, noted above. On April 26, 1999, the Department issued *Missouri Hazardous Waste Management Facility Permit MOD007155781 (Part I)* to Eaton as Owner, and Unisys as Operator. The Facility's existing hazardous waste permit expired April 26, 2009, and state and federal regulations, 40 CFR 270.51, allowed the existing hazardous waste permit to continue in effect until the Department and/or EPA issued or denied a new hazardous waste permit. On March 16, 2022, the Department re-issued *Missouri Hazardous Waste Management Facility Part 1 Permit MOD007155781*.

Missouri State Operating Permit (MSOP MO-002411) - MDNR-WPP revised MSOP MO-0002411 effective December 11, 2021, with an expiration date of March 31, 2023. Due to restructuring and watershed-based permitting, this permit was effective for slightly more than one (1) year and four (4) months, a continued diversion from earlier permit cycles. Discharge parameters and monitoring schedules generally followed earlier versions of the permit. MSOP MO-0002411 governed stormwater discharge at Outfall 002 (Figure 3), and new to this permit, discontinued (although 'standby') treated groundwater discharge from the treatment plant to Outfall 003 (Figure 3). A description of the historical Outfalls regulated by MSOP MO-0002411 is noted below:

- Outfall 001 included a 19-acre watershed discharging stormwater runoff from the ABLE Manufacturing plant roof, parking lot, and miscellaneous drains and sumps within the ABLE Manufacturing plant to an unnamed tributary of Leadville Hollow (Turkey Creek Basin). This has been an inactive outfall for Vickers since April 11, 2008. There is no contribution of Vickers stormwater to this outfall. Industrial activity and stormwater discharge to Outfall 001 from ABLE is permitted under MO-R203167;
- Outfall 002 monitors surface water runoff from approximately 26-acres. This stormwater is commingled with the adjacent ABLE property (Figure 2), and occurs along the southern and western portion of the Eaton property. This commingled stormwater discharges through the Parshall flume westward to an unnamed tributary of Short Creek, a tributary to the Spring River; and,
- Outfall 003 formerly discharged LTP treated wastewater via force main, forming the headwaters of Leadville Hollow, a tributary to Turkey Creek (Figure 3). The Facility is not applying for renewal of Outfall 003.

MSOP MO-0002411 Renewal Application Summary

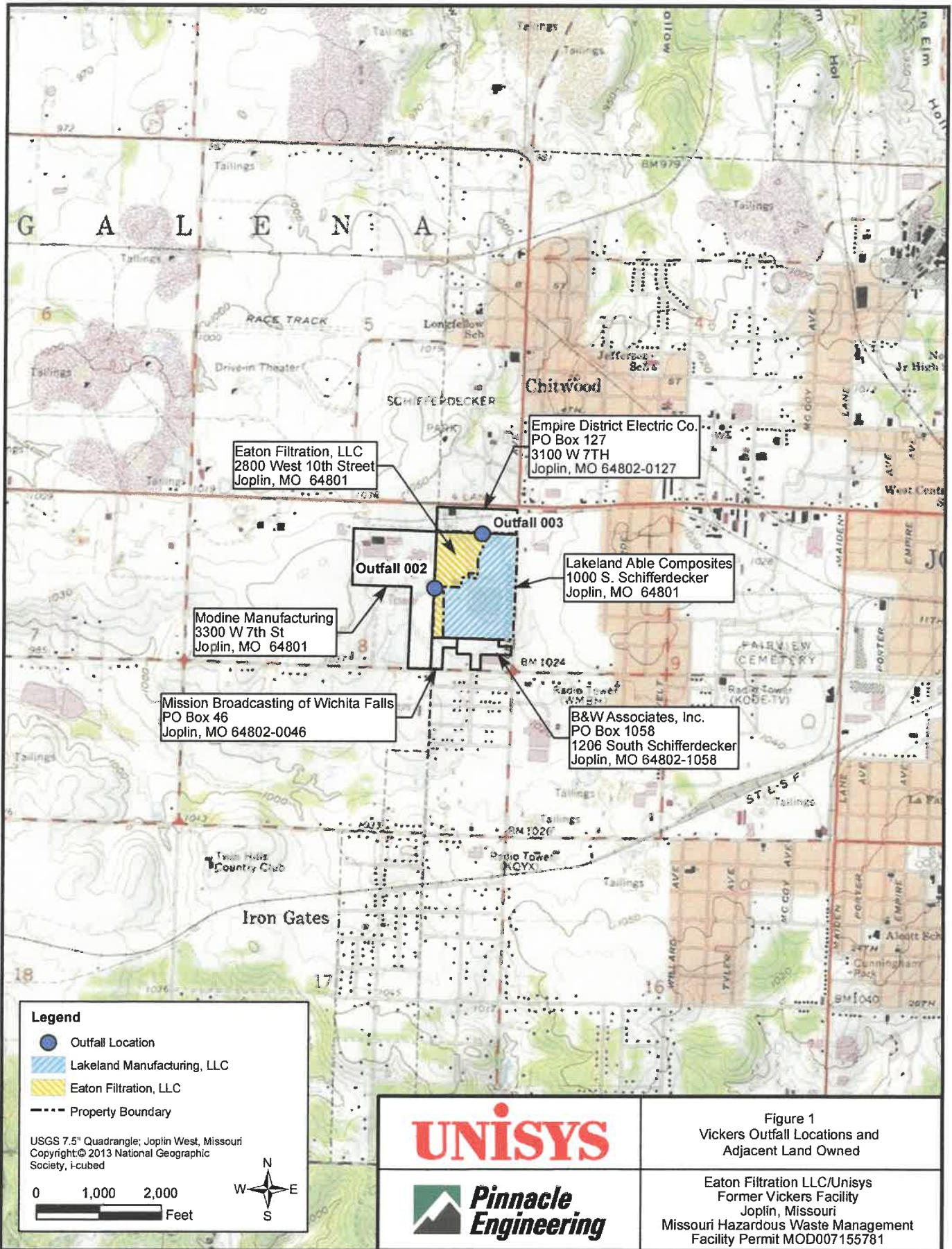
MO-0002411 Issue Date	Effective Dates	Expiration Date	Duration (years)
March 5, 1982	March 5, 1982	March 4, 1987	5.0
December 4, 1987	December 4, 1987	March 3, 1992	4.2
June 26, 1992	March 4, 1992	March 2, 1997	5.0
July 3, 1997	July 3, 1997	July 2, 2002	5.0
March 5, 2004	March 5, 2004	March 4, 2009	5.0
June 12, 2009	June 11, 2009	June 11, 2014	5.0
July 19, 2017	August 1, 2017	March 31, 2020	2.7
December 1, 2021	December 1, 2021	March 31, 2023	1.3

Underground Injection Control Permit (UI-0000032) - issued by MDNR on June 27, 2003, with effective dates from June 27, 2003, through June 26, 2008. The operating phase of this UIC Permit has been completed, and on November 17, 2017, the Facility submitted a *Request for Termination of a Missouri State Operating Permit – UI-0000032*. On January 3, 2018, WPP notified the Facility

that this MSOP was terminated in accordance with the Missouri Clean Water Commission regulation 10 CSR 20-6.010(10)(B).

Missouri Boiler Permit (MO-040401) - A Boiler/Pressure Vessel Inspection Certificate, No. MO040401, has been issued by the State of Missouri for the Facility, allowing for the operation of the low-pressure boiler system in the LTP operations. The boiler was last inspected February 27, 2018. The LTP discontinued discharging to Outfall 003 on August 14, 2018 when groundwater extraction and multiphase extraction (MPE) operations ceased, and this certificate expired February 27, 2020.

Enclosures - Figure 1 – Outfall Locations and Adjacent Landowners
Figure 2 – Watershed Boundaries
Figure 3 – Solid Waste Management Units and Areas of Concern

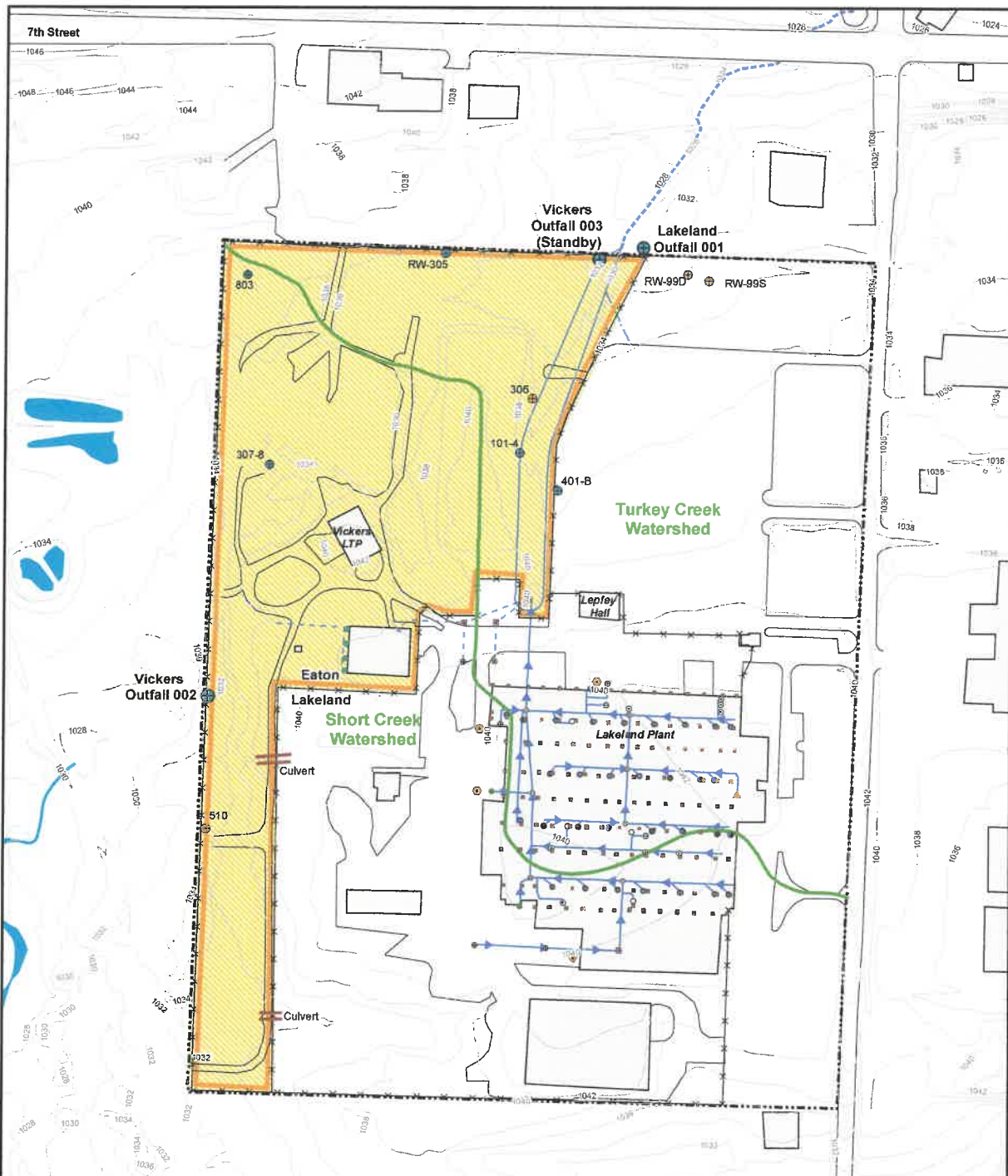


UNISYS

Pinnacle Engineering

Figure 1
Vickers Outfall Locations and
Adjacent Land Owned

Eaton Filtration LLC/Unisys
Former Vickers Facility
Joplin, Missouri
Missouri Hazardous Waste Management
Facility Permit MOD007155781

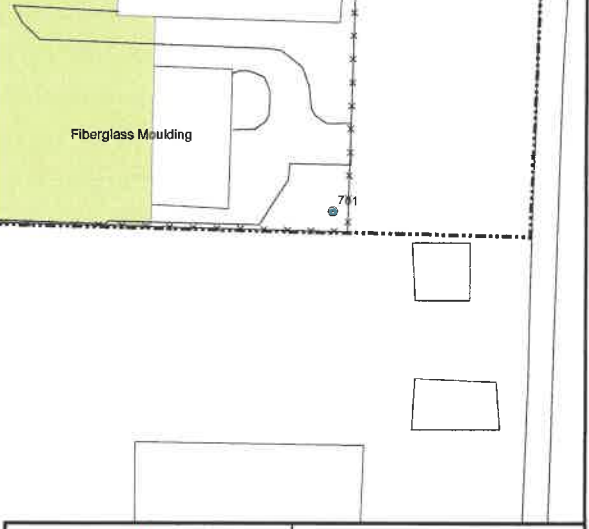
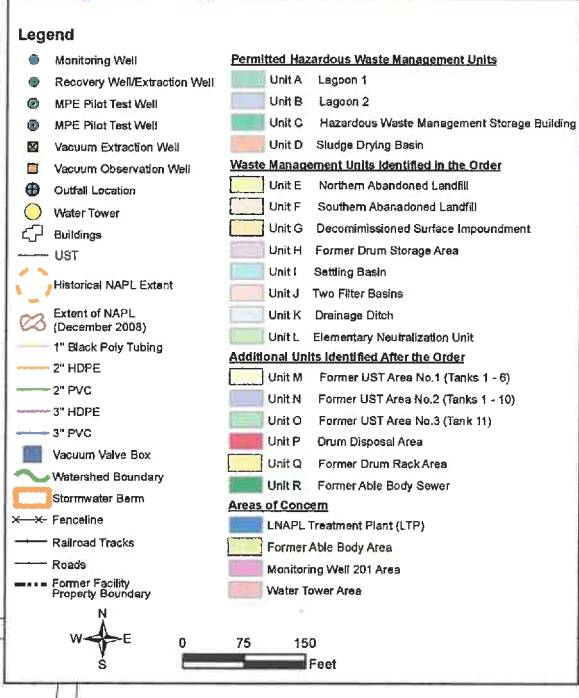
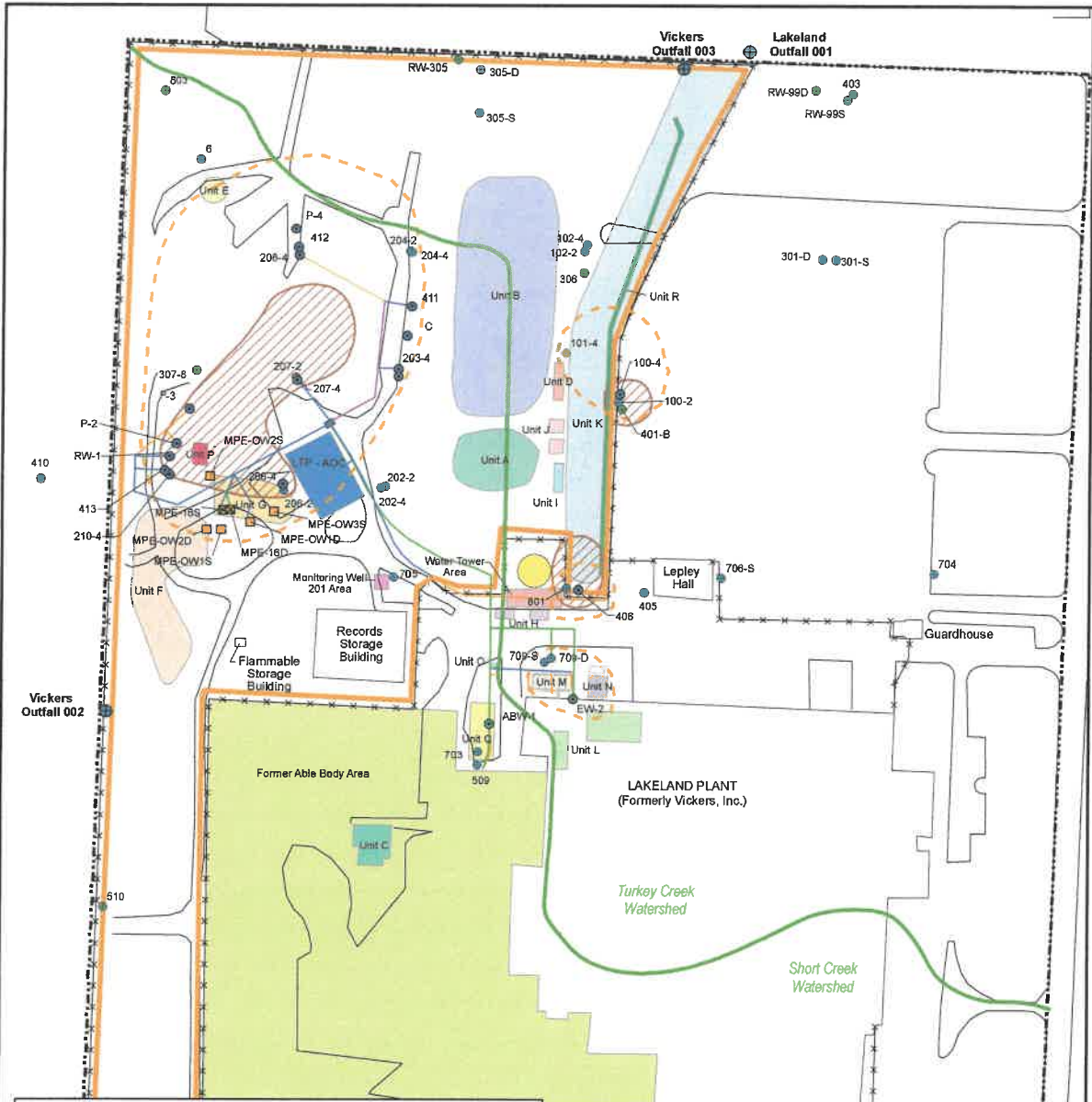


Legend

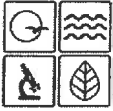
<ul style="list-style-type: none"> ⊕ Groundwater Recovery Well not operating during Reporting Period ⊙ Groundwater Recovery Well Ⓜ Loading Dock Sump ▲ AC Room ● Closed Catch Basin ■ Distribution Box ● Downspout ● Floor Drain not Inspected ● Manhole ○ Open Cast Iron Pipe in Floor ○ Open Catch Basin ○ Open Floor Drain ● RD no interior inlet ● RD w/inlet near Floor ● RD w/inlet near Roof ● RD w/inlet near Roof and Floor ■ Roof Column 	<ul style="list-style-type: none"> ● Outfall Location — Culvert --- Ephemeral Reach --- Watershed Boundary --- Contour Line (Interval = 2) --- Abandoned Storm Drain --- Drainage Ditch --- Parking Lot Discharge --- Storm Drain --- Storm Drain with Flow ■ Stormwater Berm ■ Lakeland, LLC ■ Eaton Filtration, LLC
---	--

0 100 200 Feet

	<p>Figure 2 Watershed Boundaries</p>
	<p>Eaton Filtration LLC/Unisys Former Vickers Facility Joplin, Missouri Missouri Hazardous Waste Management Facility Permit MOD007155761</p>



	<p>Figure 3 Solid Waste Management Units and Areas of Concern</p>
	<p>Eaton Filtration LLC/Unisys Former Vickers Facility Joplin, Missouri Missouri Hazardous Waste Management Facility Permit MOD007155781</p>



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

GENERAL INFORMATION (PLEASE SEE INSTRUCTIONS)

1.0 NAME OF FACILITY
 Eaton Filtration LLC/Unisys - Former Vickers Facility

1.1 THIS FACILITY IS OPERATING UNDER MISSOURI STATE OPERATING PERMIT (MSOP) NUMBER:
 MO-0002411

1.2 IS THIS A NEW FACILITY? PROVIDE CONSTRUCTION PERMIT (CP) NUMBER IF APPLICABLE.
 No

1.3 Describe the nature of the business, in detail. Identify the goods and services provided by the business. Include descriptions of all raw, intermediate, final products, byproducts, or waste products used in the production or manufacturing process, stored outdoors, loaded or transferred and any other pertinent information for potential sources of wastewater or stormwater discharges.

The Eaton Filtration, LLC/Unisys - Former Vickers Facility is a closed permitted hazardous waste treatment, storage, disposal facility undergoing corrective action at eighteen (18) closed solid waste management units (SWMUs) and four (4) areas of concern. Chemical use included corrosives, paint sludges, spent solvents, mineral spirits, waste oils, metal plating wastes, scrap metals, Cyanides, Kolene salts, and solvents including Trichloroethene, 1,1,1-Trichlorethane, chlorinated solvents, light non-aqueous phase liquid (LNAPL), and dense non-aqueous phase liquid (DNAPL). The Facility corrective action program has transitioned from hydraulic containment of groundwater through pump & treatment operations to enhanced in-situ bioremediation (EISB) through injection of bioremediation amendments (molasses, emulsified vegetable oil, nano-scale zero-valent iron) into wells.

This renewal application is for precipitation dependent stormwater runoff from the property at Outfall 002.

FLOWS, TYPE, AND FREQUENCY

2.0 Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in item B. Construct a water balance on the line drawing by showing average and maximum flows between intakes, operations, treatment units, evaporation, public sewers, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

2.1 For each outfall (1) below, provide: (2) a description of all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, stormwater runoff, and any other process or non-process wastewater, (3) the average flow and maximum flow (put max in parentheses) contributed by each operation and the sum of those operations, (4) the treatment received by the wastewater, and (5) the treatment type code. Continue on additional sheets if necessary.

1. OUTFALL NO.	2. OPERATION(S) CONTRIBUTING FLOW; INCLUDE ALL PROCESSES AND SUB PROCESSES AT EACH OUTFALL	3. AVERAGE FLOW AND (MAXIMUM FLOW), INCLUDE UNITS.	4. TREATMENT DESCRIPTION	5. TREATMENT CODES FROM TABLE A
001	inactive Vickers outfall effective April 11, 2008		none	
002	Vickers stormwater + ABLE stormwater (in MGD)	0.016900/1.014647	none	
003	inactive outfall effective August 14, 2018		none	

Attach additional pages if necessary.

2.2 INTERMITTENT DISCHARGES

Except for stormwater runoff, leaks, or spills, are any of the discharges described in items 2.0 or 2.1 intermittent or seasonal?

Yes (complete the following table) No (go to section 2.3)

1. OUTFALL NUMBER	2. OPERATION(S) CONTRIBUTING FLOW	3. FREQUENCY		4. FLOW				C. DURATION (in days)
		A. DAYS PER WEEK (specify average)	B. MONTHS PER YEAR (specify average)	A. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		
				1. MAXIMUM DAILY	2. LONG TERM AVERAGE	4. LONG TERM DAILY	3. MAXIMUM AVERAGE	
001	none							
002	none							
003	none							

2.3 PRODUCTION

A. Does an effluent limitation guideline (ELG) promulgated by EPA under section 304 of the Clean Water Act apply to your facility? Indicate the part and subparts applicable.

Yes 40 CFR _____ Subpart(s) _____ No (go to section 2.5)

B. Are the limitations in the effluent guideline(s) expressed in terms of production (or other measure of operation)? Describe in C below.

Yes (complete C.) No (go to section 2.5)

C. If you answered "yes" to B, list the quantity representing 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.

A. OUTFALL(S)	B. QUANTITY PER DAY	C. UNITS OF MEASURE	D. OPERATION, PRODUCT, MATERIAL, ETC. (specify)

2.4 IMPROVEMENTS

A. Are you 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 which 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 2.6)

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

B. Optional: provide below or attach additional sheets describing water pollution control programs or other environmental projects which may affect discharges. Indicate whether each program is underway or planned, and indicate actual or planned schedules for construction. This may include proposed bmp projects for stormwater.

2.5 SLUDGE MANAGEMENT

Describe the removal of any industrial or domestic biosolids or sludges generated at your facility. Include names and contact information for any haulers used. Note the frequency, volume, and methods (incineration, landfilling, composting, etc) used. See Form A for additional forms which may need to be completed.

No sludge\debris has been generated from Vickers storm water runoff to Outfall 002.

DATA COLLECTION AND REPORTING REQUIREMENTS FOR APPLICANTS

3.0 EFFLUENT (AND INTAKE) CHARACTERISTICS (SEE INSTRUCTIONS)

A. & B. See instructions before continuing – complete one Table 1 for **each outfall** (and intake) – annotate the outfall (intake) number or designation in the space provided. The facility is not required to complete intake data unless required by the department or rule.

C. Use the space below to list any pollutants listed in the instructions section 3.0 C. Table B which you know or have reason to believe is discharged or may be discharged from any outfall not listed in parts 3.0 A or B on Table 1. For every pollutant listed, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	3. OUTFALL(S)	4. ANALYTICAL RESULTS (INCLUDE UNITS)
none	inactive outfall effective April 11, 2008	001	
none	precipitation dependent runoff	002	See Table 3.0
none	inactive outfall effective August , 2018	003	

3.1 Whole Effluent Toxicity Testing

A. To your knowledge, have any Whole Effluent Toxicity (WET) tests been performed on the facility discharges (or on receiving waters in relation to your discharge) within the last three years?

Yes (go to 3.1 B) No (go to 3.2)

3.1 B

Disclose wet testing conditions, including test duration (chronic or acute), the organisms tested, and the testing results. Provide any results of toxicity identification evaluations (TIE) or toxicity reduction evaluations (TRE) if applicable. Please indicate the conclusions of the test(s) including any pollutants identified as causing toxicity and steps the facility is taking to remedy the toxicity.

3.2 CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported herein, above, or on Table 1 performed by a contract laboratory or consulting firm?

Yes (list the name, address, telephone number, and pollutants analyzed by each laboratory or firm.) No (go to 4.0)

A. LAB NAME	B. ADDRESS	C. TELEPHONE <i>(area code and number)</i>	D. POLLUTANTS ANALYZED <i>(list or group)</i>
Euofins Canton	180 S. Van Buren Avenue Barberton, OH 44	(615) 301-5761	HEM and SGT-HEM 1664A, COD 410.4, TSS SM2450D

4.0 STORMWATER

4.1

Do you have industrial stormwater discharges from the site? If so, attach a site map outlining drainage areas served by each outfall. Indicate the following attributes within each drainage area: pavement or other impervious surfaces; buildings; outdoor storage areas; material loading and unloading areas; outdoor industrial activities; structural stormwater control measures; hazardous waste treatment, storage, and disposal units; and wells or springs in the area.

OUTFALL NUMBER	TOTAL AREA DRAINED (PROVIDE UNITS)	TYPES OF SURFACES (VEGETATED, STONE, PAVED, ETC)	BEST MANAGEMENT PRACTICES EMPLOYED; INCLUDE STRUCTURAL BMPS AND TREATMENT DESIGN FLOW FOR BMPS DESCRIBE HOW FLOW IS MEASURED
001	~13 acres	roof, paved, grass	ABLE Manufacturing permitted discharge under MO-R203167
002	~13 acres	grass, gravel (Figure 2)	parshall flume -continuous flow chart recorded. SWPPP bmp installed+berm.
003	0 acres		

4.2 STORMWATER FLOWS

Provide the date of sampling with the flows, and how the flows were estimated.

continuous flow measurement at Parshall flume by chart recorder and pressure transducer.

SIGNATORY REQUIREMENTS

5.0 CERTIFICATION

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT)

Terry Etter

TELEPHONE NUMBER WITH AREA CODE

(651) 635-7253

SIGNATURE (SEE INSTRUCTIONS)

DATE SIGNED

10/1/2022

SEE INSTRUCTIONS; PLEASE PRINT OR TYPE.

You may report some or all of this information on separate sheet (use similar format) instead of completing these pages.

FORM C TABLE 1 FOR 3.0 - ITEMS A AND B

EFFLUENT (AND INTAKE) CHARACTERISTICS	THIS OUTFALL IS: stormwater runoff - 128 month sampling period (2009-2022)	OUTFALL NO. 002
---------------------------------------	--	-----------------

3.0 PART A – You must provide the results of at least one analysis for every pollutant in Part A. Complete one table for each outfall or proposed outfall. See instructions.

1. POLLUTANT	2. VALUES						D. NO. OF ANALYSES	3. UNITS (specify if blank)	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUES		C. LONG TERM AVERAGE VALUES			A. CONCENTRATION	B. MASS
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
A. Biochemical Oxygen Demand, 5-day (BOD ₅)	<2	0.32	<2	0.32	<2	0.32	2	mg/L	lbs
B. Chemical Oxygen Demand (COD)	57	8.05	57	8.05	14.7	2.08	48	mg/L	lbs
C. Total Organic Carbon (TOC)								mg/L	lbs
D. Total Suspended Solids (TSS)	3.2	0.52	3.2	0.52	2	0.32	43	mg/L	lbs
E. Ammonia as N								mg/L	lbs
F. Flow	VALUE 1.014 mgd		VALUE 3.061 m-gals		VALUE 0.016900 mgd		13.7 yrs	MILLIONS OF GALLONS PER DAY (MGD)	
G. Temperature (winter)	VALUE 55.9		VALUE 55.9		VALUE 42.76		38	°F	
H. Temperature (summer)	VALUE 72.0		VALUE 72.0		VALUE 64.45		15	°F	
I. pH	MINIMUM 6.27		MAXIMUM 7.98		AVERAGE 7.05		46	STANDARD UNITS (SU)	

3.0 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 the pollutant. Complete one table for each outfall (intake). Provide results for additional parameters not listed here in Part 3.0 C.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. VALUES						4. UNITS		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUES		C. LONG TERM AVERAGE VALUES		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS
			CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS			

Subpart 1 – Conventional and Non-Conventional Pollutants										
A. Alkalinity (CaCO ₃)		X	MINIMUM		MINIMUM		MINIMUM			
B. Bromide (24959-67-9)		X								
C. Chloride (16887-00-6)		X								
D. Chlorine, Total Residual		X								
E. Color		X								
F. Conductivity		X								
F. Cyanide, Amenable to Chlorination		X								

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. VALUES						4. UNITS		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS
			CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS			
Subpart 1 – Conventional and Non-Conventional Pollutants (Continued)											
G. <i>E. coli</i>		X									
H. Fluoride (16984-48-8)		X									
I. Nitrate plus Nitrate (as N)		X									
J. Kjeldahl, Total (as N)		X									
K. Nitrogen, Total Organic (as N)		X									
L. Oil and Grease			3.2	0.52	3.2	0.52	<2	0.32	40	mg/L	lbs
M. Phenols, Total		X									
N. Phosphorus (as P), Total (7723-14-0)		X									
O. Sulfate (as SO ₄) (14808-79-8)		X									
P. Sulfide (as S)		X									
Q. Sulfite (as SO ₃) (14265-45-3)		X									
R. Surfactants		X									
S. Trihalomethanes, Total		X									
Subpart 2 – Metals											
1M. Aluminum, Total Recoverable (7429-90-5)		X									
2M. Antimony, Total Recoverable (7440-36-9)		X									
3M. Arsenic, Total Recoverable (7440-38-2)		X									
4M. Barium, Total Recoverable (7440-39-3)		X									
5M. Beryllium, Total Recoverable (7440-41-7)		X									
6M. Boron, Total Recoverable (7440-42-8)		X									
7M. Cadmium, Total Recoverable (7440-43-9)		X									
8M. Chromium III Total Recoverable (16065-83-1)		X									
9M. Chromium VI, Dissolved (18540-29-9)		X									
10M. Cobalt, Total Recoverable (7440-48-4)		X									

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"		3. VALUES						4. UNITS		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS
			CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS			
Subpart 2 – Metals (Continued)											
11M. Copper, Total Recoverable (7440-50-8)		X									
12M. Iron, Total Recoverable (7439-89-6)		X									
13M. Lead, Total Recoverable (7439-92-1)		X									
14M. Magnesium, Total Recoverable (7439-95-4)		X									
15M. Manganese, Total Recoverable (7439-96-5)		X									
16M. Mercury, Total Recoverable (7439-97-6)		X									
17M. Methylmercury (22967926)		X									
18M. Molybdenum, Total Recoverable (7439-98-7)		X									
19M. Nickel, Total Recoverable (7440-02-0)		X									
20M. Selenium, Total Recoverable (7782-49-2)		X									
21M. Silver, Total Recoverable (7440-22-4)		X									
22M. Thallium, Total Recoverable (7440-28-0)		X									
23M. Tin, Total Recoverable (7440-31-5)		X									
24M. Titanium, Total Recoverable (7440-32-6)		X									
25M. Zinc, Total Recoverable (7440-66-6)			0.4	0.06			0.3	0.05	2	mg/L	lbs
Subpart 3 – Radioactivity											
1R. Alpha Total		X									
2R. Beta Total		X									
3R. Radium Total		X									
4R. Radium 226 plus 228 Total		X									

**INSTRUCTIONS FOR FILLING OUT APPLICATION FOR NPDES DISCHARGE PERMIT – FORM C –
MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, PROCESS WASTEWATER, NON-
PROCESS WASTEWATER, AND INDUSTRIAL STORMWATER DISCHARGES.**

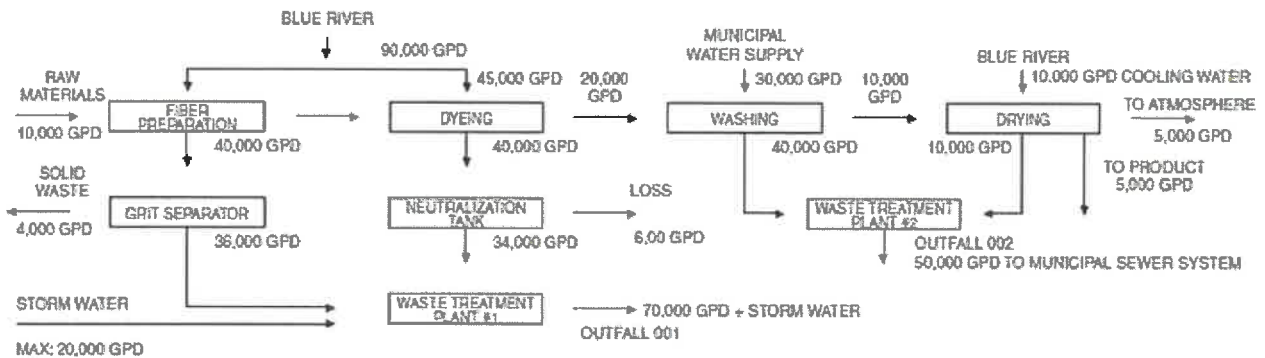
All applicable sections must be filled in when the application is submitted. The form must be signed as indicated. This application is to be completed only for facilities with a discharge. Non-discharging (land application facilities) should fill out the appropriate forms for the activity. Include any area with potential discharge, even if there is normally no discharge. If this form is not adequate for you to describe your existing operations, then sufficient information should be attached so an evaluation of the discharges can be made. Attach additional sheets as necessary for any additional information. If an applicant believes previous outfalls are no longer applicable to the facility, please indicate so. Certain parts of the application may be submitted electronically, such as extensive analytical data, or project plans relating to improvements. This may be included using a thumb drive or CD. If extensive data is submitted without an electronic copy, the department may request the submission at a later time so the permit writer can mathematically evaluate the data. If you have any questions regarding this form please contact the Water Protection Program Operating Permits Administrative Assistant at 800-361-4827 or 573-571-6825 and you will be directed to a permit writer.

GENERAL INFORMATION

- 1.0 Name of Facility – By what title or name is this facility known? Has the official name changed? Please indicate both the previous and current name you wish to be listed on the permit.
- 1.1 Operating permit number as assigned (MO-#####)
- 1.2 Indicate if this is a new facility or if there are any new discharges. Has the facility completed an antidegradation review? Is this facility being moved from a general permit to a site specific permit? If so, indicate general permit number.
- 1.3 Self-explanatory.

FLOWS, TYPE, AND FREQUENCY

2.0 The line drawing should show the route taken by water in your facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and stormwater runoff. Indicate any alternate treatment trains available. You may group similar operations into a single unit labeled to correspond to the more detailed listing. More than one drawing may be required depending on the complexity of the system. The water balance should show average and maximum flows. Show all significant losses of water to: products, atmosphere, public sewer systems; both storm sewer and sewer. You should use actual measurements whenever available; otherwise, use your best estimate. An example of an acceptable line drawing appears below.



2.1 List all sources of wastewater to each outfall. Operations may be described in general terms (for example, “dye-making reactor” or a “distillation tower”). You may estimate the flow contributed by each source if no data is available, and for stormwater, you may use any reasonable measure of duration, volume, or frequency. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Treatment units should be listed in order and you should select the proper code from Table A to fill in column 3B for each treatment unit. Insert “XX” into column 3B if no code corresponds to a treatment unit you list.

TABLE A – CODES FOR TREATMENT UNITS

PHYSICAL TREATMENT PROCESSES			
1-A	Ammonia Stripping	1-M	Grit Removal
1-B	Dialysis	1-N	Microstraining
1-C	Diatomaceous Earth Filtration	1-O	Mixing
1-D	Distillation	1-P	Moving Bed Filters
1-E	Electrodialysis	1-Q	Multimedia Filtration
1-F	Evaporation	1-R	Rapid Sand Filtration
1-G	Flocculation	1-S	Reverse Osmosis (Hyper Filtration)
1-H	Flotation	1-T	Screening
1-I	Foam Fractionation	1-U	Sedimentation (Settling)
1-J	Freezing	1-V	Slow Sand Filtration
1-K	Gas-Phase Separation	1-W	Solvent Extraction
1-L	Grinding (Comminutors)	1-X	Sorption
CHEMICAL TREATMENT PROCESSES			
2-A	Carbon Absorption	2-G	Disinfection (Ozone)
2-B	Chemical Oxidation	2-H	Disinfection (Other)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (Chlorine)	2-L	Reduction
BIOLOGICAL TREATMENT PROCESSES			
3-A	Activated Sludge	3-E	Pre-Aeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application
3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filtration
OTHER PROCESSES			
4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection
SLUDGE TREATMENT AND DISPOSAL PROCESSES			
5-A	Aerobic Digestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Web Oxidation
5-L	Gravity Thickening		

2.2 A discharge is intermittent unless it occurs without interruption during the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities. A discharge is seasonal if it occurs only during certain parts of the year. Fill in every applicable column in this item for each source of intermittent or seasonal discharges. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate and total volume in the "Maximum Daily" columns. Report the average of all daily values measures during days when discharge occurred within the last year in the "Long Term Average" columns.

PRODUCTION

2.3 A. All effluent limitation guidelines (ELGs) promulgated by EPA appear in the Federal Register and are published annually in 40 CFR Subchapter N (400-499). A guideline applies to you based on the applicability sections within each subpart. If you are unsure you are covered by an ELG, check with your Missouri Department of Natural Resources' Regional Office. You must check yes if an applicable effluent guideline has been promulgated, even if the guideline limitations are being contested in court. If you believe a promulgated effluent guideline has been remanded for reconsideration by a court and does not apply to your operations, you may check no. The ELG number and subpart(s) must be included.

2.3 B. An ELG is expressed in terms of production (or other measure of operation) if the limitations are expressed as mass of pollutant per operational parameter; for example, "pounds of BOD per cubic foot of logs from which bark is removed," or "pounds of TSS per megawatt hour of electrical energy consumed by smelting furnace." An example of a guideline not expressed in terms of a measure of operation is one which limits the concentration of pollutants, or requires no discharge of the wastewater.

2.3 C. This item must be completed if you checked "yes" to item B. The production information requested here is necessary to apply effluent guidelines to your facility and you may not claim it as confidential. However, you do not have to indicate how the reported information was calculated. Report quantities and the units of measurement used in the applicable effluent guideline. The data provided must be a measure of actual operation over a one month period, such as the production for the highest month during the last twelve months, or the monthly average production for the highest year of the last five years, or other reasonable measure of actual operation, but may not be based on design capacity or on predictions of future increases in operation. This data must be concurrent of facility operations.

2.4 IMPROVEMENTS If you check yes to this question, complete all parts of the table, or attach a copy of any previous submission you have made containing the same information. You are not required to submit a description of future pollution control projects if you do not wish to, or if none are planned.

2.5 SLUDGE MANAGEMENT If the facility generates any sludge or biosolids, please indicate where the sludge accumulates (lagoon, tank, etc.) and the methods of disposal. Please include the volume and frequency of sludge removal/disposal and any haulers used. Please indicate if the facility composts, incinerates, landfills, stores, sells, or other methods of eliminating the sludge from lagoons or holding tanks. Consider submitting a sludge or biosolids management plan electronically if additional description is needed.

DATA COLLECTION AND REPORTING REQUIREMENTS FOR APPLICANTS

3.0 This section requires collection and reporting of data on pollutants discharged from each outfall, including stormwater outfalls, non-process wastewater, and any intake data you wish to provide. Parts A, B, and C address different sets of pollutants and must be completed in accordance with the specific instructions for the part. All data must be reported as a concentration **and** as total mass. You may report some or all of the required data by attaching separate sheets of paper.

3.0 A. and B. These sections are found on Table 1. Complete a separate table for each outfall and intake.

3.0 A. Requires reporting at least one analysis for each pollutant. Part A must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water, stormwater runoff, or other discharges; intake values are not required in this Part. Upon written request, (email is suitable) prior to submitting the application, the department may waive the requirements to test for one or more of these pollutants upon determining testing for the pollutant(s) is not applicable for your effluent.

3.0 B. Mark "X" in either "Believed Present", Column 2A, or "Believed Absent", Column 2B, for each pollutant, based on your best estimate, and test those you believe present. Base your determination a pollutant is present in, or absent from, your discharge on your knowledge of your raw materials, source water, maintenance chemicals, intermediate, byproduct, and final products, and any previous analyses known to you of the facility's effluent, or of any similar effluent. If either chloride or sulfate is believed present, the department asks you to test for both chloride and sulfate. If you expect a pollutant is present as a result your intake water, you should mark "Believed Present" and analyze for the pollutant. Provide analysis of the intake or source water as well; this includes water withdrawn from wells or obtained from a potable water source. Presence of a pollutant in the discharge from sourced water does not eliminate disclosure requirements. If a

pollutant is reported as not present, the pollutant will be considered “believed absent” for the purposes of application shield.

3.0 A and B Continued

Use the following abbreviations (or other as applicable) in Column 4, “Units”. Mass must be specified as per day, month, or year.

CONCENTRATION		MASS	
ppm	parts per million	lbs	pounds
mg/L	milligrams per liter	ton	tons (English tons)
ppb	parts per billion	mg	Milligrams
ug/L	micrograms per liter	g	grams
pCi/L	picocuries per liter	kg	kilograms
		T	tonnes (metric tons)

MAXIMUM DAILY VALUE. If you measure a pollutant only once, complete only the “Maximum Daily Value” columns and insert “1” into the “number of analyses” in Column D. The Missouri Department of Natural Resources may require you to conduct additional analyses to further characterize your discharge. If the pollutant is sampled but not detected, a less than “<” symbol should be used next to the detection limit (or laboratory reporting limit). Simply stating “below detection limits” without quantifying the limit of detection may not be appropriate and additional information may be required.

MAXIMUM 30 DAY VALUES. “Maximum 30 Day Values” are not compulsory but should be filled out if data is available. The department suggests at least 4 samples (one per week) be collected over a one month period for averaging purposes, but is not required. Determine the average of all daily values taken during one calendar month, and report the highest average of all daily values taken during all calendar months, and report the highest average in Column B. Column D must show the number of samples used in the calculation.

LONG TERM AVERAGES. “Long Term Average Values” are not compulsory but should be filled out if data is available. Determine the long term average of all the data and report in Column C. Column D must show the number of samples used in the calculations. The facility should include a statement describing the timeframe of the data used in the calculations. Consider including an electronic copy of the data with the application.

SAMPLING. The collection of samples for analyses should be supervised by a person experienced in performing sampling of industrial wastewater and/or stormwater. You may contact your Missouri Department of Natural Resources’ Regional Office for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate or blank samples, etc. The time when you sample should be representative of your normal operation, with all processes contributing wastewater in normal operation, and with your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, at a site specified in your present permit, or for new discharges, at any site adequate for the collection of a representative sample.

GRAB SAMPLE. An individual sample of sufficient volume for analysis, collected at a randomly selected time, over a period not exceeding 15 minutes, which is representative of the discharge. Grab samples must be used for temperature, pH, total residual chlorine, oil and grease, *E. coli*, and any pollutant considered to be volatile. Grab samples are typically appropriate for stormwater.

COMPOSITE SAMPLE. Use composite sampling (if available) for all pollutants (except above). A combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be proportional; either time interval proportional, or flow proportional. Aliquots may be collected manually or automatically.

ANALYSIS. You must use test methods promulgated in 40 CFR Part 136 for all analyses. The facility must use a sufficiently sensitive method to determine compliance with Missouri Water Quality Standards in accordance with Standard Conditions Part I. If no method has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge. If there is no promulgated method, your attached description should include the preservation techniques, sample holding times, the quality control measures which you used, and any other

pertinent information, such as filtering or what fraction the method detects. For obscure methods or new contaminants, consider including an electronic copy of the method with the application and the laboratory analysis sheets.

IDENTICAL OUTFALL CONSIDERATION. If you have two or more substantially identical outfalls, you may submit the results of the analysis for one substantially identical outfall in its place. Identify which outfall you did test and describe why the outfalls which you did not test are substantially identical to the outfall you did test.

REPORTING OF INTAKE DATA. You are not required to report intake data unless you wish apply for "net" effluent limitations for one or more pollutants. Net limitations are technology limits adjusted by subtracting the level of the pollutant present in the intake water from the discharge. National Pollutant Discharge Elimination System (NPDES) regulations allow net limitations only in certain circumstances. To demonstrate eligibility, report the maximum and average of the results of analyses on the intake water, attach a statement the intake water is drawn from the same body of water into which the discharge is made, and a statement how the pollutant level is reduced by the wastewater treatment. When applicable, a demonstration to the extent the pollutants in the intake vary physically, chemically, or biologically from the pollutants contained in the discharge; for example, when the pollutant represents a class of compounds.

3.0. C. requires listing any pollutants from "TABLE B – TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT" you believe to be present and explain why you believe them to be present. If you have analytical data, you must report it. You may include other pollutants not listed below but present in your discharge in 3.0 C. Please provide Chemical Abstract Service (CAS) numbers for any additional pollutants described. If the facility is required to complete Form D, duplication of the parameters here is not required.

TABLE B – TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT		
TOXIC POLLUTANT	HAZARDOUS SUBSTANCES	HAZARDOUS SUBSTANCES
Asbestos	Dimethylamine	Napthenic acid
HAZARDOUS SUBSTANCES	Dintrobenzene	Nitrotoluene
Acetaldehyde	Diquat	Parathion
Allyl alcohol	Disulfoton	Phenolsulfonate
Allyl chloride	Diuron	Phosgene
Amyl acetate	Epichlorohydrin	Propargite
Aniline	Ethion	Propylene oxide
Benzonitrile	Ethylene diamine	Pyrethrins
Benzyl chloride	Ethylene dibromide	Quinoline
Butyl acetate	Formaldehyde	Resorcinol
Butylamine	Furfural	Strontium
Captan	Guthion	Strychnine
Carbaryl	Isoprene	Sytrene
Carbofuran	Isopropanolamine	2,4,5-T (2,4,5-Trichloro-phenoxyacetic acid)
Carbon disulfide	Kelthane	TDE (Tetrachlorodiphenyl ethane)
Chlorpyrifos	Kepone	2, 4, 5-TP (2-(2,4,5-Trichloro-phenoxy) propanoic acid)
Coumaphos	Malathion	Trichlorofon
Cresol	Mercaptodimethur	Triethanolamine
Crotonaldehyde	Methoxychlor	Triethylamine
2,4-D (2,4-Dichloro-Phenoxyacetic acid)	Methyl mercaptan	Uranium
Diazinon	Methyl parathion	Vanadium
Dicamba	Mevinphos	Vinyl acetate
Dichlobenil	Mexacarbate	Xylene
2,2-Dichloropropionic acid	Monethyl amine	Xylenol
Dichlorvos	Monomethyl amine	Zirconium
Diethylamine	Nalad	

3.1 Self-explanatory.

3.2 Self-explanatory.

4.0 STORMWATER [10 CSR 20-6.200(2)(C)1.]

In accordance with 10 CSR 20-6.200(2)(C)1.E(I) and (II), the facility must sample the stormwater for any pollutant listed in the permit for process wastewater discharges and/or the applicable Effluent Limitation Guideline. All industrial stormwater must be sampled for parameters listed in 10 CSR 20-6.200(2)(C)1.E.(III); these are: oil and grease, pH, biochemical oxygen demands (BOD₅), chemical oxygen demands (COD), total suspended solids (TSS), conductivity, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen.

4.1 Indicate the outfall numbers for industrial stormwater discharges. Provide the area drained by each outfall. Indicate the type and percentages of surface(s), for example: 60% grass or vegetated areas, 10% non-vegetated soils, 30% pavement, etc., the outfall drains. The facility must indicate any structural best management practices, such as settling/retention, rain garden/infiltration, filter socks, etc, employed at each outfall.

4.2 Describe the method used to determine the flow rate in accordance with 10 CSR 20-6.200(2)(C)1., and the flow rate; submit the date and duration of the storm event from which the samples were taken.

5.0 SIGNATORY REQUIREMENTS The Clean Water Act provides for severe penalties for submitting false information on this application form. Section 309(c)(2) of the Clean Water Act provides "Any person who knowingly makes any false statement, representation, or certification in any application . . . shall upon conviction, be punished by a fine of no more \$10,000 or by imprisonment for not more than six months, or both.

All applications must be signed as follows and the signature must be original. For a corporation: by an officer having responsibility for the overall operation of the regulated facility or activity or for environmental matters. For a partnership or sole proprietorship: by a general partner or the proprietor. For a municipal, state, federal or other public facility: by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.

Supplemental Information – Form 780-1479-F, Form C

Section 2.0

Water flow to Outfall 002 is dependent on precipitation that falls on Eaton property, in addition to precipitation dependent run-on to Eaton property from the adjacent ABLE Manufacturing (aka Lakeland Composites) property which sits at a higher elevation at the top of the drainage divide in the southern portion of the former Facility (Figure 2).

Section 2.1

Outfall 002 – currently flow to this outfall consists of: (1) storm water discharge from the adjacent property (ABLE Manufacturing) in the southern portion of their property, and eventual flow west through Outfall #002; and (2) storm water run-off from Vickers (Eaton) property. No industrial processes from Vickers property contributes flow to this outfall.

Table 2.1 – Outfall 002 Flow Summary

Outfall 002 Stormwater Discharge	Total Annual Flow (gallons)	Average Daily Flow (gpd)	Daily Maximum Flow (gpd)	% Days No Flow (Zero gpd)
2022 (thru 9/25)	3,281,143	12,289	277,811	69.3%
2021	3,234,647	8,862	240,544	68.5%
2020	3,788,521	10,380	233,800	68.6%
2019	9,795,560	26,837	529,943	54.5%
2018	3,741,107	10,250	801,377	84.9%
2017	5,247,190	14,376	1,014,647	79.7%
2016	3,264,888	8,920	573,028	80.1%
2015	11,717,107	32,102	731,903	68.5%
2014	2,191,937	6,005	548,254	88.5%
2013	6,605,008	18,096	434,079	64.7%
2012	3,373,005	9,241	485,512	86.6%
2011	9,041,071	24,770	804,878	67.4%
2010	10,201,969	27,951	679,663	21.9%*
2009	9,269,585	25,396	516,748	0.3%*
13.7-year totals	84,752,738	16,900	1,014,647	64.4%

*Non-contact cooling water discharge occurred through Outfall 002, discontinued December 09, 2010

Stormwater discharge to Outfall 002 occurs from approximately a 26-acre watershed upstream of the outfall structure, located at the perimeter fence on the western margin of Eaton property (Figure 2). Downstream of the Parshall flume flow leads to an unnamed tributary of Short Creek, a tributary of the Spring River (Figure 1). Outfall 002 sits between Eaton property and Modine Manufacturing property to the west (Figure 2). A Stevens continuous chart recorder was installed in the mid-1980s to record flow at Outfall 002 through the Parshall flume.

Eaton property drainage contribution to Outfall 002 occurs through approximately 13-acres, and ABLE Manufacturing drains approximately 13-acres through Outfall 002. The land-use and primary environmental operations on Eaton property now is groundwater monitoring related activities (sampling, recording data, repairs), mowing, maintenance and repairs of the RCRA cap, and land surface restoration with established vegetation. There are minimal gravel road surfaces at the Facility used to access groundwater monitoring wells across the property, which also service the mowing and inspection activities of the post-closure permit. An aerial photograph representative of the land-use for more than the past decade is provided in the photo below, with Outfall 002 located on the west fence line (bottom of picture). Outfall 001 and Outfall 003 are located for reference along the northern fence line (left in picture), as noted on Figure 3. The Eaton property is located within the yellow line (below), and contains solid waste management units (SWMUs) identified in color on the aerial photograph, and identified on Figure 3. These areas are inspected routinely as identified in our Stormwater Pollution Prevention Plan (SWPPP), and are under post-closure care and corrective action cleanup operations.



The manufacturing activities at ABLE Manufacturing include custom molded composites, fabricated metal products, thermoformed plastics and complex assembly services primarily for military and heavy truck applications. Material, equipment, and product surface storage occurs on the Able Manufacturing property. Stormwater runoff from this manufacturing site enters along the central and the southern portion of Eaton property, and flows west and northwest through Outfall 002, after commingling with stormwater runoff from Eaton.

A SWPPP was prepared in 2014 to implement best management practices (BMPs) for Outfall 002 on the Eaton property. This SWPPP is updated annually, at a minimum, or if conditions change during the reporting period, and includes an up-to-date *Contingency Plan* in accordance with 40 CFR Subpart D 264.50-56, and the post-closure permit (MOD007155781). The purpose of that plan is to minimize the hazards to human health and the environment from any un-planned release of hazardous waste or hazardous waste constituents to the air, soil, or surface water from corrective action cleanup operations. The provisions of these plans are to be carried out whenever such an event occurs. A copy of the SWPPP is maintained at the Facility.

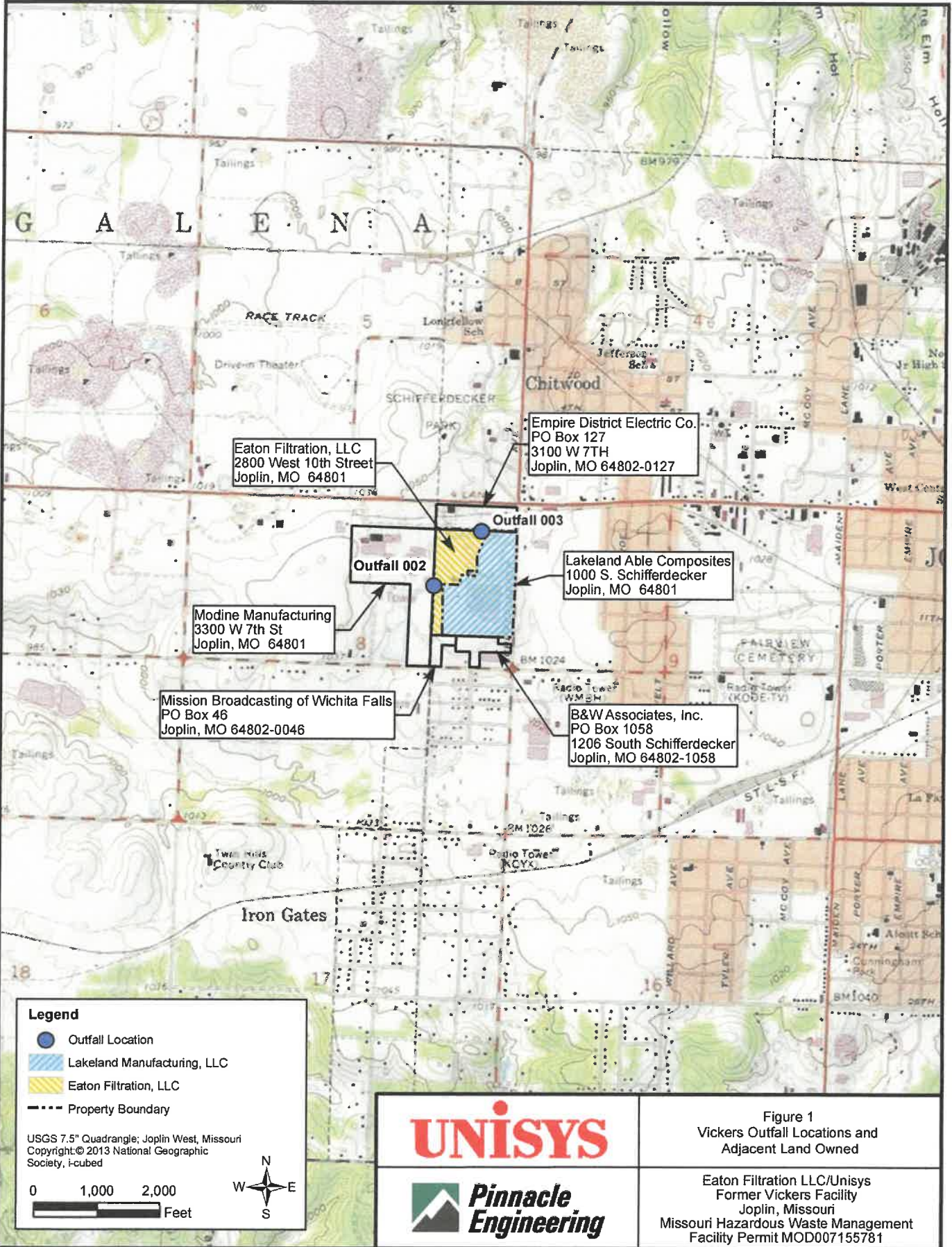
In 1987, a Stormwater Interim Measure (IM) directed the construction of a berm surrounding the 50-acre property. Berms control and direct runoff through the monitored structures (Figure 2). Rainfall and stormwater runoff draining to Outfall 002 has no exposure to chemicals or pollutants from past storage and handling practices, as determined through extensive site investigations. Furthermore, the remediation activities are confined to the subsurface areas greater than 5 feet below ground surface (bgs) via direct injection through wells. As there are no exposure risks from subsurface soils impacted with chemicals from past storage and management practices, there is no exposure risk of stormwater runoff to these materials. In August 2022, the completion of an elevated berm encircling the entire Eaton property was completed (Figure 3) to channel Eaton stormwater discharge to Outfall 002, and ABLE discharge to Outfall 001. In the northern portion of Eaton property the water shed off the RCRA cap infiltrates into the subsurface at the north end of the cap, south of the perimeter berm and fence line.

Solid waste material, including trash, construction debris, excess construction material, machinery, tools, and other materials not related to Facility operations are collected and disposed of by outside contractors. Facility related refuse, hazardous and non-hazardous materials are collected, profiled, containerized (if necessary), and disposed of in accordance with RCRA and state regulations. All waste materials are collected and stored in approved and appropriate containers and receptacles. Hazardous wastes are collected and disposed at predetermined, contracted TSDF operations off-site in accordance with the Standard Operating Procedures for the waste outlined in the *Contingency Plan* and SWPPP.

The Eaton property is surrounded by a 6-foot chain link fence topped with barbed wire. All traffic to and from the property is restricted and directed to locking access gates. Signs reading “*Danger - Unauthorized Personnel Keep Out*” are posted at all access points. These signs are legible from a distance of at least 25-feet away, as required by 40 CFR 264.14. The entire fence and gates surrounding the site are inspected for any breaches or damage. The grass is mowed at least four

times each growing season to allow inspection of the soil cover. Outfalls and access gates are visually inspected on a routine basis.

Enclosures - Figure 1 – Outfall Locations and Adjacent Landowners
Figure 2 – Watersheds Boundaries
Figure 3 – Solid Waste Management Units and Areas of Concern
Table 3.0 – Outfall 002 Sample Results (2009 - 2022)



Eaton Filtration, LLC
2800 West 10th Street
Joplin, MO 64801

Empire District Electric Co.
PO Box 127
3100 W 7TH
Joplin, MO 64802-0127

Outfall 002

Outfall 003

Lakeland Able Composites
1000 S. Schifferdecker
Joplin, MO 64801

Modine Manufacturing
3300 W 7th St
Joplin, MO 64801

Mission Broadcasting of Wichita Falls
PO Box 46
Joplin, MO 64802-0046

B&W Associates, Inc.
PO Box 1058
1206 South Schifferdecker
Joplin, MO 64802-1058

Legend

- Outfall Location
- Lakeland Manufacturing, LLC
- Eaton Filtration, LLC
- - - - Property Boundary

USGS 7.5" Quadrangle; Joplin West, Missouri
Copyright: © 2013 National Geographic Society, I-cubed

0 1,000 2,000 Feet

UNISYS

Pinnacle Engineering

Figure 1
Vickers Outfall Locations and
Adjacent Land Owned

Eaton Filtration LLC/Unisys
Former Vickers Facility
Joplin, Missouri
Missouri Hazardous Waste Management
Facility Permit MOD007155781

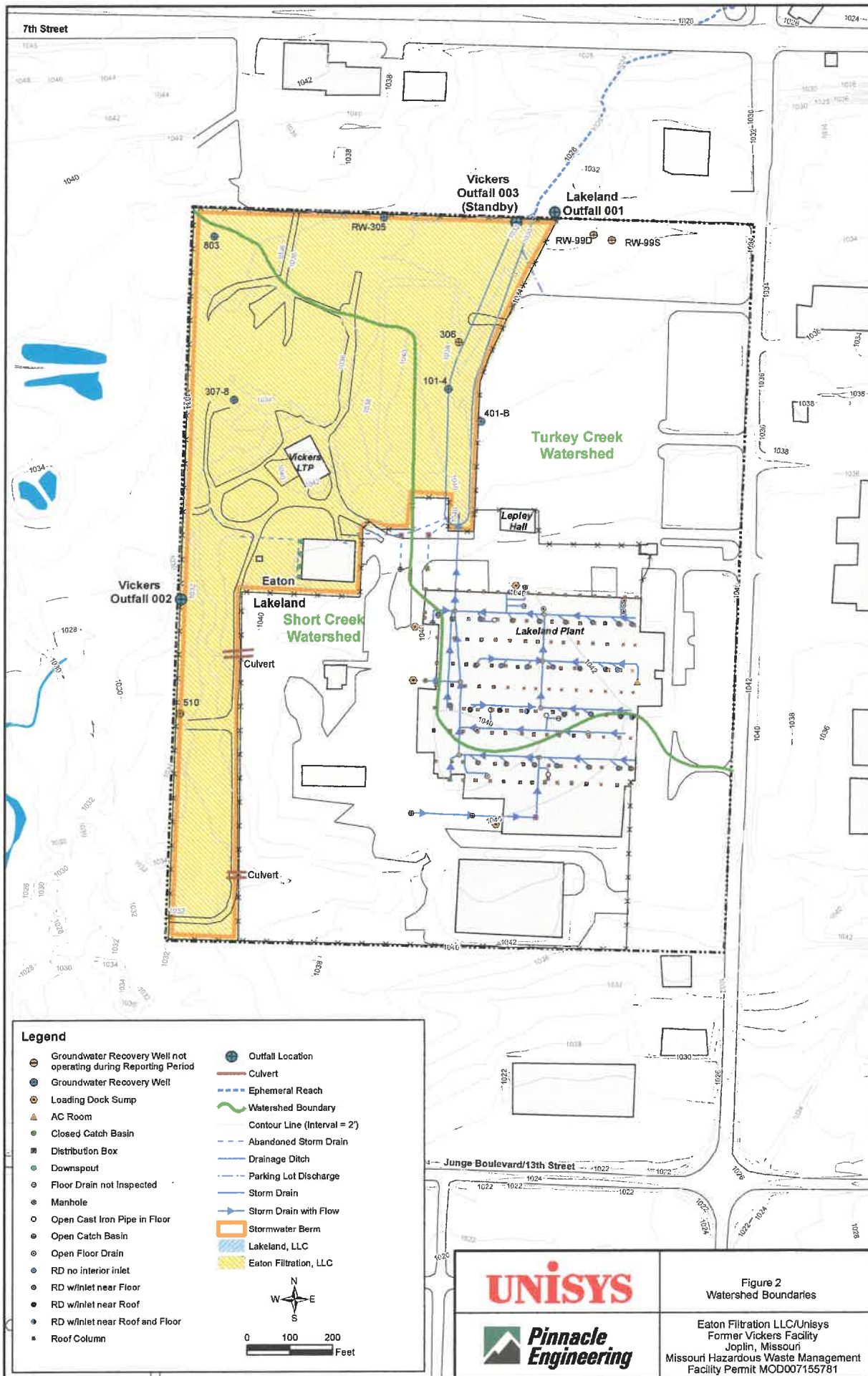


Table 3.0 - Part C
 Outfall 002 Sample Results (2009 - 2022)
 Eaton Filtration LLC/Unisys - Former Vickers Facility
 Joplin, Missouri
 Missouri State Operating Permit MO-0002411



Sample Date	Chemical Oxygen Demand (COD - 410.4)	Total Suspended Solids (TSS - SM 2540D)	Oil & Grease (HEM - 1664A)	units
1/13/2009	<10.0			mg/L
2/10/2009	<10.0			mg/L
3/10/2009	<10.0			mg/L
4/14/2009	19.3			mg/L
5/12/2009	11.9			mg/L
6/9/2009	<10.0			mg/L
8/19/2009	<10.0	<10		mg/L
11/16/2009	11.5	<10		mg/L
2/16/2010	<10.0	<10		mg/L
5/19/2010	19.5	<10		mg/L
8/16/2010	<10.0	<10		mg/L
11/15/2010	12.3	<10		mg/L
2/24/2011	34.4	<10		mg/L
5/20/2011	23	14	<4.8	mg/L
9/19/2011	57	<10	<5.2	mg/L
11/9/2011	45	<10	<5.1	mg/L
3/12/2012	26	<10	<4.9	mg/L
5/1/2012	38	<10	<4.9	mg/L
9/10/2012	34	<10	<5.0	mg/L
1/30/2013	24	<10		mg/L
5/20/2013	44	<10	<5.0	mg/L
8/12/2013	48	<10	<5.6	mg/L
12/14/2013	25	<10	<4.8	mg/L
3/16/2014	44	<10	<4.9	mg/L
5/13/2014	54	<10	<5.4	mg/L
9/2/2014	26	<10	<5.2	mg/L
11/4/2014	37	<10	<5.1	mg/L
3/14/2015	45	<10	<5.1	mg/L
4/20/2015	33	<10	<5.2	mg/L
8/20/2015	47	<10	<1.0	mg/L
11/18/2015	22	<10	<1.0	mg/L
3/9/2016	18	<10	<1.3	mg/L
5/18/2016	20	<10	<1.2	mg/L
9/10/2016	40	<10	3.2	mg/L
1/16/2017	35	<10	<1.3	mg/L
4/27/2017	31	<10	<1.0	mg/L
8/11/2017	24	<10	<0.98	mg/L
12/23/2017	14	<10	<1.0	mg/L
2/20/2018	33	<10	<0.99	mg/L
5/20/2018	33	<10	<1.1	mg/L
8/17/2018	16	<10	<1.0	mg/L
12/27/2018	47	16	<1.1	mg/L

Table 3.0 - Part C
 Outfall 002 Sample Results (2009 - 2022)
 Eaton Filtration LLC/Unisys - Former Vickers Facility
 Joplin, Missouri
 Missouri State Operating Permit MO-0002411



Sample Date	Chemical Oxygen Demand (COD - 410.4)	Total Suspended Solids (TSS - SM 2540D)	Oil & Grease (HEM - 1664A)	units
2/13/2019	27	<10	<1.1	mg/L
4/18/2019	36	<10	<1.3	mg/L
8/8/2019	47	<10	<0.98	mg/L
11/21/2019	30	<10	<1.6	mg/L
1/29/2020	21	<10	1.3	mg/L
5/30/2020	25	<10	<1.4	mg/L
10/29/2020	17	<10	<1.0	mg/L
1/25/2021	29	<10	<0.97	mg/L
5/5/2021	39	<10	<0.99	mg/L
11/2/2021	24	<10	<1.3	mg/L
2/9/2022	26	14	1.6	mg/L
4/1/2022	33	<5	1.7	mg/L
n =	54	48	40	
max	57	16	3.2	
average	30.8	14.7	2.0	

Transmitted via eMail

October 1, 2022

Missouri Department Natural Resources
Water Protection Program - Water Pollution Control Branch
Attn: Operating Permit Section
P.O. Box 176
Jefferson City, MO 65102-0176

**Subject: Permit Renewal Application – MSOP MO-002411
Eaton Filtration LLC/Unisys - Former Vickers Facility
Joplin, Missouri
Missouri Hazardous Waste Management Facility Permit No: MOD007155781**

This correspondence is intended to provide the necessary forms and documentation for the renewal application for Missouri State Operating Permit (MSOP) MO-0002411 (Permit) on behalf of the Eaton Filtration LLC/Unisys – Former Vickers (Vickers) Facility (Facility) located at 2800 West 10th Street, Joplin, Missouri. As a general permit renewal application, Form A - APPLICATION FOR NON-DOMESTIC PERMIT UNDER MISSOURI CLEAN WATER LAW (MO 780-1479), and Form C - APPLICATION FOR DISCHARGE PERMIT – MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, AND STORMWATER (MO 780-1479), appear the appropriate forms to accompany this permit renewal application. Those forms, including figures, tables, and supplemental information are enclosed with this letter.

In 2017, Vickers submitted a permit renewal application for MSOP MO-0002411 for two (2) outfalls it maintained on the property; Outfall 002, a stormwater runoff outfall structure which drains west to an unnamed tributary to Short Creek; and, Outfall 003, a point source discharge pipe that conveyed treated groundwater from our treatment plant, discharging north to an unnamed tributary of Turkey Creek. Discontinuing the pump and treat operations of the LNAPL Treatment Plant (LTP) was approved by MDNR – Waste Management Program (WMP) on June 1, 2018, as this corrective action program migrated from physical groundwater removal, treatment, and discharge to in-situ destruction of chemicals in groundwater. This permit renewal application seeks to continue discharge monitoring at Outfall 002, but does not seek continuance of discharge or monitoring through Outfall 003. The site discontinued all discharge to Outfall 003 on August 14, 2018. On March 16, 2022, WMP re-issue Missouri Hazardous Waste Management Facility Permit MOD0007155781 in which the LTP, and ultimately discharge through Outfall 003 are in 'standby' status as a contingency, if needed. If MDNR invokes standby operations, the Facility will reapply for discharge through Outfall 003.

Corporate: 11541 95th Avenue North, Minneapolis, MN 55369
800-366-3406 · Main: 763-315-4501 · Fax: 763-315-4507
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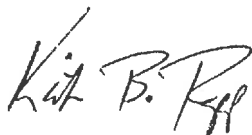
24 Hr. Emergency Response: 1-866-658-8883

Within the documents, forms, and figures in this renewal application, historical outfalls 001 and 003 are noted and located for reference and completeness, only.

With the MSOP MO-0002411 permit renewal application effective for Outfall 002 only, and with more than a 40-year historical database of water quality monitoring, the Facility requests a decrease in the outfall inspection schedule from monthly to quarterly (4X per year), to coincide with the quarterly sampling schedule. The site Stormwater Pollution Prevention Plan (SWPPP), dated August 1, 2021, will be modified to reflect any changes to the MSOP. As noted herein, the Facility currently submits Discharge Monitoring Reports (DMRs) through the state eDMR reporting program.

If you have any questions please feel free to contact me at (612) 382-3763.

Sincerely,



Keith B. Rapp, RG-0942
Senior Hydrogeologist\Senior Project Manager
PINNACLE ENGINEERING, INC.



ec:	Elizabeth Sutherland	-MDNR\WMP
	Terry Etter	-Unisys\Eagan
	Site File	-Lepley Hall\Joplin
	Lisa Sutton, Esq.	-Eaton\Cleveland
	Bob Wojciak	-APECS\Kingsport

Enclosures – Form A – Application for Non-Domestic Permit Under Missouri Clean Water Law (MO 780-1479)
Form C – Application for Discharge Permit – Manufacturing, Commercial, Mining, Silviculture Operations, and Stormwater (MO 780-1479)